Neil Krutz
City Manager
City of Sparks

Doug Thornley
City Manager
City of Reno

Emergency Medical Services Advisory Board

Eric Brown
County Manager
Washoe County

Dr. John Hardwick
Emergency Room Physician

Kevin Dick
District Health Officer
Washoe County Health District

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Joe Macaluso
Director of Risk Management
Renown

MEETING NOTICE AND AGENDA

Date and Time of Meeting: Thursday, February 3, 2022, 9:00 a.m.

This meeting will be held virtually only.

Please attend this meeting via the link listed below or via phone.
(Please be sure to keep your devices on mute and do not place the meeting on hold)

https://us02web.zoom.us/j/88197201328

Meeting ID: 881 9720 1328 Passcode: b3LfTX
+1 669 900 6833 US

1. ***Roll Call and Determination of Quorum**
2. ***Public Comment**
   Limited to three (3) minutes per person. No action may be taken.
3. **Consent Items** (For Possible Action)
   Matters which the Emergency Medical Services Advisory Board may consider in one motion. Any exceptions to the Consent Agenda must be stated prior to approval.
   A. **Approval of Draft Minutes**
      August 5, 2021
4. ***Prehospital Medical Advisory Committee (PMAC) Update**
   Dr. John Hardwick
5. ***EMS Oversight Program and Performance Data Updates –** Joint Advisory Committee Activities, EMS Planning, Data Performance Reports, Franchise Agreement Updates, REMSA Exemption Requests, Mass Gatherings and Special Events Reviews.
   Andrea Esp
6. **Presentation, Discussion, and Possible Approval of EMSAB Revised Bylaws -** Revision to Article II, Membership, Section 1, Board Composition, the authority to designate an alternate to replace the representative. (For possible action).
   Andrea Esp
7. **Presentation, Discussion, and Possible Approval of the Washoe County EMS Oversight Program FY20 and FY21 Annual Report -** Washoe County 9-1-1 EMS System Structure,

EMS Response Agencies and Their Jurisdictional Boundaries, Performance Data, EMS Partner Highlights, and the EMS Oversight Program's Accomplishments and Goals for FY22. (For possible action)
Andrea Esp

8. **Presentation, Discussion and Possible Approval of the 2020 Washoe County Trauma Data Report, and Possible Permission to Disseminate -** Provides characteristics and trends for specific trauma and injuries in periods prior and during Coronavirus Disease pandemic (2017 – 2020)**.** (For possible action)
   Anastasia Gunawan

9. ***Agency Reports and Updates**

   A. ***REMSA Quarterly EMS Advisory Report, Adam Heinz**
   Data Performance Report, EMS Operations, Community Relations, Employee Engagement and Celebrations, Clinical Standards and Practices Report

   B. ***City of Sparks Fire Department EMSAB Reports, November 2021 and February 2022, Chief Jim Reid**
   Data Performance Report, EMS Operations Report

   C. ***Truckee Meadows Fire and Rescue (TMFR) Advisory Board Updates, November 2021 and February 2022, Chief Joe Kammann**
   Incident Response Data, COVID-19 News, EMS Operations Report

   D. ***Reno Fire Department EMS Advisory Board Updates, November 2021 and February 2022, Reno Fire Department Staff Representative**
   Data Performance Report, COVID-19 Update, EMS Operations Report

10. ***Board Comment**
    Limited to announcements or issues for future agendas. No action may be taken.

11. ***Public Comment**

    Limited to three (3) minutes per person. No action may be taken.

Adjournment

Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of a later meeting; or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. An item listed with asterisk (*) next to it is an item for which no action will be taken.

The Emergency Medical Services Advisory Board meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Administrative Health Services at the Washoe County Health District, 1001 E. 9th St, Reno, NV 89512, or by calling 775.326-6049, at least 24 hours prior to the meeting.

Time Limits: Public comments are welcome during the Public Comment periods for all matters whether listed on the agenda or not. All comments are limited to three (3) minutes per person. Additionally, public comment of three (3) minutes per person may be heard during individual action items on the agenda. Persons are invited to submit comments in writing on the agenda items and/or comment on that item at the Board meeting. Persons may not allocate unused time to other speakers.

Response to Public Comments: The Emergency Medical Services Advisory Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The Open Meeting Law does not expressly prohibit responses to public comments by the Emergency Medical Services Advisory Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Emergency Medical Services Advisory Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Health District Staff action or to ask that a matter be listed on a future agenda. The Emergency Medical Services Advisory Board may do this either during the public

comment item or during the following item: "Board Comments – Limited to announcements or issues for future agendas."

Posting of Agenda; Location:
Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:

Washoe County Health District, 1001 E. 9th St., Reno, NV
Washoe County Health District Website https://www.washoecounty.us/health
State of Nevada Website: https://notice.nv.gov

Supporting materials are available at the Washoe County Health District located at 1001 E. 9th St., Reno, NV and on the website www.washoecounty.gov/health pursuant to the requirements of NRS 241.020. Ms. Dawn Spinola, Administrative Secretary to the Emergency Medical Services Advisory Board, is the person designated by the Emergency Medical Services Advisory Board to respond to requests for supporting materials. Ms. Spinola may be reached by telephone at (775) 326-6049, or by email at dspinola@washoecounty.us.

Emergency Medical Services Advisory Board

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

MEETING MINUTES

Date and Time of Meeting: Thursday, August 5, 2021, 9:00 a.m.
Place of Meeting: Washoe County Health District
1001 E. Ninth Street, Building B, South Auditorium
Reno, Nevada 89512

1. *Roll Call and Determination of Quorum

Chair Krutz called the meeting to order at 9:05 a.m.

The following members and staff were present:

Members present: Neil Krutz, Chair
Kevin Dick
Eric Brown
Joe Macaluso
Dr. John Hardwick via phone
Doug Thornley

Members absent: None

Ms. Spinola verified a quorum was present.

Staff present: Mary Kandaras, Deputy District Attorney
Nancy Diao, Epidemiology and Public Health Preparedness Division Director
Andrea Esp, Preparedness and EMS Program Manager
Julie Hunter, EMS Program Coordinator
Anastasia Gunawan, EMS Statistician
Dawn Spinola, Administrative Secretary, Recording Secretary

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2. *Public Comment

Limited to three (3) minutes per person. No action may be taken.

Chair Krutz opened the public comment period. As there was no one wishing to speak, Chair Krutz closed the public comment period.

Chair Krutz announced that Items 11 and 12 would be heard immediately after Item 4.

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3. Consent Items (For Possible Action)

Matters which the Emergency Medical Services Advisory Board may consider in one motion. Any exceptions to the Consent Agenda must be stated prior to approval.

A. **Approval of Draft Minutes**
May 6, 2021

Mr. Brown moved to approve the minutes. Mr. Macaluso seconded the motion, which passed unanimously.

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4. *Prehospital Medical Advisory Committee (PMAC) Update
Dr. John Hardwick

Dr. Hardwick explained PMAC was being reorganized to better align with the protocol meetings to make sure that all of the medical directors for each department have input. They added a protocol to place pacer pads on anybody with a malignant arrythmia or ST elevation MI.

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11. *City of Reno and REMSA CAD-to-CAD Implementation Project Update
Cody Shadle

Ms. Esp introduced herself for the record. She noted there would not be a presentation on CAD to CAD (C2C) as the intended presenter was unable to attend due to a family emergency. Kathleen Nickel had provided the update requested by the Board. Ms. Esp pointed out the Board had received hard copies and would be provided a copy in electronic format. Additionally hard copies were available to attendees. The information included the updated scope of work for C2C, a summary of features, and a user guide.

Mr. Dick mentioned that when the Strategic Plan update came to the District Board of Health (DBOH) and the C2C project was looked at, one of the Board members, a Councilman from Sparks, expressed his displeasure with the lack of progress that has occurred with the C2C initiative. This was one of the items that was really significant, one of the priority items, that came out of all of the work that happened in 2013 and 2014 with the establishment of the regional oversight and the franchise renegotiations. Mr. Dick opined this project would benefit from more transparency, it seemed rather opaque from the outside to understand what was happening. They were seeing things about liability issues, and confidential information, but there are not any details provided or explanation. We have had this kind of reporting now it seems, for years. He stated he would like to get a lot more information and understand what is going on, why this project is unable to move forward and where the impediments lie to it.

Chair Krutz stated he concurred with what Mr. Dick had to say and hoped that at the next meeting they would see a rigorous, thorough, complete update.

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12. Discussion and possible approval of moving the November 4, 2021 meeting to November 5, 2021 (For Possible Action)
Andrea Esp

Ms. Esp explained the Oversight Program was requesting to move the November 4th meeting to November 5th, a Thursday to a Friday, to accommodate the Health District retreat that will be taking place.

Mr. Dick pointed out that he had requested the Board's involvement in rescheduling the meeting, as it conflicted with the DBOH Strategic Planning retreat already scheduled for that day.

The Board members indicated they were comfortable with the move.

Mr. Brown moved to approve. Mr. Dick seconded the motion, which was approved unanimously.

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4. *EMS Oversight Program and Performance Data Updates
Andrea Esp

Ms. Esp noted she would like to highlight a few accomplishments of the team. Over the last three months the EMS partners, REMSA, the fire agencies, and EMS oversight staff have been working on the strategic plan. Even though progress maybe not as quick as we would have hoped, there has been a lot of progress made, and a lot of great discussion has taken place, especially around identifying different determinants, of which maybe Fire or REMSA only should respond, not both. There was also great discussion on how to a better job of calling off or cancelling one of the other agencies, so we are better able to provide resources across the community when resources are limited. They have been meeting bi-weekly and discussing that issue and anticipate having something in place come January 1, 2022.

In addition, the team continues to work on updating plans, including the Mutual Aid Evacuation Agreement (MAEA) and Mass Casualty Incident Plan (MCIP). Along with data performance updates, we receive regular requests from our partners to provide data reports for them, so we continue to work provide those in a timely fashion. We are working on a new protocol to make sure that we set expectations of how those requests are made to us. To also help with that we are cross-training in our team to make sure that even though someone is on leave or there is a vacancy that we can still provide that information, and timely.

The team is working on revising the REMSA franchise map for FY19-20 and FY21. We will be presenting on that in November once census data has been released so we can finish that review here internally. There has been a record number of exemptions lately, which will be discussed further later in the meeting.

Additionally, the program receives requests from the Community Services Department (CSD) on different special events and other items to review, resulting in duplication between our program, our EMS partners. Julie Hunter has worked collaboratively with EMS partners to streamline that process so we are not all reviewing the same things, and is one collective report that is being provided back to CSD.

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5. Presentation, discussion, possible approval, and recommendation to present the revised REMSA Exemption Guidelines Letter to the District Board of Health (For Possible Action)
Julie Hunter

Julie Hunter introduced herself for the record. The REMSA exemption guidelines had been revised to better define criteria used by the District Health Officer (DHO) to approve late call exemptions requested by REMSA Health. The original guidelines were written and approved in 2016, and many things have changed since then. The highlights of the recommended revisions include language to account for impacts due to multiple construction projects, which lead to traffic congestion and road closures. Language to better define exemption criteria for local, state, and federal declared emergencies was also revised. Consistency regarding deadlines for submittal and approval for both the Oversight Program and REMSA has been established, as has the activation of the MAEA which had not been included before. These revisions were presented to the DBOH on July 22, and the Board requested that the revisions go to the Emergency Medical Services Advisory Board (EMSAB) for discussion and recommendation to approve, and

then be returned to the DBOH for final approval.

Mr. Thornley asked if, in the space between 2016 when the exemptions were last revisited and now, how many incidents would be falling into these categories. Ms. Hunter indicated she did not have the information but could look into it. She noted that lately there has been quite an extensive increase in system overload and Status 99 exemption requests, 148 in June and 68 in July. Mr. Thornley asked what that meant for service level in the community. Ms. Hunter replied there have been long hospital wait lines for ambulances waiting to get patients into the hospital. Road construction has also been a problem. If the roads are closed then the lateral streets are congested, and some of the engines have had to shut down because they are not able to go anywhere. As a result, the multiple construction projects in the area are causing lots of problems with response times. Also, new major developments are adding to congestion in places like Cold Springs and Spanish Springs. Mr. Thornley asked how these exemptions helped with the mission to provide high quality EMS service to the region. Ms. Hunter stated she would defer to someone else for that response.

Aaron Abbott, Executive Director of REMSA, introduced himself for the record. Nothing about the Status 99, which are hospital delays, as well as system overload, have been changed in these exemption letter revisions. The revisions that are being suggested in the exception guidelines impact street closures, multiple construction projects, things of that nature. What REMSA has seen, as this community continues to grow, streets are widened, major arteries are shut down, is that we have an increased number of system shutdowns. As an ambulance is responding, they are trying to route around certain construction projects, but because there is a freeway construction project and then a major artery construction project, all the detours are essentially shut down or congested. They have not seen this number of situations in any recent times where units are having to shut their lights and sirens off, there is just not anywhere for them to go. 2016 was a much different era for this community and we're trying to account for some of those changes that are beginning to rear their heads.

No matter how many ambulances you have on the street, if you cannot drive around the streets, you are not going to get anywhere anytime soon. And so that is one of the major requests added in this revision proposal. The addition of MAEA, so logically the hospital has to be evacuated, I don't know how many resources it would take to have to evacuate one of our major hospitals in the community that logically would fit into a mass casualty incident criteria, requesting a lot of resources from outside mutual aid to come in and help us.

The original language for the local, state, and Federal declared emergency revision requests does not meet a definition of what happened here during a local disaster. It says local disaster, but it also says in which there was a formal emergency management process, and then local resources were requested. What we found out during the pandemic is that everybody, every community across this nation is experiencing local- and federal- and state-level declared disaster. Under the current definition, if you look at the situation with COVID, we are under a federal, state, and local declared disaster. We have been for some time, that has not been lifted. The language in the 2016 letter does not lend to what happens when, for example, somewhere within our response area there is a major earthquake and we have major building collapses. There is no emergency management process set up. There is incident command, and there is an initial response to that, and all resources will be involved or dedicated to something that large. The 2016 language does not lend itself to what happens when we have our own emergency here and suddenly all our resources are consumed. It is not reasonable to expect an 8:59 Priority 1 response time standard to apply in that situation. So we are just simply trying to take what we have learned from 2016 until now and apply it and better refine what those exemption criteria

would be.

Mr. Abbott continued, stating those were the major pieces of the revision, and offered to speak to the questions regarding system overload. System overload is a statistically relevant measurement, a 3-times standard deviation of average response numbers over a 20-week period. It has nothing to do with staffing or anything else going on in the system. What it tells us is when we hit system overload we are in a significant and unprecedented period of time of call volume, which only used to happen a couple times a year. REMSA rarely applied for exemptions, even when it did occur. It is happening daily now, so what we are seeing in this community is changing in the amount of utilization of 911. We are significantly impacted by 911 call volume, and the statistics are calculated using every hour of every day of every week along a timeline for the past 20 weeks, one of which just ended, showing a period of volume not seen in past 20-week periods. So as the 20 weeks rolls along that average line continues to creep up and up, so that is an adjustment period. Due to that, we know we have got to continue to add more resources into the 911 system. As that increase occurs, the opportunity for system overload should decrease, except in a situation where the call volume continues to outpace the average 911 responses for the past 20-week period. What REMSA is seeing, and the reason why there have been so many overload exemptions being requested, is because our 911 call volume is drastically outpacing our previous call volume, at a pace that we have not seen before. Literally almost every other day we are in a system overload period. The reason that that overload exemption criteria exists is because no agency on the face of this planet can add resources in a 20-week time period and continue to add them at the required pace.

That is compounded by hospital delays, and we are also seeing an unprecedented number of hospital delays. That tells us that not only are our resources stressed, but the hospital system resources are stressed at the same level. They are unable to offload our patients from the hallways. That's also causing an increase in mutual aid utilization, so the City of Reno, TMFPD, and our other mutual aid partners including Storey County and Carson City are all being impacted because when we are in a system overload with five ambulances sitting on the wall at the hospital unable to be offloaded, we are requesting mutual aid. And that is the only right and appropriate thing to do in that situation. However, it is causing a strain on everybody down the line. There's no change in the Status 99 exemption criteria, which is the hospital offload criteria, except for trying to standardize the timeline in which we submit those. Some of them throughout this letter in the past have been three business days, some have been five business days, some of them have been five business days after the end of the month, so we are trying to standardize when those business days or when that due date is due, for those exemptions. They did change the system overload time criteria from three to five because we are standardizing across the board.

Mr. Thornley asked what is the difference between receiving the exemption and not receiving the exemption operationally speaking for REMSA?

Mr. Abbott replied that, operationally speaking, it doesn't change what we do from an action item perspective. When we are in system overload, we know that is because the 911 volume has outpaced our available resources, otherwise we wouldn't apply for those exemptions. We would still be making those calls regardless of the amount of 911 calls in the system. All it changes is in the response time compliance calculation; those calls would no longer count for us or against us. They are removed from the data set and set aside so that the numerator and the denominator both decrease by the same amount.

Mr. Thornley stated he did not think he was able to support the requests without better

understanding what the impact on the data collection and the ramifications for the administration of the agreement are. He needed more information before he could say yes to this.

Mr. Dick noted that, under the franchise agreement, either the DHO or the DBOH can grant exemptions for these special circumstances for REMSA. An exemption means that when they do not achieve the 8:59 second response time, that it is not counted against them and their compliance under the agreement. I did update the exemptions in 2016, because I felt that the changes then were primarily administrative and clarifying items. When these came to me, I felt like these were significant changes in the exemptions, and I think it is appropriate to consider that we have an emergency, a declared emergency, etc., and there is an exemption that applies. But then there is a recovery period, perhaps after the emergency is no longer declared, when things are still disruptive. We have seen a huge impact to our healthcare system out of this type of emergency that I think will have a longer-term consequence than if we had a fire or an earthquake or a flood. I think the construction exemption is maybe a little bit more straightforward, but it is still a change.

Mr. Dick went on to say I had decided that I wanted this to go to the DBOH for them to make the decision on these exemptions. And they then decided they like to hear what the EMSAB's opinion is on this. I think it is appropriate to have these exemptions. I think it is a little loose the way it is put as far as how the decision is made on when to grant exemptions if there is no longer a declared emergency or make a decision that it is a recovery period. Frankly I do not think that that should just fall to me to make that decision, there should be some more transparency in the way that decision is made. So I would suggest that that decision should be something that goes to the DBOH level, and it may be something that the EMSAB wants to get appropriately involved in regarding a recommendation to the DBOH.

Mr. Thornley stated so to be clear, I am not a hard no on this, I am a no today. And the reason I am a no today is I hear everybody saying that we have impacts to the hospital system, to REMSA, to the respective fire departments, and I just don't feel like I have enough information on the net effect of what these exemptions are against the franchise agreement, or an understanding of what we are doing to make adjustments in our delivery system as a region to get ourselves back on track. I am a little startled to hear that we have gone from two or three times a year in an overload situation to every other day. The anecdotal data is not enough for me to feel like I am making a good decision. I feel like we need a broader conversation on this before it goes back to the Board of Health. Mr. Dick stated I don't disagree with you on that. I do think that the agencies and the EMSAB should be engaged and in agreement on the path forward.

Mr. Macaluso asked if there was an analog, another EMS agency, in a similar situation across the country? And if so, how do these requests and exemptions align with that system? Are we on track to mirror what would be expected?

Mr. Abbott explained I just got back from a national conference in Las Vegas, and my colleagues across the nation are facing all the same problems. They have unexpected variations in their call volume, some are high, some are low. The low presents a whole other host of problems when it comes to revenue and keeping staffing and paying your people and staying alive as an organization, as we all know. Some of them are extremely high, situations, emergency status. So there is a lot of parity in the national scene right now as to what is happening with health care in general and a lot of it is a trickle down. And remember, pre-hospital health care is still health care. And coming out of post-pandemic, we are going to have impacts with COVID in a way that probably nobody foresaw in a long-term situation. I have

been involved in other disasters, large fires, earthquakes, and when your employees lose homes, when the economy starts to shut down and other bad things start happening, there is an impact to the safety net systems. And so even in other types of disasters you are going to see this period, post the actual response, response sometimes is a clearer path to deal with the situation than recovery is. And we will see those impacts for some time. But I think more direct with your question, I have strong belief, and if you Google ambulance service right now, you will probably come across article after article of EMS agencies shutting down, or EMS agencies across the country dealing with significant challenges when it comes to the 911 call volume. I hope that answered what you were getting at.

Mr. Thornley answered, in part, I guess I am looking at the exemption requests. Like the third bullet, for example, to me seems like a workflow issue, moving from three to five, an ambiguous time frame to a solid five-day time frame, by which those exemptions will be submitted. How does that compare, specifically, that one for example, how does that compare? That to me is less controversial than some of these other issues around are we just going to increase the need to submit exemptions versus fundamentally change the way we provide a service. Bullet three, to me, is a little more like housekeeping, and does that align, as an example, with other systems around the country?

Mr. Abbott responded I have worked in a management capacity in two other systems, ambulance services, and I can tell you that when you have seen one ambulance service you have seen one ambulance service in one community. And really from a housekeeping perspective, we changed it to five, and I think Ms. Esp and Ms. Hunter can attest to this, that we just could not keep it straight, because one was three and one was five and we were all having troubles with the number of exemptions that we were submitting, what our time frames were and we would forget, and plus, they are dealing with vaccination PODs and we are dealing with vaccination PODs and all kinds of other things in our careers that we had not dealt with before. It was just difficult to keep it straight.

On the other items, specific to MCI and disaster declarations, every EMS system that I am familiar with has a disaster declaration exemption criteria and MCI criteria, typically a mutual aid or for provide mutual aid. That is typically an exemption criteria, because we are sending resources out of our system down to somebody else's. These are not unprecedented or unusual.

Dr. Hardwick noted I think I agree with everybody else; it just appears too nebulous to give this a green light right now. And another thing, from the ED standpoint, we are seeing a mild increase in COVID cases here, but the ambulance traffic we are seeing is considerably just kind run of the mill emergencies and urgent care complaints that appear more consistent with, I think, two things. And again, this is anecdotal, one is just a growing population of Reno, we all know that Reno's population exploded during the pandemic because a lot of people from larger cities moved to our area. And two, we are getting a lot of ambulance traffic from the new CARES facility, as I think they are going through growing pains figuring out who they need to actually call 911 for.

I think we are seeing probably social ills that resulted from COVID. But I think a lot of what we are seeing is an explosion in our population. I did question whether or not is this was truly secondary to the state of emergency, and COVID, or is this just the result of a growing city. And maybe social ills are going to be with us for quite some time. But we have to get a little bit more creative about addressing and working with our partners at the CARES facility, and the cities of Reno and Sparks, coming up with creative ways to possibly divert these ambulance calls, or come up with other ways to address these problems, which I know REMSA is already involved

with, but, right now, we are kind of saying we'll just come up with a nebulous time for how long of an exemption period. This seems fraught with a potential for abuse of that.

Dean Dow, President and CEO of Renown Health and Care Flight, introduced himself for the record. 47 years in health care, a flight paramedic hospital administrator. Multi-faceted career in health care. To Aaron's point, Dr. Hardwick's point, we provide health care. We are part of the public health system. Yesterday in our community between all three hospitals, not including the VA, there were 57 positive and/or suspected COVID patients admitted, 13 in ICUs and three on ventilators. That number this morning 70 positive or suspected, 15 in ICUs and four on ventilators. We are part of the health care ecosystem. And when that ecosystem starts to be stressed, and starts to crumble, we are affected in ways that sometimes we can control and sometimes we cannot control.

As noted by the EMS oversight group, Mr. Dick, and Aaron Abbott, we have significant wall times every day. Those wall times are averaging 45 minutes. We as an organization, have had ambulances sitting in emergency rooms waiting to unload patients for up to four to four and a half hours. We have had our fire partners sitting on the walls at hospitals for the same period of time, three and a half, four, four and a half hours. Some may present that nothing is being done about this. Some may present that there is a state statute, which there is, that says after 30 minutes an EMS organization can notify that hospital that they are leaving the patient and going back into service. But it is obvious there are no beds and not enough staff at the hospital to assist, so the responder(s) stay with the patient until the hospital staff catches up and can take over their care.

The system is stressed, we have to go into overload exemptions and that impacts our ability to be compliant to the franchise relative to response zones and performance. California is down 44,500 nurses. Nationally, 50% of all nurses right now are the age of 50 years old and older. Retirement rates and rates of nurses, nurse practitioners, PAs, janitors, hospital staff in general, are leaving by the hundreds and hundreds. In this community alone, between the three hospitals, Northern Nevada, St. Mary's and Renown, we are down hundreds of nurses.

So part of this is staff. Part of this is my organization is short staffed just like Renown, St. Mary's, Northern Nevada. People will tell you that my organization does not pay enough. People will tell you my organization is not trying to recruit good people. Those are two falsehoods. We pay above national average, we just increased our overall pay for everybody in our organization by 3.15 percent, we have an employee sharing program, we're recruiting nationally, but to Mr. Abbott's point, I am on the phone almost every other day with CEOs of large systems whether they are fire-based, hospital-based, independently based like ours, or community-based like ours, and we are all shorthanded.

Countless communities across this country are shorthanded when it comes to prehospital care. This is not just a problem for Reno, Washoe County, Sparks, and REMSA Health, it is a national problem. Our responding partners and our organization, along with EMS oversight, are working diligently at looking at how delivery systems can change. It is a recognized fact that on low priority calls we do not need to be sending out fire trucks, numerous paramedics, and an ambulance. In some cases, we can safely move those patients over to Nurse Health Line. We are looking at and understanding how to manage hospital transfers better. This week and into next week, we are implementing units that are specifically dedicated to doing nothing but inter-hospital facility transfers. We are looking at systems across this country and looking at single-resource responses. We continue to look at different ways to do patient guidance. We are involved with Renown Health and their RTOC system that went into effect this week helping

manage patient movements better. There is no one silver bullet to this problem, it is a multi-faceted problem, and it is a national problem.

In the last three months, we have responded to the CARES campus over 550 times. As also noted by Mr. Abbott, those increases in 911 volume are not Priority1s, they are not Priority 2s, they are Priority 3s and even lower acuity patient concerns. A lot of this drives from COVID and from a heightened awareness of healthcare in general, but it also drives from the Affordable Care Act, it also drives from opening up Medicaid programs across this country, because people then start having better access to health care. But the problem is, is that gaining that access is very difficult. They cannot get in to see their private care physician or the clinics, so they turn to the 911 system and emergency departments. We have people working diligently every day to try and modify and enhance every component that we can. We are working with the hospitals, on these problems, but again, they have significant staffing issues themselves, and we would be more than happy at any point in time to provide more information and bring it back in front of you with updates on where we are improving situations and where we continue to be challenged.

Mr. Thornley stated I want to be clear; I do not think that the exemptions that you are asking for do not make sense. They make sense, I just want to understand the information that we are basing them on. And I want to have a broader discussion with the fire partners and the hospitals and you, of course, in terms of what are we doing to improve this situation here in our region. I do not think it is lost on anyone in the room that it is a national problem, and that it is not REMSA-specific. So to the extent that you took my earlier questioning to mean that I thought it was REMSA-specific, I apologize for that, that was not my intent. I just do not feel like we have enough information, I do not have enough information, to make an informed decision today on how these exemptions fit in the broader paradigm with how we are attacking the problem.

Mr. Dow stated that he totally, totally understood. And I don't think I took your statement directly towards REMSA Health, but I did take it in a sense that it was directed towards the system. And since we are a very large part of that system, and we are the component of that system that is monitored, very closely, and that we understandably have contractual obligations under that franchise, I think it is prudent for me to articulate publicly what the additional problems of the ecosystem are and that it is an ecosystem. And I know several of you understand that, but it does need to be said. We have been asking for meetings because we have got to work this problem. Because I, for one, firmly believe, it is not going to get any better. Due to that, we are going to have to drastically modify how we respond and how we do things, obviously being patient-centric and being patient-safe moving forward. That is always the number one goal. But none of us can continue to do business the way we have been doing it. We have built this system over forty-something years across this country, and to realize that we've got to stop now and retool that, is a tough road to go down. I appreciate your patience and your attention.

Mr. Brown recommended that we refer this matter for broader discussion to resolve the issues before we take action on the actual exemptions?

Mr. Krutz pointed out that was not a motion, but an opportunity to discuss.

Mr. Dick stated I would recommend that we go ahead and advise the DBOH to make the changes of just the time frames that are in here, so it is consistent with that five-day period so that at least we can get that in place officially and that we continue and have an item come back to the EMSAB and maybe even have a special meeting if something gets resolved sooner as far as how to handle this issue of recovery, post-emergency and whether an exemption is provided for that period and the multiple construction projects.

Mr. Brown seconded. Mr. Dick said it was not a motion, but I will make it a motion. Chair Krutz aske the Board if everyone was comfortable, we all have a motion we all understand. Mr. Brown stated yes. Chair Krutz asked Ms. Kandaras if she was comfortable with what we are doing, and she stated she was unclear on the motion.

Mr. Dick stated I would propose a motion that we recommend that the DBOH adopt the revisions to Exemption 1, MCI, MAEA, the exemption for Miscellaneous #1, which is a business day issue, the weather exemption revisions, the system overload revisions on the time periods involved and the Status 99 revisions. Also that we have the Regional Oversight Program work with the regional EMS agencies on Item 3, the local state and federal declared emergency and #5, construction, to come back with their recommendations for the advisory board to consider as far as changes to be advised to the DBOH.

Mr. Thornley asked could you make it clear for me what the overload situation is in your motion?

Mr. Dick replied so the overload exemption would remain as it is, but we would clarify that the documentation required for the exemption is that 5-day period.

Mr. Brown seconded the motion which passed unanimously.

[Mr. Dick left the meeting at 10:00 a.m.]

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6. *REMSA Quarterly EMS Advisory Report
Adam Heinz

Good morning, for the record, Adam Heinz, Executive Director of Integrated Health Care for REMSA Health. There has recently been a felt increase in the number of responses to the CARES campus. Every day we respond about 5.5 times. We obviously would expect that as we consolidate services, we know that there's going to be an increase in the number of responses. But many of those responses really have no medical complaint, so many times it is really to the individual's activities of daily living. We are changing people, moving people, helping them with catheter issues. That prompted us last week to have a meeting with the Volunteers of America, as well as the City of Reno staff so we had Mr. Hod, Miss Cochran, as well as Mr. Cashell sitting with us. The only person not at the table that should have been there is our City of Reno fire service partners. I asked that we begin to have those meetings on a regular basis so we can talk about different strategies. And there were immediate things that we are going to do, REMSA Health is committing to put our community health paramedic and put some sort of frequency in which we are going to respond and do some proactive management of some of the minor complaints. That is obviously not a long-term solution, it could be part of the long-term solution but there were some immediate things and obviously there are long term items. I just want to let you know that we are actively engaged in that. Three percent of the community's call volume is to the CARES campus. Every day. So it definitely is a consumption of resources.

The other is the bed delays, as we heard. Last month 349 times EMS units in our community were unable to offload. And that is defined. Typically that is up to 30 minutes, or if there are multiple units that do not have the ability. And so we know that the health care system downstream is in a position where they are not able to accept those patients readily, with one of our units being at least four hours. Yesterday we had a joint advisory committee with our fire service co-response partners. They are feeling it as well. I appreciate Manager Thornley's interest, as well as the offer to actively participate in different strategies to move that forward,

because as Mr. Dow indicated, it is likely not anything that is foreseeably going to change, and we are going to need to work on what's best for patients, and what supports the EMS system in our primary mission.

We have the pleasure of hosting the International Academy of Emergency Dispatch President, Jerry Overton, and all of you on this board should have received an invitation. The purpose of his business is to celebrate our ACE-Accredited clinical communications center. But in addition, dispatch is a topic in this community, there are a lot of things that are going on nationally that I think we could benefit from. That symposium will be an opportunity, not only for him to share the state of emergency dispatch as he knows it as the industry leader and president, but also the ability for us to have a Q and A type session for our leaders. Our community influencers and leaders, as well as our fire response partners and our dispatch leaders are kindly invited and we hope you can attend that.

And then finally, as Dean indicated, and as we know, unfortunately COVID is on the rise and we are starting to see some of our unvaccinated employees suffering. Our medically trained dispatchers are continuing to do influenza-like illness screening or COVID-like illness screening, and providing that to co-response partners to ensure that we are taking the proper precautions to reduce any type of risk that we are putting our people in during any response.

Mr. Macaluso asked do you have any idea of what percentage of your employees, especially those in the field, are vaccinated?

Mr. Heinz responded it is very high, almost 90 percent of the team members that are in my division. As an organization we are around 84 percent total, which includes those individuals out in the field. We did adopt measures that include those who are unvaccinated are required to wear masks and of course with patients we are going to continue to wear masks as well. We continue to work to try and convert the unvaccinated and provide education so that the opportunity exists for them to get vaccinated. We would like to see 100 percent.

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7. *City of Sparks Fire Department EMSAB Report
Chief Jim Reid

Good morning, Chair, members of the Board, for the record Jim Keinz, Division Chief Operations, Sparks Fire department. In front of you is our quarterly report and I am here to answer any questions.

The Board had none.

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8. *Truckee Meadows Fire Protection District (TMFPD) Advisory Board Update
Chief Joe Kammann

Good morning, everybody, for the record Joe Kammann, Division Chief, Truckee Meadows Fire. You should have my report in front of you. If you have any questions, I am here to answer anything you have.

The Board had none.

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9. *Reno Fire Department EMS Advisory Board Update
Reno Fire Department Staff Representative

Good morning, Chief Dennis Nolan, you have my report in front of you, and if you have any questions, I will be glad to answer them.

The Board had none.

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13. *Board Comment

Limited to announcements or issues for future agendas. No action may be taken.

The Board had none.

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14. *Public Comment

Limited to three (3) minutes per person. No action may be taken.

Chair Krutz opened the public comment period. As there was no one wishing to speak, Chair Krutz closed the public comment period.

Adjournment

Chair Krutz adjourned the meeting at 10:07 a.m.

WASHOE COUNTY HEALTH DISTRICT
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STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: February 3, 2022

TO:	EMS Advisory Board Members
FROM:	Andrea Esp, Public Health Preparedness and EMS Program Manager 775-326-6042, aesp@washoecounty.gov
SUBJECT:	EMS Oversight Program and Performance Data Updates

EMS Partners – Joint Advisory Committee (JAC)

The EMS Oversight Program meets bi-weekly with the JAC (REMSA Health, Reno Fire Department, Sparks Fire Department, and Truckee Meadows Fire and Rescue) to develop processes and protocols to accomplish the approved revisions and additions to the goals of the Washoe County EMS Strategic Plan (2019-2023). The revised Strategic Plan was approved by both the Emergency Medical Advisory Board (EMSAB) and the District Board of Health (DBOH).

A summary of the accomplishments of the Goals and Objectives in the Strategic Plan include:

- Goal 1; Objective 1.1: The identification and agreement among the partners of 14 determinants that will be a "cold" response (without lights and sirens). All partners are currently working on approval from their Medical Directors. Upon approval, a summary of the determinants will be presented to EMSAB.
- Goal 1; Objective 1.1: Criteria for EMS Fire response to Priority 3 (P3) calls (Fire typically does not respond to P3 calls).

A summary of the current Goals and Objectives in the Strategic Plan include that continue to be addressed include:

- Goal 1; Objective 1.1: Continued discussion on Priority 2 (P2) calls REMSA Health and Fire will respond to and the development of a strict cancelation policy on calls that Fire does not need to respond to.
- Goal 2; Objective 2.2: Research and review full and unrestricted automatic response arrangements between Fire EMS partners. Dispatching the closest unit to an EMS call regardless of jurisdiction.
- Goal 2; Objective 2.4: Develop and conduct joint training opportunities for REMSA Health and Fire to train together quarterly.
- Goal 4; Objective 4.1. Establish a regional process that continuously examines performance of the EMS system
    - Strategy 4.1.5. Review and evaluate performance measures and standards across all agencies that meet the needs of patient care.

- Goal 7; Objective 7.1. Research legal protection for all agencies to ensure staff understand their legal protection.

Program staff continue to work with the partners on the revisions to EMS Oversight Program investigation procedures. Once the procedures are finalized, they will be distributed to Fire and REMSA Health and posted on the EMS Oversight Program website.

EMS Planning

Monthly meetings will continue to be held with all partners to discuss revisions of the Multi-Casualty Incident Plan (MCIP) and Mutual Aid Evacuation Agreement (MAEA) with the inclusion of the Burn Appendix. Deadline for completion is set for June 2022.

Data Performance:

The EMS Oversight Program conducts data analysis and provide technical assistance to our regional partners. In addition, the Program received several other data requests, which are outlined in the following table.

Data Performance Reports			
Requestor	**Summary of request**	**Date of request**	**Request completed**
Sparks Fire Department (SFD)	Operational Analysis for SFD Ambulance Placement(s)	12/07/2021	12/22/2021
Reno Fire Department	Ground Emergency Medical Transportation Reimbursement Analysis FY21 (Annual)	12/21/2021	12/22/2021

REMSA Franchise Agreement Updates

EMS Oversight Program staff is compiling documentation for FY 20-21, per the revised REMSA Franchise Compliance Checklist. Documentation will be complete by the end of the calendar year.

On August 26th, the DBOH approved the revisions to the Exemption Guidelines Letter recommended by the EMS Advisory Board on August 5th, with the exception of the language regarding construction and declared emergencies. Program staff continues to work with REMSA on the language for those two items. When completed, staff will present the updates to EMSAB for possible recommendation for approval by the DBOH.

REMSA Exemption Requests - REMSA continues to experience high System Overload and Status 99 delays. Table 1 summarizes requests received for 2021.

Table 1: REMSA Exemption Requests 2021							
Exemption	**System Overload**	**Status 99**	**Weather**	**Other**	**Pending Review**	**Approved**	**Total**
January 2021	23	2	3 (BWE) [a]			28	28
February 2021	5					5	5

March 2021	13					13	13
April 2021	52					52	52
May 2021	34					34	34
June 2021	135	47				182	182
July 2021	68	5				73	73
August 2021	121	111				232	232
September 2021	115	224				339	339
October 2021	71	120				191	191
November 2021	24	41				65	65
December 2021	36	0	4 (BWE)[b]	1*		41	41

*Individual weather exemptions are approved by REMSA, not WCHD, per the Exemption Guidelines. These are short-lived incidences that do not greatly impact the community.
a Blanket weather exemption that resulted in 13 late calls.
b Blanket weather exemption that resulted in 64 late calls.

Community Services Department – Memo Review/Mass Gatherings & Special Events

EMS Oversight Program staff reviews and analyzes project applications received from the Planning and Building Divisions of the Community Services Department (CSD) and provides comments and/or conditions for the applications. To further facilitate future reviews and prevent duplication of efforts, EMS Oversight Program staff met with REMSA Health, Truckee Meadows Fire and Rescue (TMFR) and CSD to develop a checklist of high priority items in development projects that could impact EMS responses. REMSA Health and TMFR comments will be included in the EMS Oversight Program staff reviews provided to CSD.

Mass Gatherings

EMS Oversight Program staff inspected the Reno Air Races in September to ensure emergency services provided were appropriate for the event.

WASHOE COUNTY HEALTH DISTRICT
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STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: February 3, 2022

TO: EMS Advisory Board Members

FROM: Andrea Esp, EMS Coordinator
aesp@washoecounty.gov

SUBJECT: Discussion and possible approval of EMSAB revised bylaws

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SUMMARY

The EMS Oversight Program suggests a revision to the Emergency Medical Services Advisory Board (EMSAB) bylaws to allow for representatives to designate an alternative in the case of a representative's absence.

PREVIOUS ACTION

- March 2015 the EMS Advisory Board approved and adopted the bylaws.
- October 2016 the EMS Advisory Board approved and adopted the revised bylaws.
- May 2021 the EMS Advisory Board approved and adopted the revised bylaws.

BACKGROUND

The Advisory Board is established to provide for concurrent review of present topics within the Washoe County EMS system by the City of Reno, a municipal corporation in the State of Nevada, and the City of Sparks, a municipal corporation in the State of Nevada and Washoe County, a political subdivision of the State of Nevada.

The Advisory Board is established by the (ILA) for Emergency Medical Services Oversight, executed on August 26, 2014. The purpose of the Advisory Board is to review reports, evaluations and recommendations of the Regional Emergency Medical Services Oversight Program, discuss issues related to regional emergency medical services and make recommendations to the respective jurisdictional Boards and/or the District Board of Health.

On May 6, 2021, the Advisory Board adopted the revisions to the language in the bylaws that closer aligned to the language in the ILA for consistency purposes. Those revisions included:

- Clarification of Article I, Section 3.a. – Duties of the Advisory Board
- Recommend removing Section 3.d. in Article I
- Revision to Article I, Section 4 – Terms/Board Administration
    - Chair and vice-chair shall serve for one year, not two.
- Revision to Article II, Section 4 – Terms/Board Administration

- Removal of language regarding the Open Meeting Law, with the addition of the language to Article III, Section 1 – Meetings.

The suggested revisions to the EMS Advisory Board bylaws are:

"Each representative of a City, County, Health District shall have authority to designate an alternate to replace the representative in the representative's absence from meetings of the Advisory Board. The alternate must be a City or County Assistant Manager or Health District Division Director."

FISCAL IMPACT

There is no fiscal impact to the Board on this agenda item.

RECOMMENDATION

Staff recommends the Board approve the suggested revisions to the EMSAB bylaws.

POSSIBLE MOTION

Should the Board agree with staff's recommendation a possible motion would be:

"Move to approve the suggested revisions to the EMSAB bylaws."

Attachment

EMS Advisory Board draft revised bylaws

EMERGENCY MEDICAL SERVICES ADVISORY BOARD

BYLAWS

Approved
March 2015

Approved
October 2016

Dates of Revision/Review
May 2021

WASHOE COUNTY HEALTH DISTRICT
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ARTICLE I – NAME AND PURPOSE

Section 1 - Name

The name of this body is the Regional Emergency Medical Services (EMS) Advisory Board (hereinafter referred to as "Advisory Board").

Section 2 - Purpose

The Advisory Board is established to provide for concurrent review of present topics within the Washoe County EMS system by the City of Reno, a municipal corporation in the State of Nevada ("RENO"), and the City of Sparks, a municipal corporation in the State of Nevada ("SPARKS") and Washoe County, a political subdivision of the State of Nevada ("WASHOE").

The Advisory Board is established by the Interlocal Agreement (ILA) for Emergency Medical Services Oversight, executed on August 26, 2014. The purpose of the Advisory Board is to review reports, evaluations and recommendations of the Regional Emergency Medical Services Oversight Program (the "Program"), discuss issues related to regional emergency medical services and make recommendations to the respective jurisdictional Boards and/or the District Board of Health ("DBOH").

Section 3 - Duties

Duties of the Advisory Board shall include:

a. Make recommendations to the District Health Officer and/or the DBOH related to performance standards and attainment of those standards, medical protocols, communication, coordination, and other items of importance to a high-performing Regional Emergency Medical Services system.
b. Strive to implement recommendations of the Program or submit those recommendations to their governing bodies for consideration and possible action if determined necessary and appropriate by the respective managers.
c. Make recommendations to the respective Boards regarding participating in working groups established by the Program for coordination, review, evaluation, and continuous improvement of Emergency Medical Services.
d. Work cooperatively with the Program to provide input to the development of the Five-Year Strategic Plan, as it relates to the continuous improvement of Emergency Medical Services.
e. Support and work cooperatively with the Program to achieve the Program duties as outlined in the ILA.

ARTICLE II – MEMBERSHIP

Section 1 - Board Composition

The Advisory Board shall be composed of the following members:

a. City Manager, Reno
b. City Manager, Sparks
c. County Manager, Washoe County
d. District Health Officer
e. Emergency Room Physician (DBOH Appointment)
f. Hospital Continuous Quality Improvement (CQI) Representative (DBOH Appointment)

Each representative of a City, County, Health District shall have authority to designate an alternate to replace the representative in the representative's absence from meetings of the Advisory Board. The alternate must be a City or County Assistant Manager or Health District Division Director.

Section 2 - DBOH Appointments

Two positions within the Advisory Board are appointed by the District Board of Health and will serve staggered terms to ensure stability of the Advisory Board. The Emergency Room Physician appointment, a representative of the Prehospital Medical Advisory Committee, will be for three (3) years while the Hospital Continuous Quality Improvement (CQI) representative will serve a four (4) year term. Both appointees are eligible for reappointment for up to two additional two (2) year terms.

Section 3 - Resignation and Termination of DBOH Appointees

Advisory Board membership may be resigned at any time to the DBOH in writing.

Upon the resignation or expiration of the DBOH appointee's term, the member shall continue to serve until his/her successor qualifies and is appointed.

Section 4 - Terms/Board Administration

The Advisory Board shall elect a chair and a vice-chair from among its membership to manage the meetings. The chair and vice-chair shall serve for one (1) year. Both positions are eligible for reappointment for up to two additional two (2) year terms.

ARTICLE III – MEETINGS

Section 1 - Meetings

The Advisory Board shall hold a minimum of one meeting per fiscal year. Additional meetings may be held at the discretion of the chair or as frequently as needed to perform the duties of the Advisory Board.

The Advisory Board shall be subject to the requirements of Nevada Revised Statutes Chapter 241, Open Meeting Laws. A majority of the Advisory Board constitutes a quorum for the conduct of business and a majority of the quorum is necessary to act on any matter.

A quorum of the Advisory Board members must be present to transact business legally – a quorum consists of four (4) Advisory Board members. A majority vote is required for any official action of the Advisory Board unless otherwise specified in the rules of order, which are defined below.

The chair presides over the meetings:

a. The chair opens the meetings.
b. The chair determines that a quorum is present by a roll call vote.
c. The chair calls the meeting to order.
d. Approval of minutes of the prior meeting.
    i. Unanimous consent can be used instead of motions to expedite the proceedings.
e. Every meeting of the Advisory Board shall be conducted in accordance with the adopted agenda.
    i. The written agenda will be approved by the chair prior to distribution and will be distributed to all committee members at least three (3) working days prior to the meeting.
f. The vice-chair shall preside over meetings when the chair is absent.

Section 2 - Voting

Each Advisory Board member will have one (1) vote. Proxy votes are not permitted.

Section 3 - Attendance

Consistent meeting attendance and participation is critical to the success of the Advisory Board. Members who are unable to attend an Advisory Board meeting will notify the Chair of the Advisory Board and Program staff. Program staff will record attendance of all members at each Advisory Board meeting.

Section 4 - Minutes

Minutes shall be kept and recorded of all meetings and forwarded to all members of the Advisory Board as promptly as possible following the adjournment of each meeting.

EMERGENCY MEDICAL SERVICES ADVISORY BOARD

BYLAWS

Approved
March 2015

Approved
October 2016

Dates of Revision/Review
May 2021
February 2022

WASHOE COUNTY HEALTH DISTRICT
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Section 5 - Conflict of Interest

A member of the Advisory Board may not vote on a matter with respect to which the member has a conflict of interest.

ARTICLE IV – AMENDMENTS

Section 1 - Amendments

The bylaws may be amended as necessary at any Advisory Board meeting but will be reviewed at minimum every two (2) years. All amendment requests must be indicated at the Advisory Board meeting as a future agenda item and require an approval of a two-thirds vote for adoption. Amendments take effect immediately upon approval of the Advisory Board.

Approved and adopted this 3rd day of February, 2022, by the Emergency Medical Services Advisory Board.

_____

Neil Krutz, Chair

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD:
Meeting Date: February 3, 2022

TO: EMS Advisory Board Members

FROM: Andrea Esp, EMS Coordinator
775-326-6042, aesp@washoecounty.gov

SUBJECT: Presentation, discussion, and possible approval of the Washoe County EMS Oversight Program FY20 and FY21 Annual Report.

SUMMARY

The purpose of this agenda item is to present for discussion and possible direction on publishing the EMS Oversight Program's FY20 and FY21 Annual Report. The FY20 and FY21 Annual Report serves as an educational and informational resource highlighting the work performed and achievements of the entire region as it relates to Emergency Medical Services (EMS). This report contains performance data for signatory agencies of the Interlocal Agreement.

PREVIOUS ACTION

The previous EMS Program Annual Report for FY19 was presented to and approved by EMS Advisory Board on November 7, 2019.

BACKGROUND

The Interlocal Agreement for Emergency Medical Services Oversight outlines duties of the EMS Oversight Program state that "the Program shall provide oversight of all Emergency Medical Services provided by RENO (City of Reno), SPARKS (City of Sparks), WASHOE (Washoe County), FIRE (Truckee Meadows Fire Protection District) and REMSA and shall … Provide a written Annual Report on the State of Emergency Medical Services to RENO, SPARKS, WASHOE, FIRE and REMSA covering the preceding fiscal year, containing measured performance in each agency including both ground and rotary wing air ambulance services provided by REMSA in Washoe County; the compliance with performance measures established by the District Emergency Medical Services Oversight Program in each agency… ".

The FY20 and FY21 Annual Report is being presented and highlights regional achievements utilizing the template agreed upon by the data workgroup representatives during the winter of 2016. This template was approved by the EMSAB at the January 2017 meeting.

The FY20 and FY21 Annual Report is intended to be utilized as an educational and informational resource for our community to discuss EMS system performance more effectively. It serves as a document for the EMS Advisory Board on the status of the EMS system and the achievements from all the partner agencies, which meets the obligations of the Interlocal Agreement.

FISCAL IMPACT

There will be no additional fiscal impact should the Advisory Board approve the presentation and distribution of the Washoe County EMS Oversight Program FY20 and FY21 Annual Report.

RECOMMENDATION

Staff recommends the Board accept the presentation and approve distribution of the Washoe County EMS Oversight Program FY20 and FY21 Annual Report.

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be "Move to accept the presentation and approve distribution of the Washoe County EMS Oversight Program FY20 and FY21 Annual Report."

Attachment:

Draft FY20 and FY21 Annual Report

WASHOE COUNTY
HEALTH DISTRICT
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EMS Oversight Program
FY20 and FY21 Annual Report

November 2021

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Prevent. Promote. Protect.

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The EMS Oversight Program would like to extend their appreciation to the EMS Partners of Washoe County for the quality emergency care they continue to deliver to the visitors and residents of Washoe County and for contributing to this report by providing their agency's highlights and accomplishments for FY20 and FY21.

Washoe County EMS Oversight Program

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Introduction

The Emergency Medical Services (EMS) Oversight Program Annual Report contains a summary of the Washoe County EMS system from July 1, 2019, through June 30, 2021 (FY20 & 21). The report contains seven major sections highlighting the EMS system within Washoe County, including how the Washoe County 9-1-1 EMS system is set up, the EMS response agencies and their jurisdictional boundaries, performance data, as well as EMS partner highlights, the EMS Oversight Program's accomplishments, and goals for FY22.

In previous years, Washoe County EMS Oversight Program Annual report is available for the public, and stakeholders the end of each fiscal year. However, the publication of FY20 was delayed due to the county's ongoing COVID-19 mitigation efforts. The Annual Report will be available online upon approval.

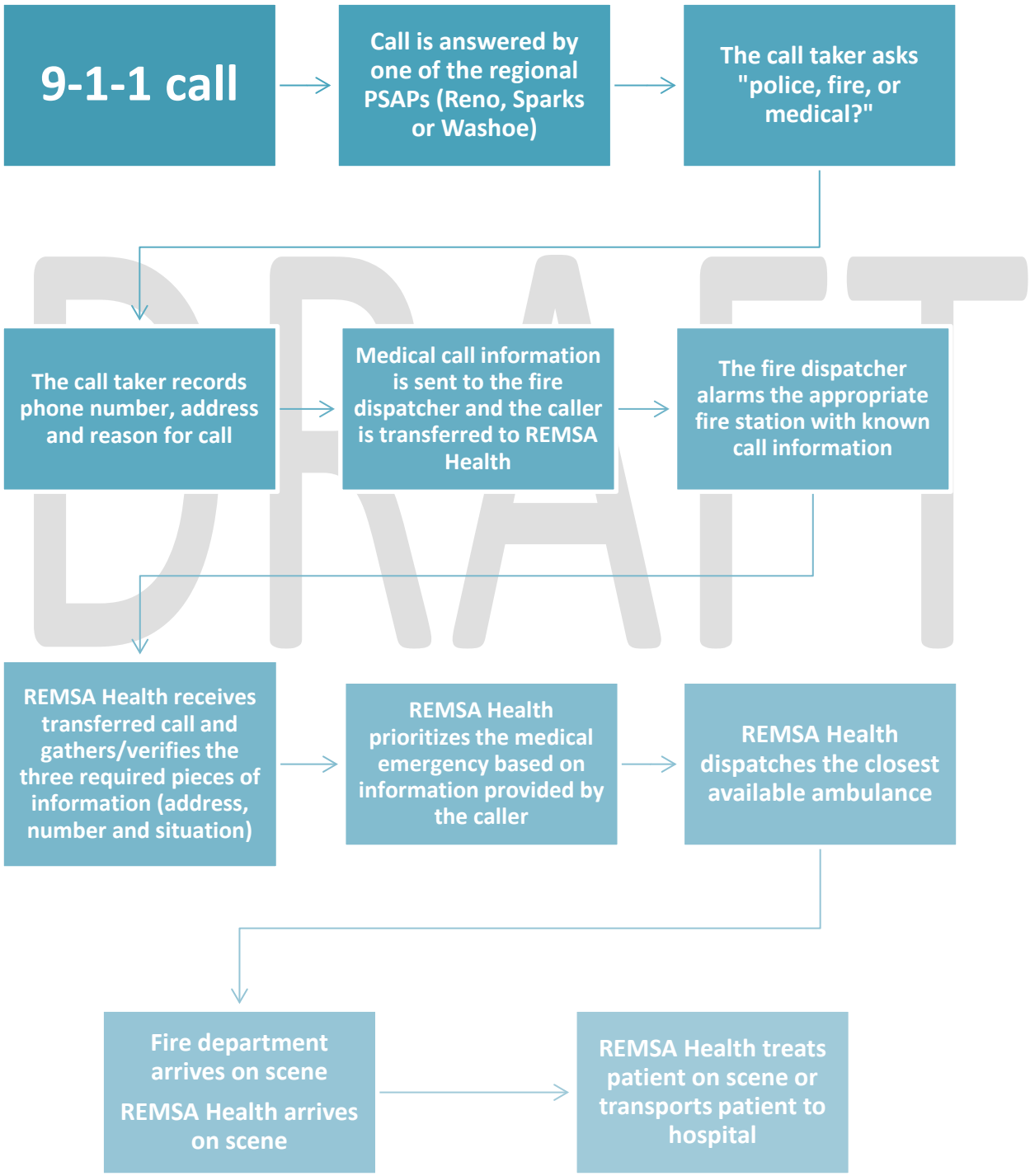
Washoe County's 9-1-1 and EMS System

Washoe County has a two-tiered response system for emergency medical calls. A 9-1-1 call is received at a Public Safety Answering Point (PSAP) where the call taker then will determine if the person in need of services is requesting police, medical or fire response. If medical is requested or needed, fire is dispatched, then the caller is transferred to the REMSA Health dispatch center for Emergency Medical Dispatch (EMD).

The two-tiered system is designed so that a fire agency is dispatched first to a medical EMS incident in their jurisdiction, since fire stations are located within neighborhoods throughout the county. While fire is being dispatched, the caller is questioned by REMSA Health call takers through a structured EMD process to determine the call priority and dispatch send the closest ambulance.

Figure 1 illustrates how a 9-1-1 call is transferred through the EMS system. Starting from the initial call coming into the PSAP, to the call taker questioning, dispatch of fire, transferring the 9-1-1 call to REMSA Health, REMSA Health dispatching an ambulance, EMS (Fire and REMSA Health) responders arriving on scene, and, if warranted, REMSA Health transporting the patient to a hospital.

Figure 1: 9-1-1 Call Routing in the REMSA Health Franchise Area*



*See REMSA Health Franchise area map on page 7

Washoe County EMS Partner Agencies

The EMS system within Washoe County is comprised of multiple partner agencies. These agencies work together daily to ensure the EMS needs of the community are met. The EMS partner agencies include:

- City of Reno[1]
- City of Reno Fire Department
- Reno Public Safety Dispatch
- City of Sparks[1]
- City of Sparks Fire Department
- City of Sparks Public Safety Answering Point
- Gerlach Volunteer Fire Department
- Mount Rose Ski Patrol
- North Lake Tahoe Fire Protection District
- Pyramid Lake Fire Rescue EMS
- Red Rock Volunteer Department
- Reno-Tahoe Airport Authority Fire Department
- REMSA Health
- Truckee Meadows Fire and Rescue[1]
- Washoe County[1]
- Washoe County Health District[1]
- Washoe County Sheriff's Office

Emergency Medical Services in Washoe County are provided by the following fire agencies: Reno Fire Department, Sparks Fire Department, Truckee Meadows Fire and Rescue, North Lake Tahoe Fire Protection District, Reno Tahoe Airport Authority Fire Department, and Pyramid Lake Fire and Rescue. The City of Reno and City of Sparks Fire Departments' jurisdictions encompass the city limits of their respective cities (Figure 2), while Truckee Meadows Fire and Rescue's jurisdiction encompasses unincorporated Washoe County south of the Rural Fire Boundary (Figure 3). The southwest corner of Washoe County falls under the jurisdiction of North Lake Tahoe Fire Protection District (NLTFPD). NLTFPD provides fire and ambulance coverage and transport for the residents of Incline Village, Crystal Bay, and surrounding communities. The Mount Rose Ski Patrol (Mt. Rose) was licensed as an advanced life support (ALS) provider in March of 2018, granting them jurisdiction within the Mt. Rose Ski area. Mt. Rose Ski Patrol is not a transport agency and works closely with regional partners for patient transports. Pyramid Lake Fire Rescue's jurisdiction includes the Pyramid Lake Tribal Land reservation boundaries.

Washoe County citizens north of the Rural Fire Boundary are served by Pyramid Lake Fire Rescue EMS. They respond to medical emergencies in the towns of Gerlach, Empire, or surrounding rural areas. The Red Rock Volunteer Fire Department serves a rural area north of Reno supplemented by Truckee Meadows Fire and Rescue.

[1] Signatory of the Inter Local Agreement for EMS Oversight.

The private ambulance company, REMSA Health, is responsible for the transport of patients within the designated Franchise response area. REMSA Health's response area extends from the southern border of Washoe County, north to the border of the Pyramid Lake Paiute Tribal Lands, east to Wadsworth and west to the border of California (Figure 3).

Figure 2: Jurisdictional Boundaries and Fire Station Locations for Reno Fire Department, Sparks Fire Department and Truckee Meadows Fire and Rescue

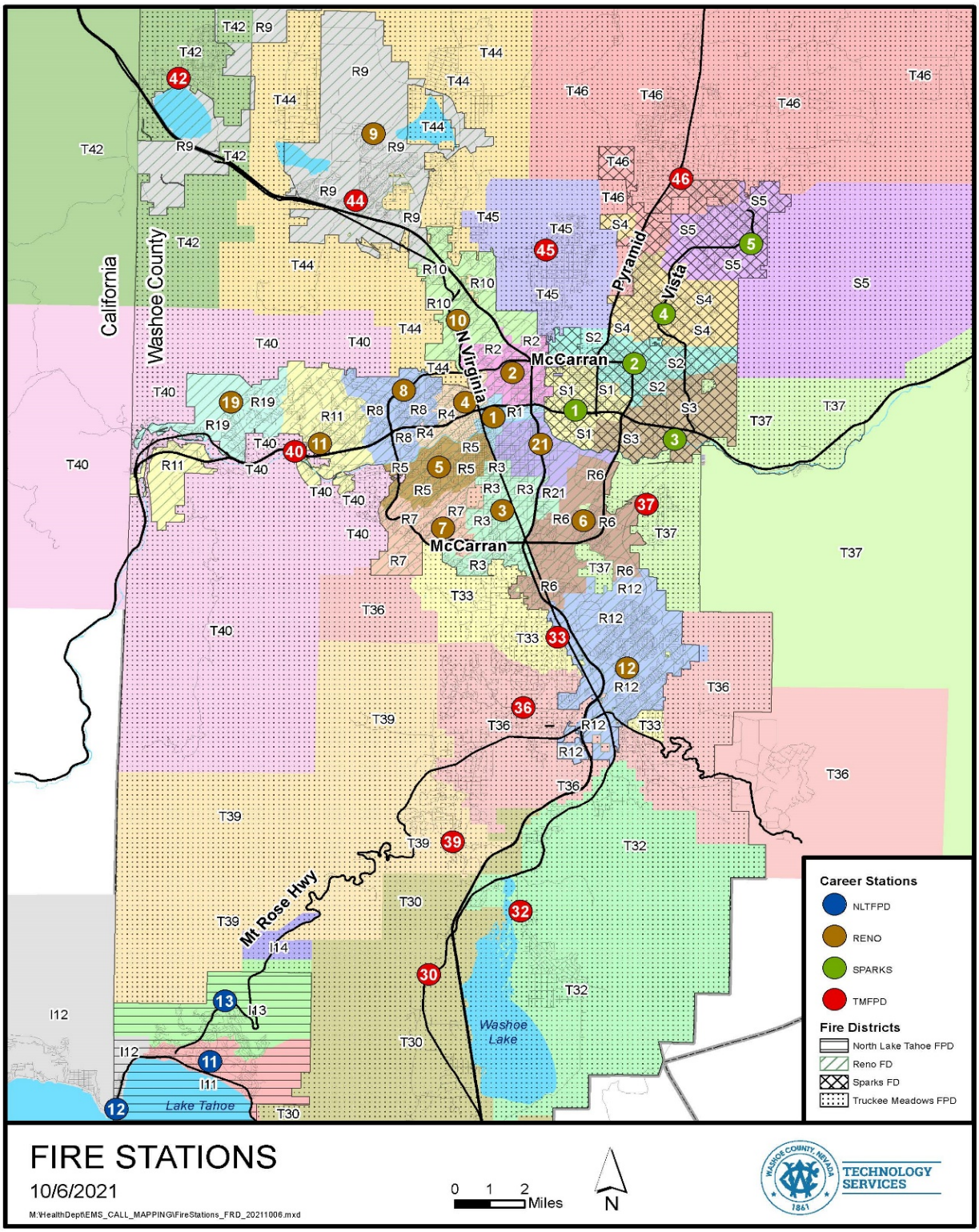
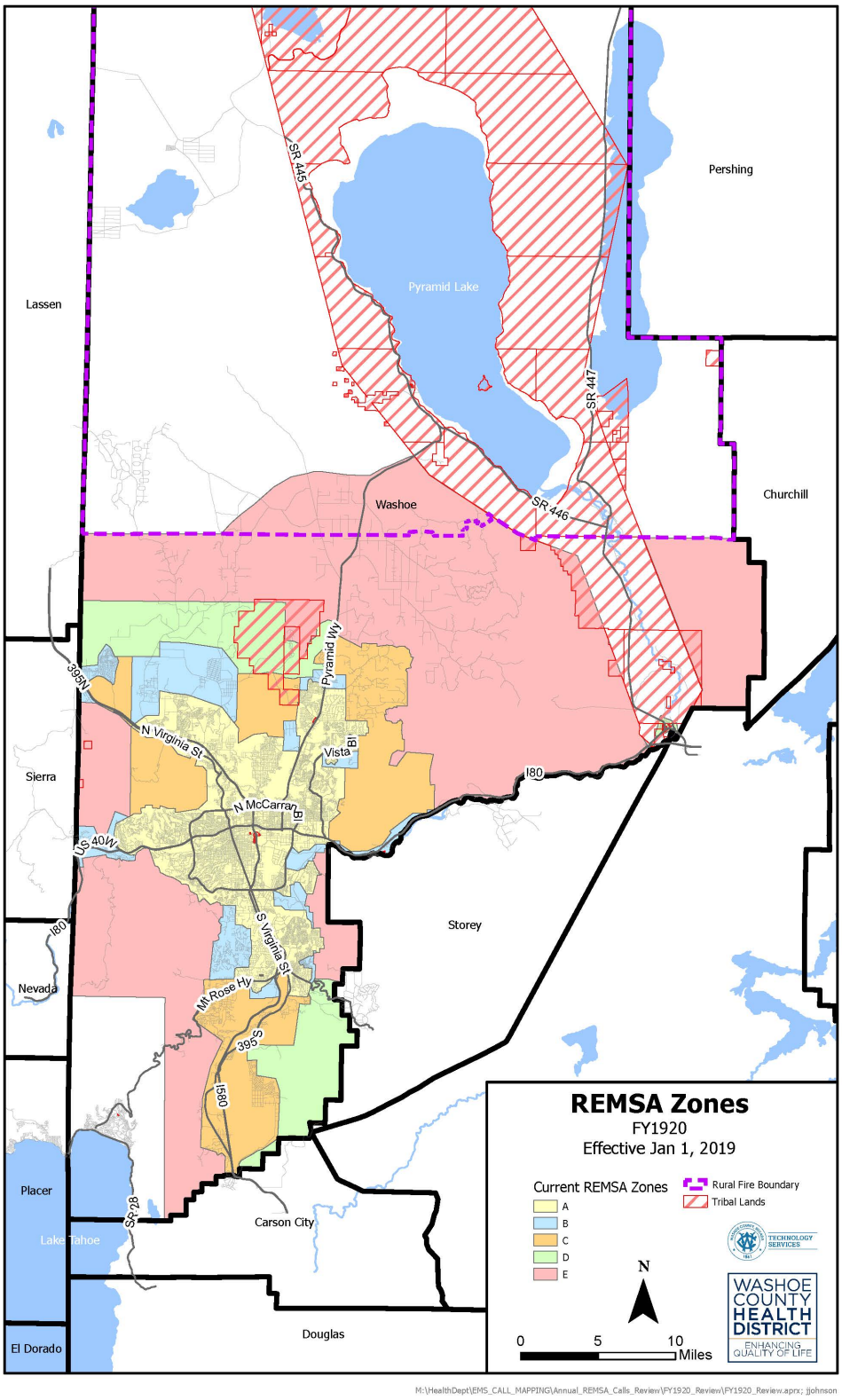


Figure 3: REMSA Health Franchise Response Map



Partner Agency EMS Highlights & Accomplishments FY20-21

Partner agencies prepared and provided their EMS related highlights for FY20-21, which include accomplishments such as trainings, certifications, committee accomplishments, services provided, and new programs implemented. Not all EMS partners provided updates.

2019-2021 Reno Fire Department's EMS Program

The fiscal years of 2019-2020 and 2020-2021 took on some very different dynamics for the Reno Fire Department (RFD). The emergency medical services aspect of our operations blends into every part of our operations and response. The end of 2019 resulted in 43,000+, calls RFD responded to, of which over 29,100 were EMS related calls.

For 2019, what began as an otherwise normal operational period experienced a potentially catastrophic event on June 29, 2019, with the gas explosion at Argenta Hall on the UNR campus. Through only a series of fortunate circumstances, this devastating explosion did not result in mass casualties. Not knowing the building was all but empty at the time; RFD put its mass casualty plan into action and responded to the event with overwhelming resources including it Heavy Rescue Team and nearly thirty apparatus in preparation of the worst.

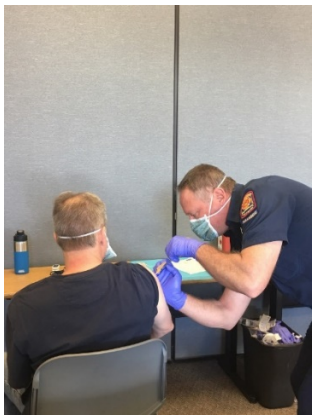
The COVID-19 Response

2020 began to devolve early with the realization that the Covid virus had spread to the U.S. The March 1st news of the disease moving through a King County, Washington residential facility and ultimately infecting over 120 persons including several shifts of firefighters causing the close down of one of their fire stations, hit close to home. The Reno Fire Department began working closely with local and state health officials as well as other fire agencies, hospitals and REMSA on formulating a response to the encroaching disease. By March 17th the Governor had begun issuing several emergency declarations for mandatory, masks, event and business closures, and isolation orders.

Throughout the pandemic crisis effecting Washoe County, RFD adapted its policies and procedures to protects its own personnel and maintain continual response capabilities to the citizens and visitors of Reno. Reno Fire Department's EMS and Emergency Management Divisions stepped up to face the challenge. Initially participating with the Washoe County Health Department in establishing the first community wide Covid Testing site. RFD lent its EMS Chief and Coordinator to act as both the safety officers and onsite paramedics. To ensure RFD has continued ability to respond safely to the increasing number of medical emergencies during the pandemic, we had to guarantee the protection of our responders as well making sure we did not contribute to the spread of the disease. RFD established very strict Personnel Protection and Isolation Protocols and internal Covid testing procedures.

Through CAREs Act monies an EMS Specialist (Kim Eastman) was hired to further coordinate RFDs and indeed the City of Reno's internal testing and expand the department's ability to provide testing and vaccinations to the community as a whole. The same grant monies were used to purchase a specialized trailer, which was outfitted as a mobile POD (point of distribution), so RFD could set up a vaccination site when and wherever needed.

The following are highlights of some of RFD's EMS related advancements and program developments in the recent fiscal year.



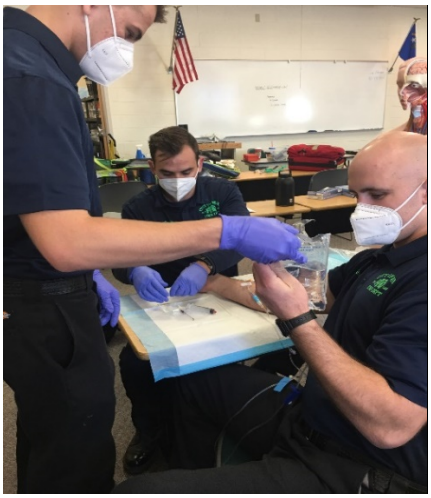
Throughout the 2020 Pandmeic and into the 2021 Delta Varient surges, the RFD has be a steadfast community ally in the testing and adminstration of immunizations communitywide. RFD continues to coordinate vaccination PODs weekly throughout the City having delivered over 10,700 vacinnes as of September 2021.

Stay Calm…And Carry On!

Even with the advent of the Covid Pandemic, the RFD has to continue day-to-day responses, operations and training. The following are those routine activities that the RFD EMS Division carries throughout each year.

Academies:

RFD graduated a four-month academy, in each of the 2019-2021 fiscal years, which provided a compliment of 36 new firefighters to the department. Among them were eight new paramedics, 12 Advanced EMTs and 16 EMTs. Additionally, the EMS Division conducted Mass Casualty Incident and Active Assailant training along with the Reno Police Department for the new recruits in each of its academies. The last two weeks of each academy is intensive emergency medical training which includes: equipment and medication familiarization, IV and injection training, advanced airway management, adult and pediatric medical and trauma patient assessment and treatment. The recruits must successfully pass six written and four practical tests as part of this training.



New Paramedic Companies:

The addition of newly hired paramedics along with RFD members who completed paramedic training from other programs, allowed for the opening of 1 new paramedic apparatus; Engine 8 (northwest) now staffed full time for paramedic response.

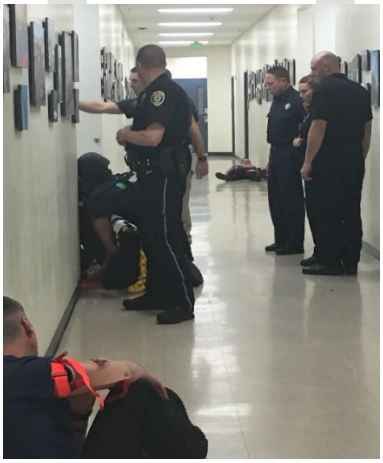
Wildland EMS:

Over 30 RFD personnel have been qualified as wildland fire "Line-Medics". This specialized training along with a full complement of ALS equipment and supplies allows these medics to work alongside firefighters in remote and austere conditions and provide high levels of medical care in the event of a serious injury or illness. Additionally, RFD will be implementing an additional REM (Rapid Extrication Module) Team with the compliment of an off-road UTV vehicle, which can provide care, rescue and transportation to injured firefighters and victims in remote locations. RFD deployed EMS resources on over 30 wildland assignments during the 2020 fire season.

One of the most serious Wildland-Urban, the Pinehaven fire burned into west Reno on November 27, 2020, being pushed by 30 and 40 mph winds. Nearly every RFD Company on duty that night was engaged in the firefight, which saw nine homes lost and dozens of others damaged. Neighboring communities poured in resources and manpower to back fill RFD fire stations and assist in the response.

EMS Training:

- Division level training was conducted for all 200+ line personnel, involving realistic scenarios of firefighters injured in remote locations.
- Unfortunately, Active Assailant/Rescue Task Force (RTF) training is essential in today's world. Training was conducted with the Reno Police Department (RPD) and REMSA for all line personnel, Investigators and Battalion Chiefs who have received NFPA 3000-Tactical Emergency Critical Care (TECC) training dealing with the response, treatment and extrication of victims of an active shooter event. RFD has provided each of its personnel with ballistic protective gear in order to operate effectively in these dangerous circumstances.



- All Recruit Paramedics and Advanced EMTs must complete an EMS preceptorship as part of the completion of their one-year probation. This includes the mentorship, evaluation by a senior EMS preceptor over ten-shift period This training/evaluation period culminate in a written knowledge and protocol test and practical assessment test.

- RFD EMS Division conducted three internal Advanced Cardiac Life Support (ACLS) and Pediatric Life Support (PALS) refresher courses to maintain the nearly 70-paramedic certifications.

Additional Training:

- Mass Casualty Incidents/Disaster Response
- Swift water Rescue for RFDs "WET" Team,
- AMTRAK Train emergency response
- Building Collapse and Rescue, "Tech-Team"
- Hospital "Med-Sled" Evacuation Training.

Community Participation in EMS:

- The Reno Fire Department provides CPR and First Aid to various community organizations upon request. The Reno Fire Department is engaged with regions higher education institutions through its participation in the proctorship of over 150 EMT and AEMTs students annually from Truckee Meadows Community College (TMCC) as well as Western Nevada Community College (WNC) for their required clinical "ride-a longs".
- RFD is an active participant in UNR's College of Public Health's internship program providing much needed internship opportunities for 2 bachelorette students each semester. These students' area of focus is on community health and are assigned such projects as community cardiac arrest outcomes and homeless population health issues.
- RFD is actively involved in the regions EMS efforts through regular participation in the following organizations: The District Board of Health (DBOH), Physician Medical Advisory Committee (PMAC), Emergency Medical Advisory Board (EMSAB), Inter-Hospital Coordinating Council (IHCC), Emergency Department Consortium (EDC), Nevada EMS Advisory Board, WCHD EMS Regional Protocols, Special EMS Study Review Task Force and National Association EMT's (NAEMT) State Advocacy, Northern Nevada Fire Chiefs EMS Committee, Mass Casualty Incident Plan (MCIP) Committee, and State Emergency Response Commission (SERC). Additionally, RFD EMS is represented on all three of the regions Paramedic Program Advisory Boards.

Reno Fire Department EMS Team: EMS Specialist/Covid Coordinator-Kim Eastman, EMS Chief-Dennis Nolan, EMS Coordinator Cindy Green

City of Sparks Fire Department Highlights for FY20-21

Pandemic Response

Half of FY19-20 and all FY20-21 fire department operations were impacted by the Coronavirus. Several meetings with neighboring fire agencies, REMSA HEALTH, Medical Director's, and county health officials were assembled to provide a unified approach to serving our communities and flattening the curve. The EMS response, and strain on the 9-1-1 and hospital systems were leading topics of discussion. Information from these meetings was returned to the Sparks Fire Department to implement best practices to protect our personnel so we would be available to respond and serve the EMS needs of the public.

Fire Stations

Daily health screenings and touchless thermometers were implemented to keep COVID-19 out of the fire stations. Non-safety personnel worked remotely, face coverings were required while in common areas or in the presence of another person, and social distancing was practiced. Personnel were instructed to decontaminate after each emergency response in apparatus bays before returning to living quarters.

COVID-19 Testing

During the beginning stages of COVID-19 testing, test kits (PCR) were provided by Washoe County Health Department. The Nevada State Public Health Laboratory worked with first responders to expedite test results. These services greatly assisted the Sparks Fire Department (SFD) and Sparks Police Department (SPD) staffing when exposures occurred, personnel were in precautionary quarantine, or members returned from wildland assignments. The SFD training captains were tasked with testing asymptomatic personnel and completed over 100 tests.

Later, COVID testing expanded to community testing with the assistance of the National Guard, Washoe County Health officials, and Washoe County POD trailers. This had a positive effect on reaching vulnerable members in our community who had lesser means of transportation or access to COVID testing sites. In addition to learning their COVID status, many residents were provided the necessary documentation required to return to work.

COVID-19 Vaccinations

In late December of 2020, the Moderna vaccine became available for first responders to begin vaccinations. Surveys were sent to personnel soliciting interest in receiving the vaccine to ensure doses weren't wasted when planning vaccination points of distribution (PODs). Fire personnel with Nevada State Immunization Endorsement, administered the vaccines to fire and police officers under the direction of the SFD Medical Director, CDC guidance/protocols, Washoe County Health Department guidance and other applicable information/ standards. The majority of fire and police personnel were fully vaccinated by the end of March 2020.

As the vaccination tier system expanded beyond public safety, a Sparks Fire Department Vaccination Coordinator was established. The vaccination coordinator with the assistance of several Sparks Fire personnel held city employee and Washoe County School District PODs that branched out to public PODs beginning with the elderly, immunocompromised recipients, and eventually leading to the general public. The SFD conducted 49 PODs and administered over 5,700 vaccinations.

Several systems and training were required to administering vaccines. Some of these systems included registering with the Nevada State Immunization Program, training, and certification through Nevada's immunization documentation program (WebIZ), purchasing and installing a pharmaceutical grade refrigerator, scheduling vaccinations.

EMS Supplies

EMS supplies, especially N95 masks, isolation gowns and gloves, were extremely limited and methods were established to preserve supplies on hand. Donning & doffing training was provided to protect personnel from cross contamination exposure and to safely store reusable EMS personal protective equipment (PPE). Long standing relationships with EMS vendors enabled small purchases of N95 masks as they become available, resulting in a continuous, uninterrupted supply. Several local and state resources were integral in supplementing PPE supplies when vendors were unavailable. These supplies were quickly provided by programs such as: Washoe County Emergency Management, Nevada Department of Public Safety Division of Emergency Management/Homeland Security, and the Inter-Hospital Coordinating Council (IHCC).

An online, PPE tracking system or "Burn Rate" spreadsheet was established for fire personnel to enter their daily PPE usage. This system provided real-time updates of department EMS PPE inventory as well as usage trends in relation to surges in COVID-19 cases.

Disinfectants and Hand Sanitizer

Early on, disinfectants and hand sanitizer could not be purchased. Fortunately, the City of Reno Public Works Department began producing hand sanitizer & bleach by the gallons for distribution to EMS responders. The on duty SFD battalion chief vehicle carried separate totes of these sanitizing/disinfecting chemicals to refill the fire stations until manufacturing and production returned. This operation supplied us with critical cleaning agents for 3-4 months when otherwise unavailable.

Training

During FY19-20 and FY20-21, there were several months where training was either limited to single companies or provided through distance learning. When COVID levels were low enough to expand training drills, SFD took advantage and conducted multi-company/joint trainings such as: joint rescue task force training consisting of SFD, SPD, and REMSA, suppression drills, EMS training, wildland training, water rescue training, technical rescue training, and hazmat triad training.

EMS training was a combination of distance learning, classroom sessions, and skills sessions. Traditionally, SFD augments paramedic level training through regional paramedic refreshers, but many conferences were cancelled due to COVID. During this time, SFD utilized other training opportunities to increase our EMS instructor pool to provide inhouse paramedic recertification classes.

SFD Agency Highlights FY19-20

- SFD hired 2 firefighter/paramedics
- SFD Fire Line Medics were certified and began responding to wildfires.
- E-11 began providing Advanced Life Support (ALS) services.
- Tank farm fire training
- New Ladder 51 put into service

SFD Agency Highlights FY20-21

- SFD hired 3 firefighter/paramedics
- Nine SFD personnel completed the TMFR EMS instructor course with certification.

- Three SFD paramedics completed Advanced Cardiac Life Support (ACLS) instructor certification.
- Four SFD paramedics completed Pediatric Advanced Life Support (PALS) instructor certification.
- E-12 began providing ALS services
- SFD REMS (Rapid Extrication Module Support) team with paramedics was established and began responding to wildfires.
- Sparks City Council approved an EMS Division Chief position.

Truckee Meadows Fire and Rescue Highlights for FY20-21

DATA PERFORMANCE REPORTS

TMFR Incident Response Data:

	July 01,2020 – June 30, 2021
District Wide EMS Responses	7602
Mutual Aid Responses	1116
Mutual Aid Transports	957

COVID -19 Update

Truckee Meadows Fire and Rescue (TMFR) has assigned a full time COVID-19 Coordinator to work with the existing Department Infection Control Officer (DICO) Staff and the EMS Division to provide vaccinations, COVID-19 testing, contact tracing, and development of policies and best practices during the pandemic. The vaccination rate for TMFR personnel is over 86 percent, with over 4300 vaccinations completed on community members. TMFR also partnered with the Washoe County School District and Dr. Pasternak's Silver Ridge Center to complete over 1000 vaccinations to essential workers and high-risk persons. Our DICO personnel were also instrumental in assisting the Washoe County Health District with providing testing and vaccinations to rural areas of Washoe County including the Gerlach area. TMFR retains the logistical ability to continue to provide more vaccinations to the community as the need arises.

Staffing Update

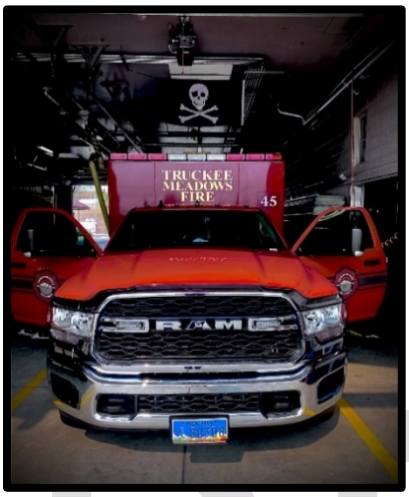
TMFR had 19 Firefighter Paramedics complete the Fire Academy and start their probationary period on the line during FY20-21. We currently have added another 19 Firefighters starting their onboarding training and will be available for station assignments by the end of 2021. This includes 4 Lateral Firefighter/Paramedics, and 15 entry level Firefighter/EMTs and Firefighter/Paramedics. This will increase our State Certified Paramedic count to 113.

An additional EMS Coordinator position was filled to allow TMFR the ability to expand our Quality Assurance/ Quality Improvement Program, as well as develop a more comprehensive training program for our employees.

We are also maintaining a group of 25 Wildland Fireline Paramedics that can be deployed on wildland

fires throughout the United States as they are needed. These Paramedics serve as a supplement to the district's already established REMS (Rapid Extrication Module Support) Team.

Ambulance Program Update



During November 2021, TMFR began providing expanded Mutual Aid response to REMSA to assist with an increased call volume due to the COVID-19 pandemic. This partnership continued throughout the remainder of FY20/21. This expansion of TMFR's transport capability provided for a faster response time to TMFR citizens, created a larger depth of resources for fire incidents, and provided an additional training platform that allowed for educational opportunities for local paramedic students. The development of a formal Paramedic Preceptor position within the department ensures a high level of competency for TMFR instructors. TMFR currently has agreements in place with Truckee Meadows Community College in Reno, and Western Nevada College in Carson City.

TMFR ambulances served as the primary transporting unit for the Washoe Valley and Sun Valley areas of our district, but also provided a significant surge response to the City of Reno and the City of Sparks when no other ambulances were available to respond. As listed above, during the last half of FY20/21, TMFR responded to 1116 mutual aid incidents and transported 957 times to local facilities.

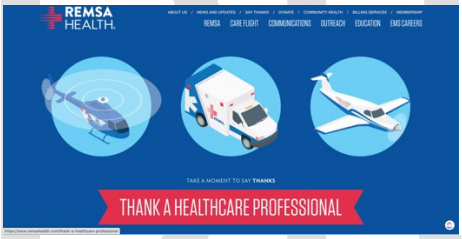
To meet the equipment needs of this service enhancement of TMFR, we also purchased and placed 2 new 2021 Braun ambulances into service at Station 45 and Station 30. These ambulances will help ensure consistent and safe EMS transport for the citizens of Washoe County well into the future.

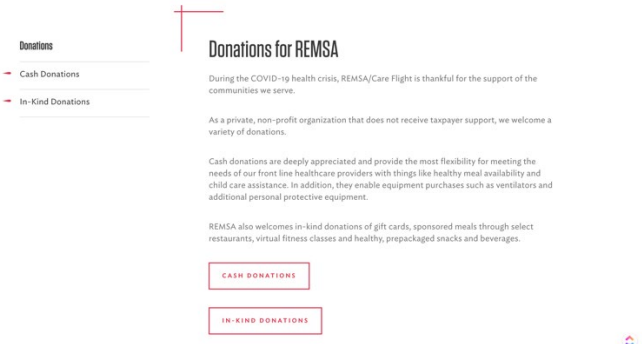
REMSA Health & Care Flight Highlights for FY20

DIVISION: COMMUNITY RELATIONS

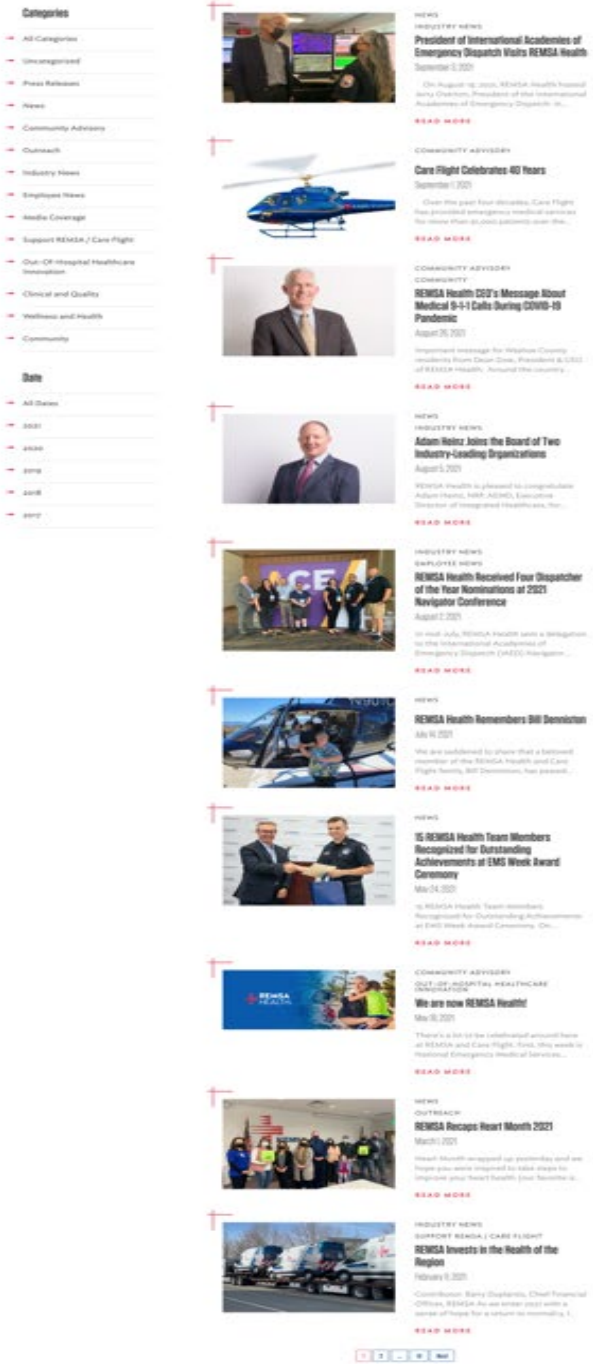
Digital Media

REMSA Health continues to expand and enhance its website, remsahealth.com. REMSA Health's website added several new features including a searchable (by year and by category) News and Updates section, as well as a tagged and recommended content. In addition, a section titled, "Say Thanks" allows anyone to send a message thanking medical dispatchers, administrative staff, and healthcare providers. A continuous stream of thank you notes is also visible. The COVID-19 pandemic accelerated the addition of a "Donate" section on the website. Many private citizens and local businesses were interested in thanking and supporting REMSA Health throughout the pandemic. A special webpage was created to accept cash and in-kind donations.






REMSA HEALTH
REMSA CARE FLIGHT COMMUNICATIONS OUTREACH EDUCATION EMS CARRIERS
NEWS AND UPDATES


Categories
All Categories
Uncategorized
Press Releases
News
Community Advisory
Outreach
Industry News
Employee News
Media Coverage
Support REMSA / Care Flight
Out-Of-Hospital Healthcare Innovation
Clinical and Quality
Wellness and Health
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President of International Academies of Emergency Dispatch Visits REMSA Health
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Care Flight Celebrates 40 Years
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REMSA Health CEO's Message About Medical 9-1-1 Calls During COVID-19 Pandemic
August 26, 2021
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NEWS
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Adam Heinz Joins the Board of Two Industry-Leading Organizations
August 5, 2021
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INDUSTRY NEWS
EMPLOYEE NEWS
REMSA Health Received Four Dispatcher of the Year Nominations at 2021 Navigator Conference
August 2, 2021
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NEWS
REMSA Health Remembers Bill Denniston
July 14, 2021
READ MORE
NEWS
15 REMSA Health Team Members Recognized for Outstanding Achievements at EMS Week Award Ceremony
May 24, 2021
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COMMUNITY ADVISORY
OUT-OF-HOSPITAL HEALTHCARE INNOVATION
We are now REMSA Health!
May 18, 2021
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NEWS
OUTREACH
REMSA Recaps Heart Month 2021
March 1, 2021
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INDUSTRY NEWS
SUPPORT REMSA / CARE FLIGHT
REMSA Invests in the Health of the Region
February 9, 2021
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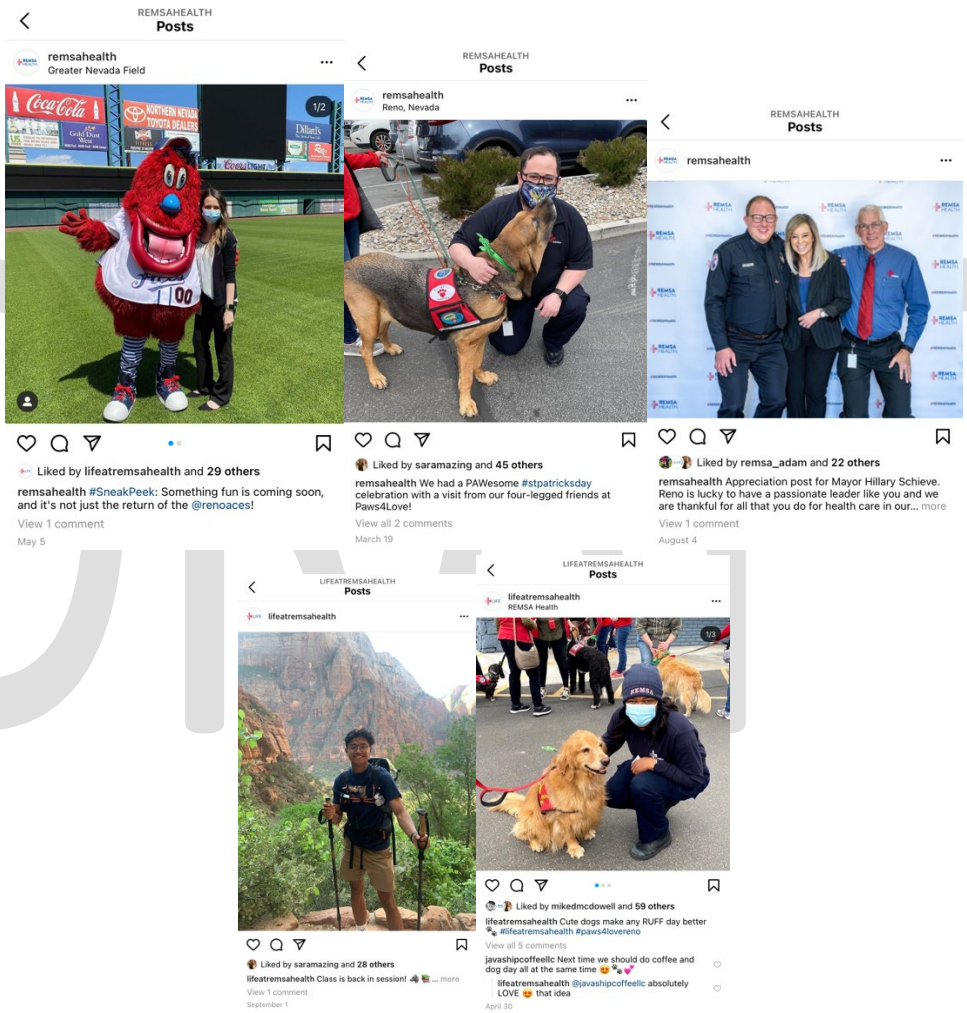
In addition, REMSA Health engages in dialogue through its social media channels. These include Facebook, Twitter, LinkedIn, YouTube and more recently, two Instagram pages – one on behalf of the entire organization and one aimed at talent acquisition. All the social channels have content that is related but tweaked slightly to connect with and appeal to audiences most likely to use that platform. Social media highlights and posts range from employee celebrations to partner agency recognition, from general healthcare messaging to out-of-hospital industry news.



Media Relations

Developing strong and meaningful relationships with regional media is a key focus of REMSA Health's Public Relations Department. As a healthcare and public safety organization, building trust with the community through the media is critically important. We rely heavily on their coverage to raise awareness about important topics; and this was perhaps the most important 18 months ever in terms of how much we worked with the media to promote and share public health information.

In addition to personnel features and general safety topics, a significant amount of media coverage was focused on COVID-19 – on behalf of REMSA Health as well as through the Joint Information Center. Media stories – proactive and reactive – covered topics including: it's safe to call 9-1-1, preserve 9-1-1 for

emergencies, precautions REMSA HEALTH was taking to keep employees/patients/colleagues/families safe, tiered system of response, matching the right response to the right call, how to contact the Community Triage Line, and what to expect when you call 9-1-1.

Community Engagement

Community is one of REMSA Health's foundational brand pillars. Through community outreach, education and special projects, we work to enhance and improve the health of the community we serve. Recent community projects include flu shots for homebound citizens, COVID-19 testing for homebound citizens, COVID-19 vaccines for homebound citizens, and participation in community COVID-19 testing and vaccine events, including events focused on underserved populations and in partnership with the University of Nevada, Reno.

In addition, REMSA Health works to grow its community engagement through formal presentations to community groups such as Rotary and Lions Club chapters, Builders Association of Northern Nevada, Northern Nevada Networking, Osher Lifelong Learning Institute, Reno-Sparks Chamber of Commers, Downtown BID, EDAWN, and regional hospital boards of directors.

Partnerships

REMSA Health maintains community partnerships with organizations and businesses such as the Girl Scouts, Reno Aces, Nevada Donor Network, and Donor Network West By hosting tours (when appropriate and safe) and sponsoring giveaways for items such as AEDs.

DIVISION: EMPLOYEE INITIATIVES

EMS Week

Every May, across the country, the important contributions that EMS agencies make are recognized during EMS Week. REMSA Health uses this opportunity to thank and celebrate employees across our organization. From the billing office to the mechanics, from the administrative staff to the providers and medical dispatchers, contributions are recognized, and outstanding service is honored. This year, EMS Week included a special COVID-19 medal bar recognition, giveaways, an employee/family drive-in movie night, Paws for Love visits, catered meals, the 35th anniversary celebration of the organization and the unveiling of a refreshed name and logo: REMSA HEALTH.

North Lake Tahoe Fire Protection District

FY 2020

Operations Summary

North Lake Tahoe Fire Protection District (NLTFPD) remained fully staffed with forty-five (45) line personnel for most of the fiscal year. Seventy percent (70%) of the line personnel are certified as paramedic or higher. Over a third of the paramedics have experience as a critical care paramedic, certified flight medic, or EMS-RN.

NLTFPD hired four (4) line personnel during the year and continues to participate in the Capital City Fire Academy with regional partners.

Fifty-six percent (56%) of NLTFPD requests for service were rescue and emergency medical service incidents.

NLTFPD completed the replacement of all Type I ALS engines and received a grant from the Dave and Cheryl Duffield Foundation for a new fire and rescue boat.

Education

NLTFPD continues to host the annual Paramedic Refresher and CE Program. This program provides EMS education for partner agencies and regional cooperators in Nevada and California.

General NLTFPD Education Statistics for FY 2019-2020.

- ACLS – 241
- PALS – 134
- BLS/CPR – 1489
- Other Disciplines – 509

FY 2021

Operations Summary

NLTFPD remained fully staffed with forty-five (45) line personnel for most of the fiscal year. Seventy percent (70%) of the line personnel are certified as paramedic or higher. Over a third of the paramedics have experience as a critical care paramedic, certified flight medic, or EMS-RN.

NLTFPD hired four (3) line personnel during the year and continues to participate in the Capital City Fire Academy with regional partners.

Fifty-three percent (53%) of NLTFPD requests for service were rescue and emergency medical service incidents.

NLTFPD placed a new rescue and fire boat into service increasing the capabilities to assist cooperating agencies.

NLTFPD moved dispatch services to Grass Valley Emergency Command Center. The move enhances agency coordination during EMS, wildland, and fire responses. Truckee and Tahoe Basin agencies now

have real time locations of all apparatus available for or assigned to a response. NLTFPD will remain partners in the 800 MHz system.

Education

NLTFPD continues to host the annual Paramedic Refresher and CE Program. This program provides EMS education for partner agencies and regional cooperators in Nevada and California.

General NLTFPD Education Statistics for FY 2020-2021

- ACLS – 149
- PALS – 119
- BLS/CPR – 1423

Mt. Rose Ski Patrol FY20-21

The Mt. Rose Ski Patrol is made up of 60 paid and volunteer Ski Patrollers. Using a tiered response system, patrollers provide care as EMR, EMT, AEMT, Paramedic, and/or EMS RN level in an Austere environment. Since Mt Rose Ski Patrol is not a transport agency, they work closely with NLTFPD, TMFR, and REMSA to provide quality patient care and minimize unnecessary calls for service from our partner agencies and busy EMS system.

During the 20-21 season (November 2020 - April 2021) Mt. Rose Ski Patrol responded to:

- Total Ski Patrol Requests for Service: 748
- Total Patients Treated: 539
- Adults: 357
- Minors: 182
- Treated, Transported by Ground Ambulance: 56
- Treated, Transported by Air Ambulance: 0

Additionally, Mt. Rose Ski Patrol works with partnering agencies to provide avalanche training, mitigation, and rescue as mutual aid primarily along the Highway 431 corridor.

EMS Regional Performance Analyses

The EMS Oversight Program monitors the response and performance of each agency providing Emergency Medical Services in Washoe County. One of the duties of the EMS Oversight Program is to measure performance, analysis of system characteristics, data and outcomes of the Emergency Medical Services to Reno, Sparks, Washoe County, Fire and REMSA as outlined in the Interlocal Agreement (ILA).

The EMS regional performance analyses in this section utilize the EMS incident calls reported in Sparks Fire Department, Reno Fire Department, and Truckee Meadows Fire and Rescue jurisdictions from Fiscal Year 2020 (July 1, 2019, through June 30, 2020) and Fiscal Year 2021 (July 1, 2020, through June 30, 2021). The evaluation of the regional EMS performance system spans from initial 9-1-1 PSAP call received to EMS agency/apparatus arriving on the scene. Fire and EMS system outcomes presented in each analysis is dependent upon accuracy and validity of time variables submitted by Fire and EMS agencies to the Health District. Analyses performed by the EMS Oversight Program allows EMS partners to assess opportunities for system and quality improvement(s).

Table 1. REMSA Priority Level(s)

Priority	Priority Description(s)
0	Unknown priority occurs when the emergency medical dispatching (EMD) questioning process has begun. However, either A) REMSA Health was cancelled prior to arriving on scene before the EMD process was completed; or B) REMSA Health arrived on scene prior to the EMD process being completed.
1	High acuity calls, deemed life-threatening.
2	Medium acuity calls, no imminent danger.
3	Low acuity calls, no clear threat to life.
9	Also referred to as Omega calls, are the lowest acuity call.

Table 1 outlines priority levels for EMS related incidents assigned by REMSA Health International Academy of Emergency Dispatch (IAED) certified Emergency Medical Dispatch system and corresponding description for each level.

Table 2: Number and Percent of Reported EMS Incident Calls by Match Status, REMSA Priority and Fire Agency, FY20								
REMSA Priority	RFD		SFD		TMFR		Total	
	Number	%	Number	%	Number	%	Number	%
0	176	0.5%	51	0.5%	15	0%	242	0.5%
1	16,280	50%	4,846	44%	3,123	39%	24,249	47%
2	11,906	37%	3,386	31%	2,791	35%	18,083	35%
3	2,287	7%	1,563	14%	1,226	15%	5,076	10%
9	479	1%	417	4%	345	4%	1,241	2%
No Match	1,366	4%	788	7%	555	7%	2,709	5%
Total	32,494	100%	11,051	100%	8,055	100%	51,600	100%

Table 2 summarize the distribution of matched calls between REMSA Health and Fire by REMSA Health Priority levels. Approximately 82% of EMS incident calls between REMSA Health and Fire were in Priority 1 and Priority 2 level response category for Fiscal Year 2020.

Table 3: Number and Percent of Reported EMS Incident Calls by Match Status, REMSA Priority and Fire Agency, FY21								
REMSA Priority	RFD		SFD		TMFR		Total	
	Number	%	Number	%	Number	%	Number	%
0	148	0.5%	42	0.4%	29	0.4%	219	0.4%
1	16,167	50%	4,945	41%	3,064	39%	24,176	46%
2	11,185	35%	3,604	30%	2,311	29%	17,100	33%
3	2,913	9%	1,853	15%	1,577	20%	6,343	12%
9	525	2%	475	4%	303	4%	1,303	2%
No Match	1,379	4%	1,072	9%	623	8%	3,074	6%
Total	32,317	100%	11,991	100%	7,907	100%	52,215	100%

Table 3 summarize the distribution of matched calls between REMSA Health and Fire by REMSA Health Priority levels. Approximately 79% of EMS incident calls between REMSA Health and Fire were in Priority 1 and Priority 2 level response category for Fiscal Year 2021. The EMS system experienced a 7% increase (48,585 to 52,215) in EMS volume from Fiscal Year 2019 to Fiscal Year 2021. On average, an additional 300 EMS incidents were reported every month in Fiscal Year 2021 compared to pre-COVID volume in Fiscal Year 2019.

Table 4: EMS Response Travel Time for Priority 1 and Priority 2 Calls Matched to REMSA Health, Fire Enroute to Arrival Times, FY18 to FY21				
Fiscal Year	**Median**	**Mean**	**90th Percentile**	**Number of Calls Analyzed**
2018	04:19	05:03	07:51	37,046
2019	04:36	05:17	08:20	37,135
2020	04:51	05:31	08:48	37,067
2021	05:08	05:49	09:09	36,330

Table 5: EMS Response Travel Time for Priority 1 and Priority 2 Calls Matched to Fire, REMSA Health Enroute to Arrival Times, FY18 to FY21				
Fiscal Year	**Median**	**Mean**	**90th Percentile**	**Number of Calls Analyzed**
2018	05:52	06:56	11:29	51,796
2019	05:33	06:25	10:24	40,468
2020	05:48	06:42	10:48	40,316
2021	05:56	07:01	11:43	39,474

Table 4 and Table 5 summarize REMSA Health and Fire response travel time for Priority 1 and Priority 2 EMS incidents, independent of first arriving agency to the scene. The number of calls available for analysis for Priority 1 and 2 calls decreased from Fiscal Year 2020 to 2021. The decrease may be due to changes in dispatch protocols and response assignments for additional low acuity calls released by REMSA Health on July 21, 2020 and approved to District Board Of Health on August 27, 2020. The change to expand Intermediate Life support response protocol may have influenced the system change of 2% increase in matched Priority 3 EMS incidents between REMSA Health and Fire in Fiscal Year 2021 compared to Fiscal Year 2020 (refer to Table 2 and Table 3).

Table 6: Patient Perspective from Time Call Answered to First Arriving Agency FY18 to FY21					
REMSA Health Priority	**Patient Perspective Median Time**				
	FY18	**FY19**	**FY20**	**FY21**	**±Δ FY18 – FY21**
0	06:26	06:55	07:21	08:43	2:17
1	05:52	06:20	06:38	07:06	1:14
2	06:25	06:44	07:03	07:39	1:14
3	07:13	07:21	07:46	08:43	1:30
9	07:51	07:50	08:00	09:16	1:25
All	06:14	06:36	06:54	07:29	1:15
Number of Calls Analyzed	**50,680**	**47,583**	**47,865**	**48,671**	**-**

Table 6 provides an overview of median time from the time 911 call is received at PSAP to first agency (fire or REMSA Health) arriving at the scene of the call. During Fiscal Year 2020, median time patient perspective for all call type is under seven minutes. As EMS volume calls continue to rise in Washoe County, median time for patient perspective during Fiscal Year 2021 is seven minutes and twenty-nine seconds. Comparison for median time for all priority call has been at a steady increase.

Table 7: Arrival on Scene, All Matched Calls between REMSA Health and RFD, SFD, and TMFR, FY20												
Arrival On Scene	**REMSA Health Priority**											
	0		**1**		**2**		**3**		**9**		**Total**	
	Number	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
REMSA First	0	0%	11,414	47%	6,986	39%	1,325	26%	319	26%	20,044	41%
REMSA Only-Fire Canceled	1	0%	2,330	10%	2,101	12%	933	18%	247	20%	5,612	11%
Fire First	0	0%	9,878	41%	7,517	42%	2,302	45%	532	43%	20,229	41%
Fire Only-REMSA Canceled	107	44%	376	2%	861	5%	461	9%	58	5%	1,863	4%
Same Time	0	0%	54	0%	36	0%	9	0%	1	0%	100	0%
All Canceled	134	55%	197	1%	582	3%	46	1%	84	7%	1,043	2%
Total	242	100%	24,249	100%	18,083	100%	5,076	100%	1,241	100%	48,891	100%

Table 7 shows equal distribution of first arriving agency on the scene between REMSA Health and Fire during Fiscal Year 2020. Analysis of 48,891 calls show REMSA Health arrives to the scene first for 47% of all Priority 1 calls. Fire agencies have a higher percentage of arriving to the scene first for Priority 2, and 3 calls, 42% and 45% respectively compared to Priority 1 calls. Approximately 10% of Priority 1 calls were responded to by REMSA Health only. Calls without arrival or completed time variables from REMSA Health or Fire were excluded from the analysis.

Table 8: Arrival on Scene, All Matched Calls between REMSA Health and RFD, SFD, and TMFR, FY21												
Arrival On Scene	**REMSA Priority**											
	0		**1**		**2**		**3**		**9**		**Total**	
	Number	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
REMSA First	0	0%	11,616	48%	7,177	42%	1,644	26%	247	19%	20,684	42%
REMSA Only-Fire Canceled	3	1%	2,468	10%	2,014	12%	1,591	25%	408	31%	6,484	13%
Fire First	3	1%	9,440	39%	6,676	39%	2,275	36%	337	26%	18,731	38%
Fire Only-REMSA Canceled	86	39%	373	2%	764	4%	598	9%	105	8%	1,926	4%
Same Time	0	0%	51	0%	32	0%	4	0%	3	0%	90	0%
All Canceled	126	58%	228	1%	437	3%	231	4%	203	16%	1,225	2%
Total	218	100%	24,176	100%	17,100	100%	6,343	100%	1,303	100%	49,140	100%

Table 8 shows the distribution of first arriving agency on the scene between REMSA Health and Fire during Fiscal Year 2021. REMSA Health arrives on the scene first for 48% of all Priority 1 calls. Fire agencies have a higher percentage of first on scene for Priority 2 and 3 calls, 42% and 45% respectively. Approximately 10% of Priority 1 calls were responded to by REMSA Health only. The percentage of calls cancelled by a fire agency remained the same for Priority 1, and 2 (10%, and 12%, respectively). Meanwhile cancellations by Fire have increased by 7% for Priority 3 calls, and 11% for Priority 9 calls from Fiscal Year 2020 to 2021 as a result of previously noted enhanced protocols for non-fire response to low acuity and/or omega (P9) calls in the region.

Fig. 4 : Arrival on Scene Statistics, All Matched Calls between REMSA Health and RFD, SFD, and TMFR, FY20

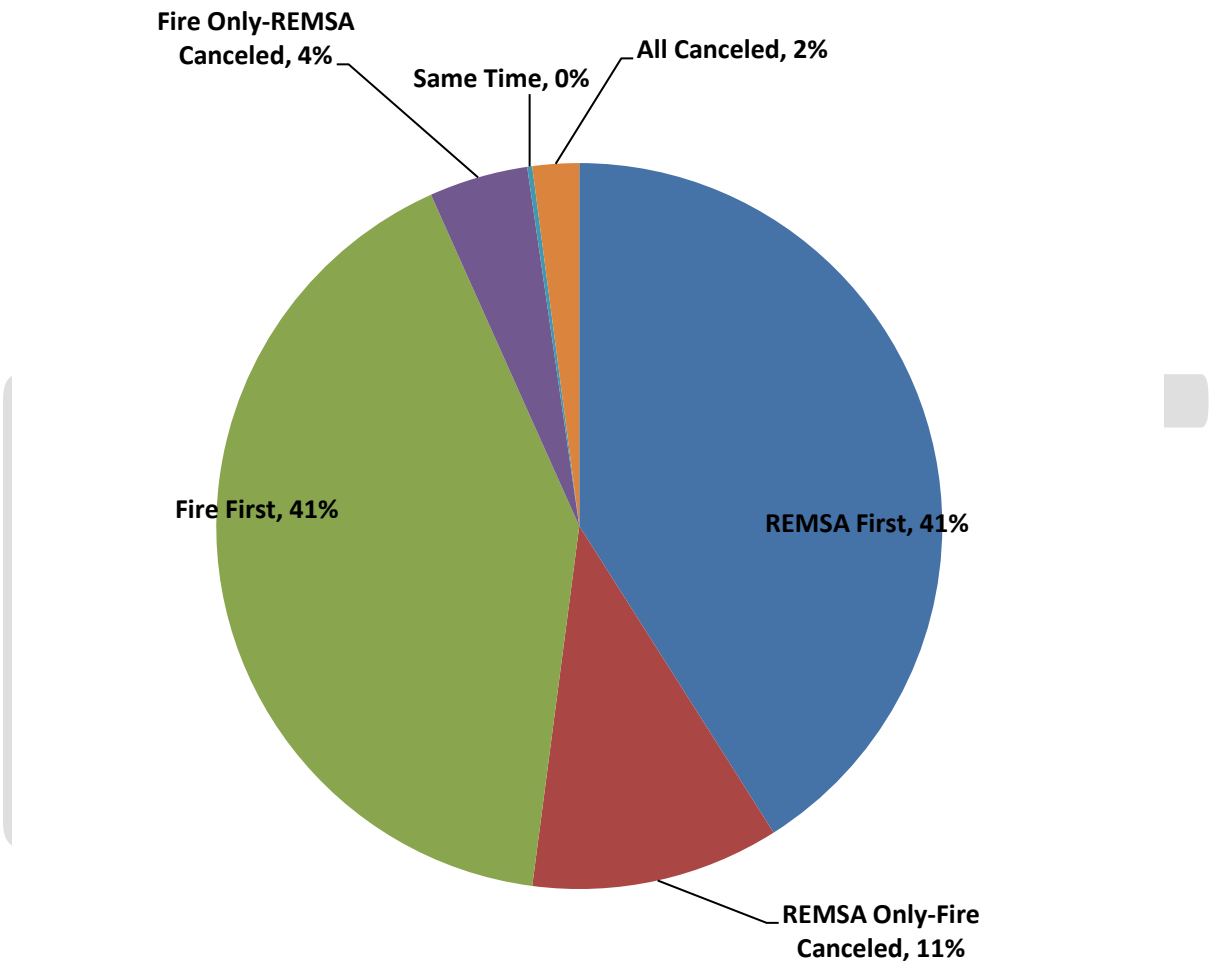


Figure 4 is a visual summary of total distribution of arrival on scene statistics presented in Table 7. Irrespective of call priority, the chart shows equal distribution of calls (41%) where Fire or REMSA Health were on the scene first. Approximately 15% of calls in Fiscal Year 2020 were responded by either REMSA Health or Fire, without co-responding agency.

Fig. 5: Arrival on Scene Statistics, All Matched Calls between REMSA Health and RFD, SFD, and TMFR, FY21

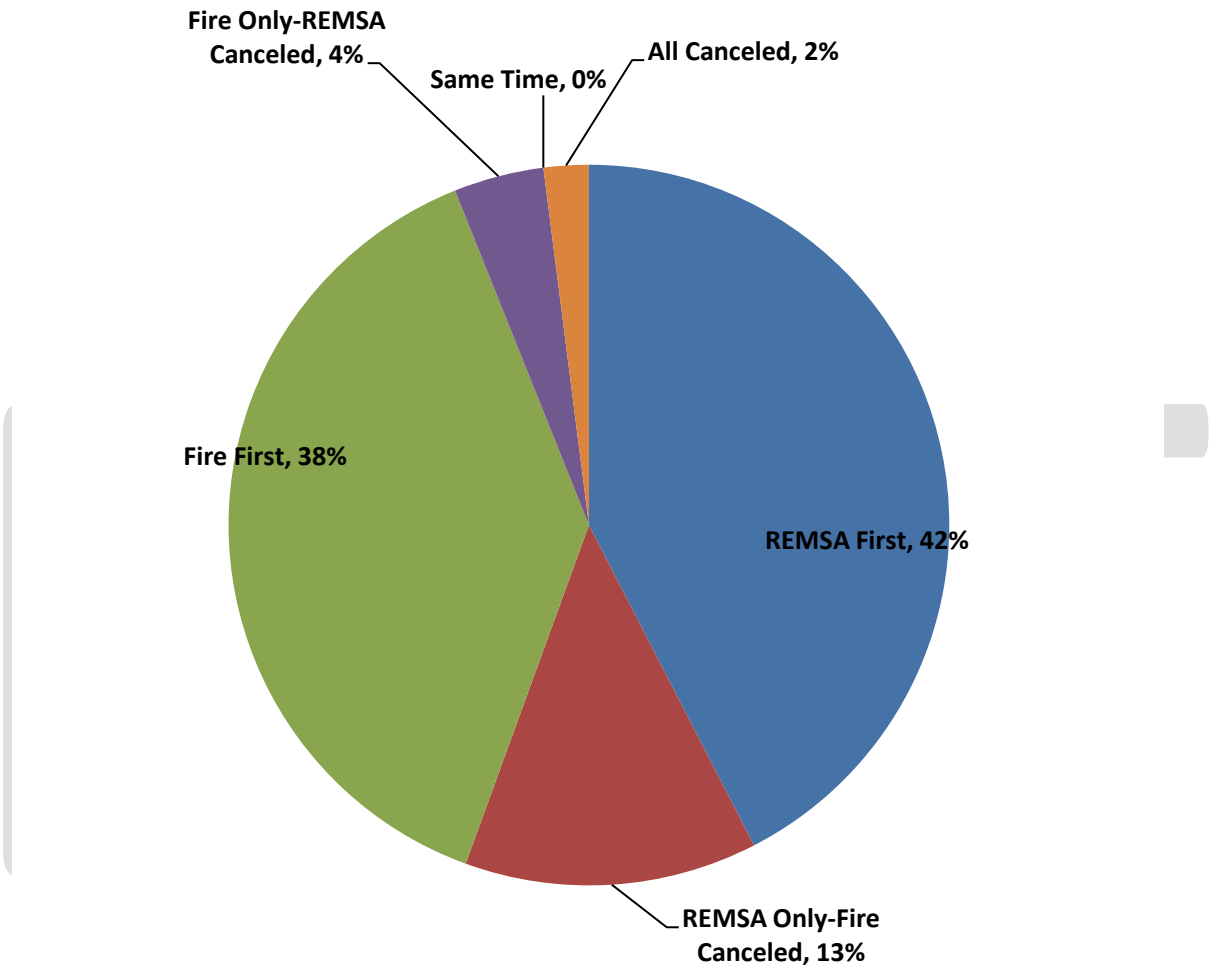


Figure 5 is a visual summary of total distribution of arrival on scene statistics presented in Table 8. Irrespective of call priority, the chart shows REMSA Health first on scene for 42% of calls in Fiscal Year 2021 analysis. Approximately 17% of calls in Fiscal Year 2021 were responded by either REMSA Health or Fire, without co-responding agency.

Jurisdictional Performance

As outlined within the Interlocal Agreement for EMS Oversight, the EMS Oversight Program shall provide oversight of EMS provided by RENO, SPARKS, WASHOE, FIRE and REMSA by monitoring the response and performance of each agency providing EMS in the region for maintenance, improvement, and long-range success of the regional emergency medical system. Each fire jurisdiction in Washoe County has defined standards to measure performance. Those performance metrics are presented within this section.

Reno Fire Department

The City of Reno's Master Plan, approved December 13, 2017, includes metrics to assess performance, although the Master Plan states these are not performance standards. The following statement is used to gauge and measure progress toward the guiding principles and goals of the City of Reno Master plan[2]:

> Maintain or decrease the fire service average response time of 6 minutes 0 seconds.

Additional sets of response time performance measures are outlined in the City of Reno Master Plan[3]:

- Urban: First fire department response unit will arrive at a fire emergency or medical emergency within four minutes 30 seconds from time of dispatch 85 percent of the time.
- Suburban: First fire department response unit will arrive at a fire emergency or medical emergency within six minutes 30 seconds from time of dispatch 85 percent of the time.

The EMS Oversight Program is unable to perform response measures by the neighborhood classification of urban/suburban due to lack of the designation "urban" or "suburban" in data received. Overall response time are measured from enroute time to arrival time. The mean, median for overall, day vs. night response median time for City of Reno is summarized below.

Table 9. Fire Enroute to Fire Arrival: From Station to Scene

Fiscal Year	Median	Mean	P90	Day 06:00-18:00 MEDIAN	Night 18:01-05:59 MEDIAN	Total
2019	04:36	05:13	08:15	-	-	28,500
2020	04:51	05:29	08:45	04:59	04:45	27,804
2021	05:14	05:48	09:05	05:06	05:18	27,719

[2] REIMAGINE RENO. (2017). The City of Reno Master Plan, page 13. Reno, NV.
[3] REIMAGINE RENO. (2017). The City of Reno Master Plan, page 183. Reno, NV.

Sparks Fire Department

In the City of Sparks, the responding fire captain designates 911 calls as a Priority 1, high acuity, or a Priority 3, low acuity. The number and percent of calls classified within each of the Sparks Fire Department (SFD) priorities are provided in Table 10. Starting Fiscal Year 2021, SFD does not respond to Priority 3 – low acuity calls in the City of Sparks. The travel times (response time) as measured from enroute to arrival for each of the SFD stations are provided in Table 7. Table 11 and 12 summarize SFD travel time which is the time the responding unit leaves the station, or is enroute to the incident, to the time of arrival on scene. Only incidents that occurred within each station's response district are included in the analyses.

Table 10: Number and Percent of Calls by SFD Priority

SFD Priority	Fiscal 2020		Fiscal 2021	
	Number	Percent	Number	Percent
1	5,947	53%	6,254	52%
3	5,121	47%	5,743	48%

Table 11: Median Travel Time by Station and SFD Priority, FY20

SFD Call Priority	Station 1	Station 2	Station 3	Station 4	Station 5	Total
All Priorities	04:00	04:18	05:07	05:13	04:49	04:28
SFD Priority 1 Calls	03:33	03:54	04:34	04:39	04:08	04:00
SFD Priority 3 Calls	04:58	05:42	06:40	06:57	04:56	05:36

Table 12: Median Travel Time by Station and SFD Priority, FY21

SFD Call Priority	Station 1	Station 2	Station 3	Station 4	Station 5	Total
All Priorities	04:06	04:12	05:12	05:29	05:00	04:30
SFD Priority 1 Calls	03:37	03:49	04:31	05:07	04:26	04:00
SFD Priority 3 Calls	05:07	05:03	06:20	06:30	05:21	05:23

Truckee Meadows Fire and Rescue

Truckee Meadows Fire and Rescue (TMFR) serves citizens in all unincorporated areas of Washoe County, not including Incline Village. TMFR career stations are staffed by Advanced Life Support paramedics. Response times outcomes for TMFR are reported based on the Regional Standards of Cover Response Time Recommendations as outlined below:

Regional Standards of Cover Response Time Recommendations[4]

Call Processing Time: PSAP → Fire Dispatch

Improve call processing times at the dispatch center so that response units are notified of the emergency within 60 seconds of the receipt of the call.

Turnout Time: Fire Dispatch → Fire Enroute

For 85 percent of all priority responses, the Region fire agencies will be enroute to the incident in 90 seconds or less, regardless of incident risk type.

First-Due Service Tier One: PSAP → Fire Arrival on Scene

Urban: The first unit response capable of initiating effective incident mitigation should arrive within 8 minutes, 85 percent of the time from receipt of the call.

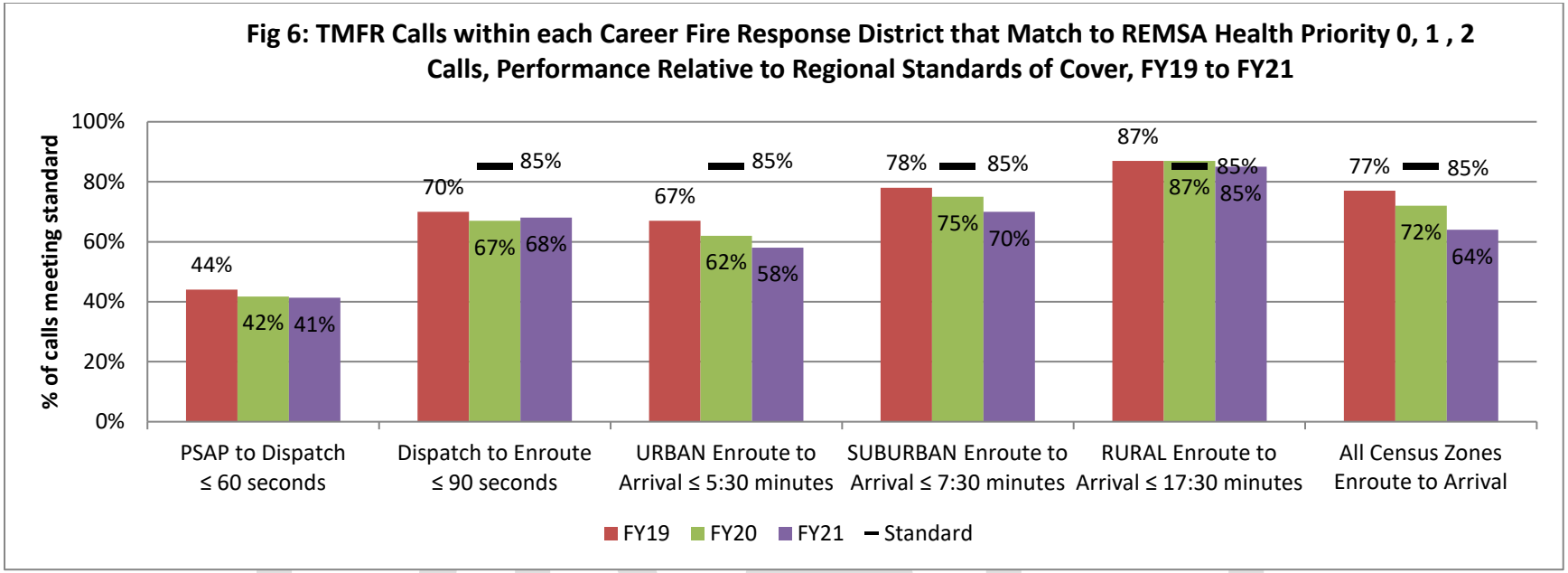
Suburban: The first unit response capable of initiating effective incident mitigation should arrive within 10 minutes, 85 percent of the time from receipt of the call.

Rural: The first unit response capable of initiating effective incident mitigation should arrive within 20 minutes, 85 percent of the time from receipt of the call.

Frontier: The first unit response capable of initiating effective incident mitigation should arrive as soon as practical, based on the best effort of response forces.

Although the Regional Standards of Cover measures the first-due service for Tier One from receipt of call to the arrival on scene, this does not allow for an independent measure of true travel time, which is the time from enroute to arrival. Therefore, this report breaks each of the call segments out into 1) Call Processing Time; 2) Turnout Time; and 3) Travel Time.

[4] Emergency Services Consulting International. (2011). Regional Standards of Cover, page 2. Reno, NV.



NOTE: There is not an explicit percentage defined for call processing, measured from PSAP to Dispatch

Figure 6 illustrates the percentage of TMFR EMS calls for service during FY19 to FY21 that were measured and meet performance standards based on the Regional Standards of Cover. Inclusion criteria for calls considered for measurement are as follows:

1. TMFR calls for service within each fire response district.
2. Calls that matched to REMSA and were categorized as Priority 0,1,2 calls through REMSA Health's EMD process.
3. Time stamps measured must be populated.

Table 13: TMFR Calls within each Career Fire Response District that Matched to REMSA Health Priority 0, 1, or 2 Calls, FY20							
Time Measurement	Standard	Expected Standard	Calls Used	Met Standard		Median Time	Average Time
			Number	Number	Percentage		
PSAP to Fire Dispatch	60 seconds or less	-	4,376	1,827	42%	01:07	03:34
Fire Dispatch to Enroute	90 seconds or less	85%	4,376	2,933	67%	01:12	01:21
Fire Enroute to Arrival							
Urban	5:30 minutes or less	85%	617	385	62%	04:44	05:13
Suburban	7:30 minutes or less	85%	3,112	2,326	75%	05:34	06:38
Rural	17:30 minutes or less	85%	473	413	87%	08:21	10:11
ALL: Fire Enroute to Arrival	depends on density	85%	4,376	3,158	72%	05:42	06:52

Table 14: TMFR Calls within each Career Fire Response District that Matched to REMSA Health Priority 0, 1, or 2 Calls, FY21							
Time Measurement	Standard	Expected Standard	Calls Used	Met Standard		Median Time	Average Time
			Number	Number	Percentage		
PSAP to Fire Dispatch	60 seconds or less	-	3,991	1,649	41%	01:07	01:19
Fire Dispatch to Enroute	90 seconds or less	85%	3,991	2,721	68%	01:12	01:19
Fire Enroute to Arrival							
Urban	5:30 minutes or less	85%	496	289	58%	04:47	05:27
Suburban	7:30 minutes or less	85%	2,629	1,848	70%	05:47	06:25
Rural	17:30 minutes or less	85%	373	316	85%	09:10	18:28
ALL: Fire Enroute to Arrival	depends on density	85%	3,498	2,456	70%	05:57	07:34

Table 13 and Table 14 summarize TMFR Priority 0, 1, or 2 response performance for Fiscal Year 2020, and 2021 respectively. Selected performance measures were adopted from the 2011 Washoe County Regional Standards of Cover study. The numbers and percentage of TMFR calls that met the recommendations are outlined in the tables.

Gerlach Volunteer Ambulance & Fire Department

Due to the rural and frontier nature of the communities of Gerlach and Empire, the median time is provided for the three major time segments, call processing, turn out time, and travel (response) time.

Table 15: Median Time for All Calls, Day Calls, and Night Calls, Gerlach Volunteer Department, FY20				
Time Interval	**Median Time**			
	All Calls	**Day (0900 - 1800)**	**Night (1801 - 0859)**	**Number of Calls Measured**
Call Processing (PSAP to Dispatch)	01:24	01:18	01:25	53
Turn Out (Dispatch to Enroute)	02:50	02:03	05:19	53
Travel/Response (Enroute to Arrival)	04:00	04:00	04:59	44

Table 16: Median Time for All Calls, Day Calls, and Night Calls, Gerlach Volunteer Department, FY21				
Time Interval	**Median Time**			
	All Calls	**Day (0900 - 1800)**	**Night (1801 - 0859)**	**Number of Calls Measured**
Call Processing (PSAP to Dispatch)	01:12	01:01	01:15	48
Turn Out (Dispatch to Enroute)	02:18	01:17	06:53	47
Travel/Response (Enroute to Arrival)	03:32	03:12	04:21	39

About the Washoe County EMS Oversight Program

As noted previously, on August 26, 2014, an Interlocal Agreement (ILA) for Emergency Medical Services Oversight was fully executed between the City of Reno, City of Sparks, Washoe County Board of Commissioners, Washoe County Health District, and Truckee Meadows Board of Fire Commissioners. The ILA created the EMS Oversight Program (Program), the purpose of which is to provide oversight of all emergency medical services provided by Reno, Sparks, Washoe, Fire, and Regional Emergency Medical Services Authority (REMSA Health).

The Program is staffed with the equivalent of three full-time employees: a full-time Program Manager, a full-time Program Coordinator, and a part-time Program Statistician, and a part-time Office Support Specialist. The ILA also created an Emergency Medical Services Advisory Board (EMSAB), comprised of the following members:

a. City Manager, Reno
b. City Manager, Sparks
c. County Manager, Washoe County
d. District Health Officer
e. Emergency Room Physician (DBOH Appointment)[5]
f. Hospital Continuous Quality Improvement (CQI) Representative (DBOH Appointment)[5]

The EMSAB was established to provide a concurrent review of topics within the EMS system. The purpose of the EMSAB is to review reports, evaluations and recommendations of the Program, discuss issues related to regional emergency medical services and make recommendations to respective jurisdictional boards and councils.

A summary of the eight duties of the Program, and seven duties of the signatory partners, as designated per the ILA include:

EMS Program Roles & Responsibilities

1. Monitor the response and performance of each agency providing EMS in the region
2. Coordinate and integrate medical direction
3. Recommend regional standards and protocols
4. Measure performance, system characteristics, data and outcomes for EMS to result in recommendations
5. Collaborate with partners on analyses of EMS response data and formulation of recommendations for modifications or changes of the regional Emergency Medical Response Map
6. Identify sub-regions to be analyzed and evaluated for recommendations regarding EMS response
7. Provide an annual report on the state of EMS to contain measured performance of each agency and compliance with performances measures established by the Program for each agency.

8. Create and maintain a five-year strategic plan to ensure continued improvement in EMS to include standardized equipment, procedures, technology training and capital investments

Signatory Partner Roles & Responsibilities

1. Provide information, records and data on EMS dispatch and response for review, study and evaluation by the EMS Program
2. Participate in working groups for coordination, review, evaluation and continued improvement of EMS
3. Participate in the establishment and utilization of computer-aided-dispatch (CAD)-to-CAD interface[6]
4. Work cooperatively with the EMS Oversight Program to provide input on the five-year strategic plan and ensure two-way communication and coordination of EMS system as future technologies, equipment, systems and protocols evolve
5. Participate in the EMS Advisory Board
6. Strive to implement recommendations of the EMS Oversight Program or submit recommendations to their respective governing bodies for consideration and possible action
7. Submit recommendations regarding the EMS system to the EMS Oversight Program for implementation or consideration and possible action by the District Board of Health

[6] CAD-to-CAD is a two-way interface with allows for call-related information to be transferred between all agencies involved with an incident to have access to live updates and incident status information.

EMS Oversight Program Accomplishments FY19-20

EMS Oversight Program accomplishments are achieved in collaboration with regional partners.

Training/Exercises

Mutual Aid Evacuation Agreement

The EMS Oversight Program and the REMSA Health Emergency Manager conducted a tabletop exercise for the Cascades of the Sierra on August 6, 2019. The facility had reached out after the Jasper fire because they did not have a complete evacuation plan. The tabletop was designed to get the leadership staff thinking about disaster preparedness. They signed onto the Mutual Aid Evacuation Agreement (MAEA) and will be more active in County preparedness activities.

On September 18, 2019, EMS Oversight Program staff conducted a tabletop exercise for the Northern Nevada State VA Home (NNSVH). More than 45 staff members attended and walked through their possible actions if the facility experienced a long-term power outage. NNSVH is one of the most recent facilities to sign onto the MAEA and this exercise provided a foundation to build upon existing emergency plans.

Multi-Casualty Incident

EMS Oversight Program staff presented to the Reno/Tahoe International Airport staff and carrier station managers on August 13, 2019. The presentation included an overview of the response structures should a multi-casualty incident (MCI) occur in Washoe County. There was also discussion about legislative events and how the Health District would work in conjunction with airport staff if an MCI occurred on airport grounds.

Planning/Reports

Multi-Causality Incident Plan

A Multi-Casualty Incident Plan (MCIP) Workshop was held on July 31, 2019. This was the initial workshop to discuss plan revisions for the fiscal year. Some suggestions included: revising the language of a MCI pre-alert verse a full MCI activation, developing a HazMat section, and adding information about Rescue Task Forces (RTFs). Revisions are complete on the Multi-Casualty Incident Plan and its annexes, the Alpha Plan and the Family Service Center, and became effective August 1, 2020.

Trauma Report

The Nevada Division of Public and Behavioral Health released the Nevada Trauma Registry data for Washoe County, the data are based on a national set of guidelines for reporting variables. After evaluating the data, the EMS Statistician produced a Washoe County-specific trauma report which includes assessment of trauma and injuries based on demographic characteristics, spatial epidemiology of injury by zip code, severity of injury, place of injury, and specific mechanism causing the injury. The analyses included were modeled from the 2016 National Trauma Data Bank Annual Report, which continues to be the most recent national report for this type of data. The 2019 Washoe County Trauma Data Report was approved by the District Board of Health and the EMS Advisory Board.

EMS Strategic Plan

The Washoe County EMS Strategic Plan (2019-2023) is a requirement of the ILA for Emergency Medical Services Oversight. This plan outlines the implementation of projects within the EMS Strategic Plan. The mission of the EMS Strategic Plan is to coordinate the delivery of efficient and effective emergency medical services to the citizens, businesses, and visitors of Washoe County, through collaboration with EMS providers. A group convened to discuss strategic planning items and the updated Plan was approved by the EMSAB on May 2, 2019, and the DBOH on May 23, 2019.

Regional EMS Protocols

EMS Oversight Program staff worked with the Regional Protocols Task Force to make all necessary revisions to the next version of EMS Protocols. Examples of updates include a new community resource section and the creation of a hemorrhagic shock protocol using a new medication, tranexamic acid. The EMS protocol revisions were implemented July 1, 2019, for all nine agencies.

EMS Oversight Program Accomplishments FY20-21

The EMS Oversight Program accomplishments are achieved in collaboration with regional partners.

Training/Exercises

EMS Oversight Program staff, in collaboration with regional partners, participated in the Burn Mass Casualty Course and Tabletop exercise with the University of Utah Burn Center on May 4, 2021. The improvement items identified in the After-Action Report and Improvement Plan (AAR/IP) from this training will be incorporated into the Mass Casualty Incident Plan, scheduled for revision June 2022.

Planning/Reports

EMSAB By-Laws

EMS Oversight Program staff revised the EMSAB bylaws to closer align with the language in the ILA. The EMS Coordinator presented the revisions to the EMSAB in May 2021, where they were approved and adopted.

EMS Strategic Plan

EMS Oversight Program staff and the EMS partners met bi-weekly in February, March, and April 2021, to determine additions and revisions to the Washoe County EMS Strategic Plan (2019-2023). The EMS Oversight Program presented the revised EMS Strategic Plan to the District Board of Health (DBOH) and the EMSAB in May of 2021. The revisions were approved by both in May 2021.

Trauma Report

The Washoe County 2020 Trauma Report was presented to and approved by EMSAB on May 6, 2021. Highlights from the report indicated that there was a decrease in trauma incidents per 100,000 population, however, there was a noticeable increase in incidents in the 65 and older age groups. A major contributor to accidents in this age group are unintentional tripping and falling. Compared to previous years, 2019 saw an increase in unintentional trauma activities and a decrease in intentional trauma incidents.

Mid-Year Report

The EMS Statistician presented the Fiscal Year 2020 Mid-Year Data Report draft to the DBOH on August 27, 2020. The motion for dissemination was approved.

Multi-Casualty Incident Plan

The Multi-Casualty Incident Plan (MCIP) is a plan for EMS agencies and healthcare facilities responding to an incident involving the transportation of more than 15 patients. In conjunction with Inter-Hospital Coordinating Council (IHCC), the first planning meeting for the revisions to the MCIP was held July 28, 2021. Monthly meetings will continue to be held with all partners to discuss revisions of the MCIP with the inclusion of the Burn Appendix, with a deadline for completion set for June 2022.

Mutual Aid Evacuation Agreement

The Mutual Aid Evacuation Agreement (MAEA) is a plan specifically for healthcare facility evacuations due to a natural or technological disaster. Program staff worked with healthcare partners and EMS agencies to complete the revision of the MAEA. The most notable change was the inclusion of transportation resources and revisions to the transportation form. Plan revisions were approved by the IHCC and the District Health Officer in June 2021.

EMS Partners

EMS Oversight Program staff and the EMS Task Force met regularly and reviewed all recommendations in the TriData Report and the Center for Public Safety Management (CPSM) Report (EMS-related recommendations only). The priorities from the review of the recommendations in the TriData and CPSM Report were incorporated into the EMS Strategic Plan (2019-2023). Upon completions of the review of these reports the EMS Task Force developed the Joint Advisory Committee (JAC). The JAC continues to meet bi-weekly to accomplish the goals and objectives outlined in the EMS Strategic Plan.

Community Services Development Memo Review

EMS Oversight Program staff met with REMSA Health, TMFR and the Community Services Department (CSD) to further identify each agency's roles in CSD Memo Reviews to compliment any comments and/or prevent duplication of efforts when reviewing cases. The group decided to develop a checklist of the critical components of development projects that would impact EMS response and require EMS comments. REMSA Health suggested a potential checklist with suggestions for CSD to look at for determination on who to ask for suggestions for certain projects. The group continues to meet to develop the checklist and provide comments to CSD on projects.

REMSA Franchise Agreement and Compliance

EMS Oversight Program staff and REMSA met in April and May 2021 to review and revise the REMSA Compliance Franchise Checklist. The revisions were made to align more closely with the Franchise Agreement and to ensure documentation provided to Program staff was valid and accurate according to the franchise agreement. Many of the changes include the addition of formal documentation from REMSA, language to clarify documentation needed to meet the language in the Franchise Agreement, as well as the removal of redundant documents. These revisions were approved by the EMSAB and the DBOH in May and June 2021.

EMS Oversight Program staff is working with Washoe County Geographic Information Systems (GIS) to conduct the annual review of the REMSA Franchise Map. The review will be conducted for FY19-20 and FY20-21. The Program reviewed map analysis and call volumes comparisons between Year 1 (FY 2015) to Year 6 (FY 2020) provided by Washoe County GIS Tech Services for REMSA Franchise Map Review Fiscal Year 2020 on June 22, 2021. Population census data will from 2021 will be used for the FY20-21 review along with call volume comparisons.

In addition, program staff is working with REMSA Health to revise the exemption letter that became effective July 1, 2016. The revisions will include consistency to the number of days for

REMSA Health to submit requests as well as the Program to review and approve the requests. Language will be added to further clarify the Declaration of Emergencies and Construction exemptions, per direction of the EMSAB and DBOH.

REMSA Health is currently conducting a market survey per Section 4.1 of the franchise agreement. The DBOH has approved the consultant, Fitch and Associates, to conduct the survey per the requirements of the agreement. The consultant will be working with the DBOH as well as the EMS Oversight Program to identify intra- and extra-model comparisons.

EMS Advisory Board

Sparks City Manager Neil Krutz was elected chair to the EMSAB on February 4, 2021. Program staff worked with Chair Krutz to develop and outline expectations of EMS partners updates to ensure the accountability of all EMS providers as outlined in the ILA. The intent is to ensure attainment of performance standards, medical protocols, communication, coordination, and accountability of all parties involved to further improve the delivery of patient care and patient outcome.

EMS Oversight Program staff updated and revised EMSAB by-laws to closer align with the language in the ILA and presented these revisions to EMSAB. The revised by-laws were approved May 6, 2021. EMS Oversight Program staff continue to present revisions of the Washoe County EMS Strategic Plan, as a requirement of the ILA, to EMSAB as updates occur.

Regional Washoe County EMS Protocols

The Washoe County EMS Protocols is a regional patient care document for pre-hospital care EMS providers. This project began in 2017 and was Objective 5.1 of the Washoe County Five-Year EMS Strategic Plan (2017-2021). The protocols task force is comprised of two representatives from each fire/EMS agency and meets on a quarterly basis to review and revise the existing protocols. In early 2019, Storey County Fire Protection District joined the review process and is now an active participant. The task force produced an updated set of protocols that was approved by the responding agency's Medical Directors, with a current revision effective January 1, 2021.

Supply Distribution

Command Vehicle Kit Distribution

The distribution of a total of 234 Command Vehicle Kits, in conjunction with the Assistant Secretary for Preparedness and Response (ASPR) grant for Healthcare Preparedness Program (HPP), has been completed. The kits, containing basic Stop the Bleed items, have been distributed to law enforcement, hospitals, tribal partners, schools and universities, and EMS agencies for first responder use during an incident.

EMS Oversight Program Goals for FY22

The EMS Oversight Program is working with regional partners to achieve the following objectives during the next fiscal year.

Joint Advisory Committee

The Joint Advisory Committee (JAC) has been meeting on a bi-weekly or monthly basis. As defined in the revised WCHD Strategic Plan, JAC meetings will be held at least once a month. The JAC continues to make progress on the objectives and strategies in the Strategic Plan (2019-2023). Some of these accomplishments include the identification of determinants EMS will respond to without lights and sirens (cold calls) and the prioritization of what calls agencies respond to. The JAC also worked together after review of the TriData and CPSM reports to include additional goals and objectives to the Strategic Plan. These revisions were approved by both the EMSAB and DBOH.

EMS Oversight Program staff is working with all partners on the revisions of EMS Investigations/Complaints procedures to better meet the intent of the EMS Oversight Program. Once a consensus has been made amongst the partners, the final procedures will be available on the EMS Oversight Program website. Until then the current procedures will be used for any pending or upcoming investigations.

Community Services Development Memo Review

EMS Oversight Program staff will continue to meet with REMSA, TMFR and CSD to further identify each agency's roles in reviewing CSD Memo Reviews and providing comments to prevent duplication of efforts when reviewing cases. The group will continue to develop the checklist of the critical components of development projects that would impact EMS response and require EMS comments and will continue to meet to develop the checklist and provide comments to CSD on projects.

REMSA Franchise Agreement and Compliance

REMSA Health is conducting a market study, per Article 4 of the franchise agreement. This study will be completed by the end of the calendar year 2021. REMSA Health has seen a record number of exemption requests for delays due to Status 99 (patient offload at hospitals) and System Overloads. These delays are a result of a record number of calls and patient transports. Program staff will continue to work on revisions of the REMSA Health Exemption Guidelines letter with EMSAB on language to address Declared Emergency and Construction exemptions, per direction of the DBOH.

Radio Communication Interoperability

Statewide, the Nevada Shared Radio System is in the midst of a technology upgrade that will impact operations and is expected to improve the system performance and capacity. The new system will be a P25 Trunked system and the older one will be shut down. The rollout began in 2020 and will proceed through 2024. EMS Oversight Program staff continues to be engaged in the process.

CAD-to-CAD Interface

The CAD-to-CAD data exchange project is still under way. This project has spanned multiple years as the technology to build the exchange continues to change. After the exchange is built, dispatch centers will be requested to develop policies and processes and train staff on the system. EMS Oversight Program staff and EMSAB continue to be updated on progress as it occurs.

Continuous Quality Improvement

On November 11, 2020, Continuous Quality Improvement (CQI) was introduced to the EMS Protocols Team. The group determined that CQI would be the best forum for discussion of possible shortcomings in protocols or training, to include potential revision of EMS Protocols. The EMS Protocols group will have a voluntary input of items to this group after being reviewed by their internal Quality Improvement Teams. Discussion will be had and research as necessary, to resolve the issue. CQI will be added to each quarterly agenda for discussion and specific information will be provided prior to meetings. EMS Oversight Program staff will work to re-invigorate the process and re-establish engagement with partners.

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD:
Meeting Date: February 3, 2022

TO: EMS Advisory Board Members

FROM: Anastasia Gunawan, EMS Statistician
agunawan@washoecounty.us

SUBJECT: Presentation, Discussion and Possible Approval of the 2020 Washoe County Trauma Data Report, and Possible Permission to Disseminate

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SUMMARY

The EMS Oversight Program Statistician is providing most recent, 2020 Washoe County Trauma Data Report.

District Health Strategic Priorities supported by this item:

4. **Impactful Partnerships:** Extend our impact by leveraging partnerships to make meaningful progress on health issues.

PREVIOUS ACTION

No previous action.

BACKGROUND

The Washoe County Trauma Data Report provide summary and assessment of trauma and injuries that meets the National Trauma Data Standards and Nevada Trauma Registry reporting guidelines established under NRS 450B.238, and NAC 450B. According to most recent statistics published by the Centers for Disease Control and Prevention, injuries are the leading cause of deaths among persons 1 to 45 years of age, accounting for 59% of deaths in that age group in the United States.

Based on analysis of 1,324 trauma cases reported to the Nevada Trauma Registry, the annual case fatality rate among trauma patients of all ages in 2020 in Washoe County was 3.5 per 100 trauma patients. Compared to 2019, case fatality rate due to trauma injuries declined by 54% in 2020. Unintentional injuries accounted for 93.2% of trauma incidents in Washoe County, with a reported case fatality rate of 3.3 per 100 trauma patients. Intentional injuries make up less than 10% of total trauma incidents, with a reported case fatality rate of 1.1 per 100 trauma patients.

FISCAL IMPACT

There is no anticipated fiscal impact should the Board move to accept the 2020 Washoe County Trauma Data Report.

RECOMMENDATION

Staff recommends the Board accept the update regarding of the Washoe County 2020 Washoe County Trauma Data Report.

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the 2020 Washoe County Trauma Data Report, and Permission to Disseminate."

Attachment: 2020 Washoe County Trauma Data Report

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Washoe County 2020 Trauma Data Report

Published February 2022

Public Health
Prevent. Promote. Protect.

Introduction

The purpose of this report is to highlight prevalence, morbidity, and mortality associated with patterns of fatal and non-fatal injuries due to trauma, as defined by The American College of Surgeons (ACS) in Washoe County. Assessment of trauma and injuries presented in this report utilizes the Nevada Trauma Registry (NTR) standardized dataset established under NRS 450B. 238, and NAC 450B. 768. This report provides characteristics and trends for specific trauma and injuries in periods prior and during Coronavirus Disease pandemic (2017 – 2020).

This report is divided into section(s) with background on patient trauma care in Washoe County with accompanying information on : a) demographic distribution of injuries in Washoe County; b) specific mechanisms causing the injury; c) severity of the injury; d) place of the injury; and e) length of hospital stay in the intensive care unit (ICU). These section(s) were curated to augment the Washoe County Health District strategic priority to promote impactful partnership with stakeholders in the community and mission to protect and enhance the well-being and quality of life for all in Washoe County.

Traumatic Injury in Washoe County during COVID-19 pandemic

The Coronavirus Disease pandemic has affected the healthcare systems nationwide including communities in Washoe County. On March 12, Nevada Governor issued an Emergency Declaration for the Coronavirus outbreak to follow social distancing guidelines and stay-at-home order to all residents and businesses in all Nevada counties. The directives allowed essential business to continue operations followed by the re-opening of non-essential business in May 2020. Several reports describing the impact of the pandemic on injury trends in multiple states and trauma registry systems reported a statistically significant decreases in the number of specific trauma related incidents and injuries in 2020.

According to the Centers for Disease Control and Prevention, unintentional injuries are the leading cause of deaths among persons 1 to 45 years of age, accounting for half of deaths in that age group in the United States (Appendix A). In addition to those that survive, millions of people still suffer from injuries each year[1]. The combined cost of fatal and non-fatal injuries related to medical costs, work productivity, live lost, and quality of life in the United States was $4.2 trillion in 2019.

10 Leading Causes of Death, United States
2019, Both Sexes, All Ages, All Races

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 4,301	Unintentional Injury 1,149	Unintentional Injury 714	Unintentional Injury 778	Unintentional Injury 11,755	Unintentional Injury 24,516	Unintentional Injury 24,070	Malignant Neoplasms 35,587	Malignant Neoplasms 111,765	Heart Disease 531,583	Heart Disease 659,041
2	Short Gestation 3,445	Congenital Anomalies 416	Malignant Neoplasms 371	Suicide 534	Suicide 5,954	Suicide 8,059	Malignant Neoplasms 10,695	Heart Disease 31,138	Heart Disease 80,837	Malignant Neoplasms 435,462	Malignant Neoplasms 599,601
3	Unintentional Injury 1,266	Malignant Neoplasms 285	Congenital Anomalies 192	Malignant Neoplasms 404	Homicide 4,774	Homicide 5,341	Heart Disease 10,499	Unintentional Injury 23,359	Unintentional Injury 24,892	Chronic Low. Respiratory Disease 133,246	Unintentional Injury 173,040
4	Sids 1,248	Homicide 284	Homicide 155	Homicide 191	Malignant Neoplasms 1,388	Malignant Neoplasms 3,577	Suicide 7,525	Liver Disease 8,098	Chronic Low. Respiratory Disease 18,743	Cerebrovascular 129,193	Chronic Low. Respiratory Disease 156,979
5	Maternal Pregnancy Comp. 1,245	Heart Disease 133	Heart Disease 91	Congenital Anomalies 189	Heart Disease 872	Heart Disease 3,495	Homicide 3,446	Suicide 8,012	Diabetes Mellitus 15,508	Alzheimer's Disease 120,090	Cerebrovascular 150,005
6	Placenta Cord Membranes 742	Influenza & Pneumonia 122	Chronic Low. Respiratory Disease 69	Heart Disease 87	Congenital Anomalies 390	Liver Disease 1,112	Liver Disease 3,417	Diabetes Mellitus 6,348	Liver Disease 14,385	Diabetes Mellitus 62,397	Alzheimer's Disease 121,499
7	Bacterial Sepsis 603	Perinatal Period 57	Influenza & Pneumonia 52	Chronic Low. Respiratory Disease 81	Diabetes Mellitus 248	Diabetes Mellitus 887	Diabetes Mellitus 2,228	Cerebrovascular 5,153	Cerebrovascular 12,931	Unintentional Injury 60,527	Diabetes Mellitus 87,647
8	Respiratory Distress 424	Septicemia 53	Cerebrovascular 37	Influenza & Pneumonia 71	Influenza & Pneumonia 175	Cerebrovascular 585	Cerebrovascular 1,741	Chronic Low. Respiratory Disease 3,592	Suicide 8,238	Nephritis 42,230	Nephritis 51,565
9	Circulatory System Disease 406	Cerebrovascular 52	Septicemia 36	Cerebrovascular 48	Chronic Low. Respiratory Disease 168	Complicated Pregnancy 532	Influenza & Pneumonia 951	Nephritis 2,269	Nephritis 5,857	Influenza & Pneumonia 40,399	Influenza & Pneumonia 49,783
10	Necrotizing Enterocolitis 354	Benign Neoplasms 49	Benign Neoplasms 31	Benign Neoplasms 35	Cerebrovascular 158	Hiv 486	Septicemia 812	Septicemia 2,176	Septicemia 5,672	Parkinson's Disease 34,435	Suicide 47,511

Appendix A. Ten Leading Causes of Death, United States. Source: WISQARS Centers for Disease Control and Prevention

Injuries are categorized into three major types, 1) unintentional; 2) intentional; and 3) undetermined injuries. Falls and transportation-related injuries make up the largest proportion of traumatic unintentional injuries and associated emergency department visitation costs in the region and the United States. Meanwhile, homicide and suicide accounts for the majority of traumatic intentional injuries. Reducing the risk of unintentional injury involves basic preventive mechanisms, such as implementing robust transportation safety and primary seat belt laws[1]. State of Nevada under NRS 484D.495 enforces seat belt use under a non-moving, secondary violation. Under current statutes, including in Washoe County, seat belt use violation do not affect driver's license points or suspension. Effective transportation safety and restraint use policies have been shown to significantly reduced the risk of serious injuries and deaths by half. Other methods of risk reduction to address the likelihood of high impact falls among seniors include the promotion of evidence-based falls prevention programs[2] endorsed by the National Council on Aging in regional areas with high percentage of adults residents aged 65 years and older.

[1] Transportation Safety Centers for Disease Control and Prevention. Source: https://www.cdc.gov/transportationsafety/seatbelts/states.html
[2] Falls Prevention and Programs National Council on Aging. Source: https://www.ncoa.org/article/about-evidence-based-programs

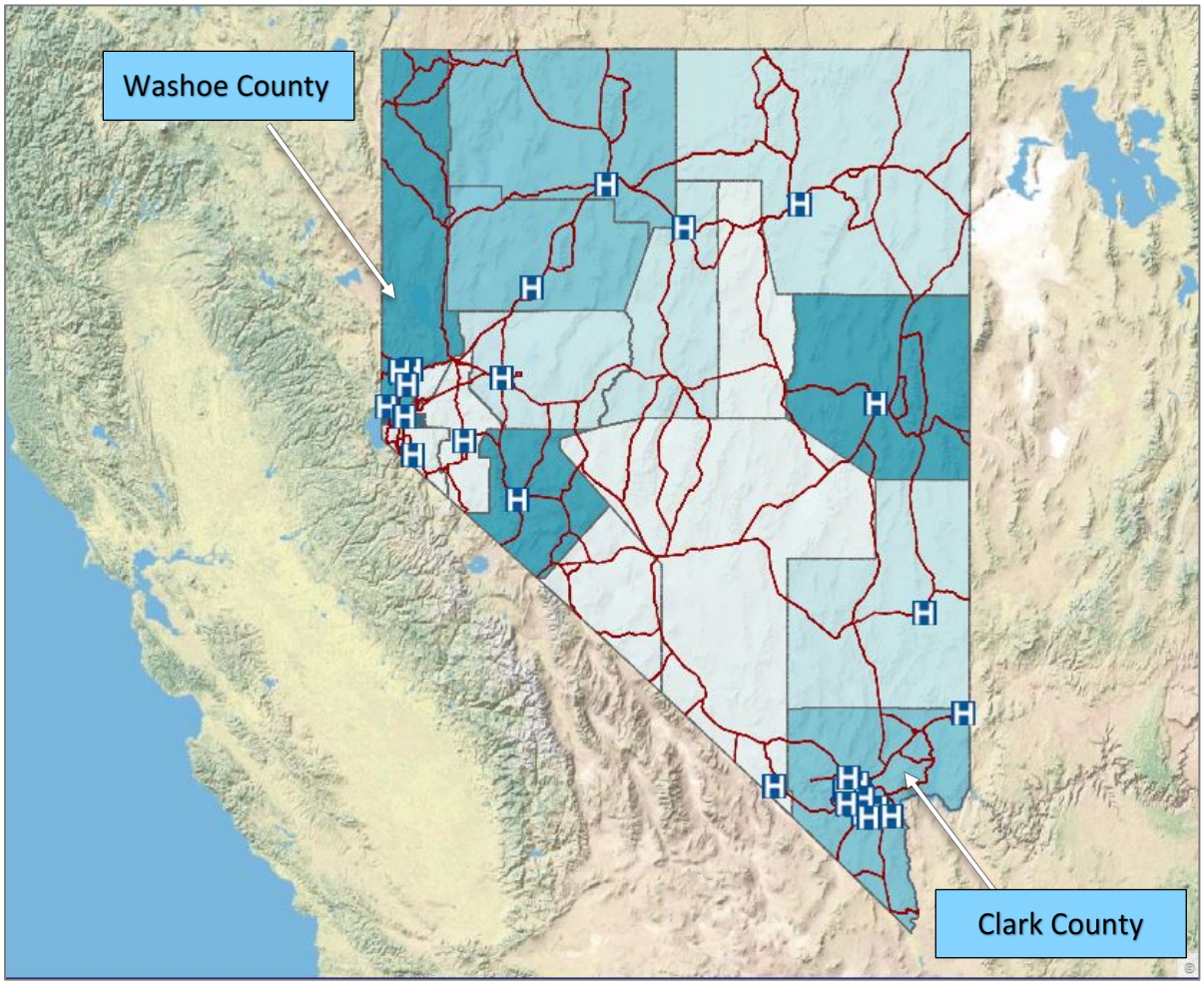
Trauma Centers in the United States

Designation and verification of trauma centers are two separate independent activities directed to assist hospitals to enhance and optimize trauma care. The designation of trauma facilities in the U.S. is a geopolitical process by which empowered entities, government or otherwise, are authorized to designate[3]. Although the ACS does not designate trauma centers, the ACS conducts consultation and verification activities through ACS Verification, Review, and Consultation (VRC) programs. Designated trauma centers may receive certification through voluntary review of essential elements such as trained and capable personnel, adequate facilities, and performance improvement to confirm resource capability readiness as a Trauma Center[4]. Trauma Centers are classified into various Levels (Level I, II, III, IV, or V), based on the kinds of resources available in the facility and the number of patients admitted annually[5].

[3] American College of Surgeons. Verification, Review and Consultation (VRC) Program. Source: https://www.facs.org/quality-programs/trauma/tqp/center-programs/vrc/about
[4] American College of Surgeons. Resource for Optimal Care of the Injured Patient 6th edition. Source: https://www.facs.org/Quality-Programs/Trauma/TQP/center-programs/VRC/resources
[5] Trauma Center Levels and Capabilities. Washoe County 2017 Trauma Data Report. Source: https://www.washoecounty.us/health/files/ephp/emergency-medical-services/

Trauma Centers in Nevada

Nevada Trauma Centers are located in the most populated counties in Nevada: Clark County and Washoe County (Appendix B). Level I Adult Trauma Center and Level II Pediatric Trauma Center is located in Las Vegas, Clark County. Renown Regional Medical Center (RRMC) is a Level II Trauma center in Reno, Washoe County (Appendix B). Trauma Level III Center is located throughout Las Vegas, Clark County. Patients with traumatic injury may arrive at a facility which is not a designated Trauma Center. Medical personnel make an informed decision as to whether a patient should be transferred to a designated Trauma Center in the region[6].



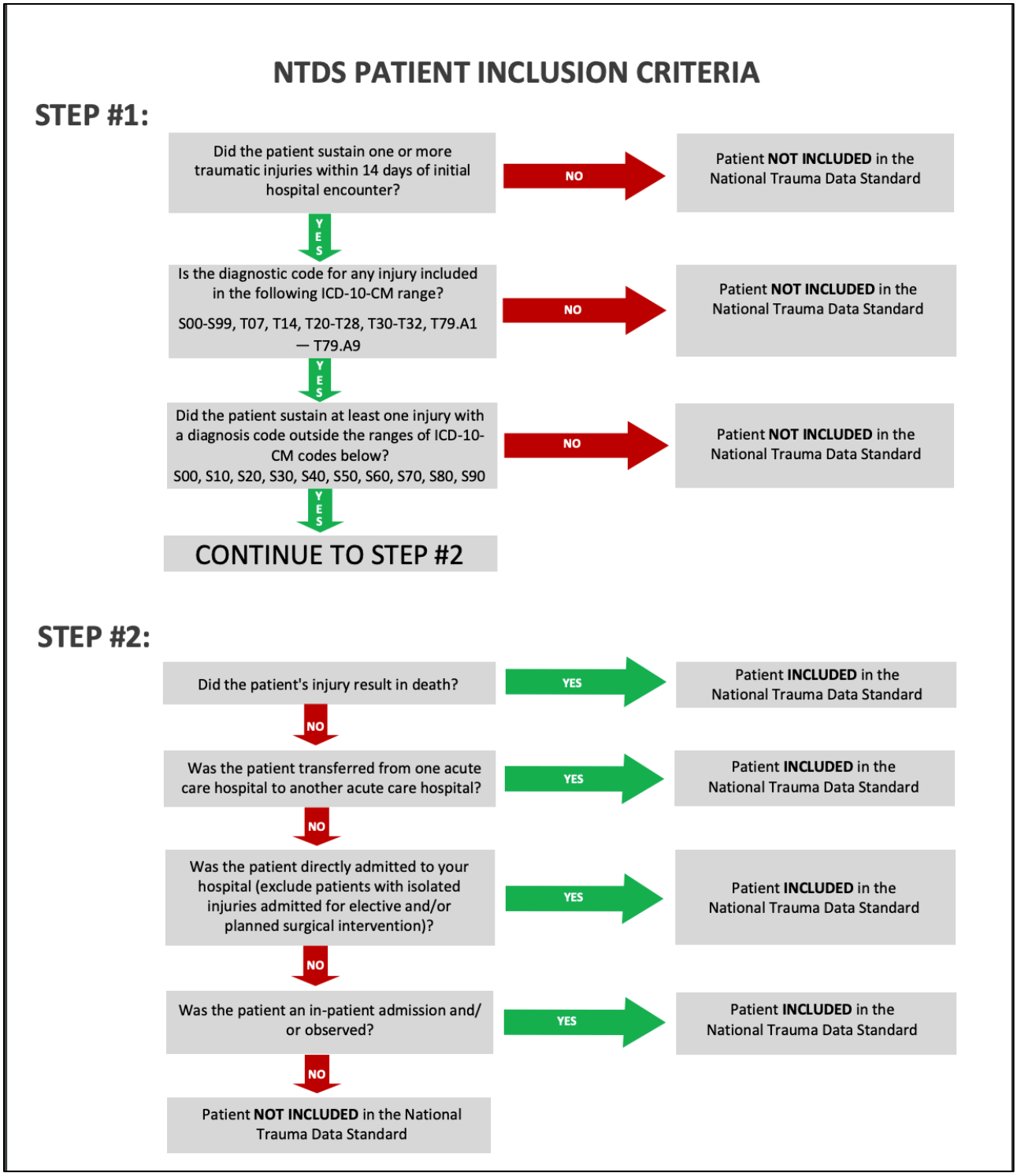
Appendix B. Licensed Community Hospitals in Nevada. Source: https://med2.unr.edu/SI/CountyData/atlas.html

[6] Trauma Center Levels and Capabilities. Washoe County 2017 Trauma Data Report. Source: https://www.washoecounty.us/health/files/ephp/emergency-medical-services/

Trauma Reporting in Washoe County

The National Trauma Data Bank (NTDB) is the largest combined trauma registry in the United States. Healthcare facilities across the nation report patient level trauma information to the NTDB that range from basic demographics to quantitative, and qualitative data describing the nature of the injury, level of care received, and the outcome of the injury. The National Trauma Data Standard defines a standardized set of data variables to capture and report to Nevada Trauma Registry (Appendix C). A facility does not have to be designated or a verified Trauma Center to report data on a patient experiencing traumatic injury to the Nevada Trauma Registry. Patient level trauma data is reported to Nevada Trauma Registry (NTR) by five healthcare facilities in Washoe County: Incline Village Community Hospital, Northern Nevada Medical Center, Renown Regional Medical Center, Renown South Meadows Medical Center, and Saint Mary's Regional Medical Center. Reporting facilities also admit trauma patients who sustained injuries in location(s) outside Washoe County. The NTR does capture patient level information for trauma patients transported from Northern California region(s) to healthcare facilities in Washoe County. Emergency Room (ER) at McCarran Northwest, an extension of Northern Nevada Medical Center, in Reno has been added to the NTR system. Appendix C illustrates inclusion criteria that a patient must meet to be reported to the NTR.

For the purpose of consistency in data reporting, the Washoe County Trauma 2020 report does not exclude out-of-state patients treated in Washoe County facilities. We intend to continue to report incidences based on injury location, and the utilization and demand of resources (EMS and hospital) in the region regardless of residency.



Appendix C. National Trauma Data Standard Data Dictionary 2020 Admissions. Source: https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds

Traumatic Injuries in Washoe County

Table 3a depicts the trend of trauma cases reported in Washoe County to the Nevada Trauma Registry from 2017 to 2020. The rate of injury classified as traumatic that were reported by Washoe County facilities decreased in 2020 by 13.7% (276.3 per 100,000 population) compared to 2019 (320.19 per 100,000 population). The trend follows closely to national trends reporting substantial decrease in range of 20 to 50 percent in hospital volumes for trauma related visits in 2020 compared to 2019. Nevada Trauma Registry does not mandate compliance tracking by facilities pursuant to NRS 450B.238, and NAC 450B.768. Facilities that do report trauma cases to the registry are encouraged by the state to conduct internal data check independently.

Table 3a: Number & Rate of Trauma Incidents by Year, Washoe County, 2017-2020

Year	Number of Incidents	Rate per 100,000 population
2017	1,841	407.14
2018	2,130	463.99
2019	1,501	320.19
2020	1,324	276.31

Table 3b: Race Specific Rate of Trauma Incidents, Washoe County, 2020

Year	Number (%) of Incidents	Race Specific Rate per 100,000 population [a]
White, non-Hispanic	1,057 (79.8%)	357.87
Black, non-Hispanic	36 (2.7%)	290.84
American Indian, non-Hispanic	26 (1.9%)	356.16
Asian/Pacific Islander, non-Hispanic	43 (3.2%)	125.94
Hispanic	127 (9.6%)	103.28

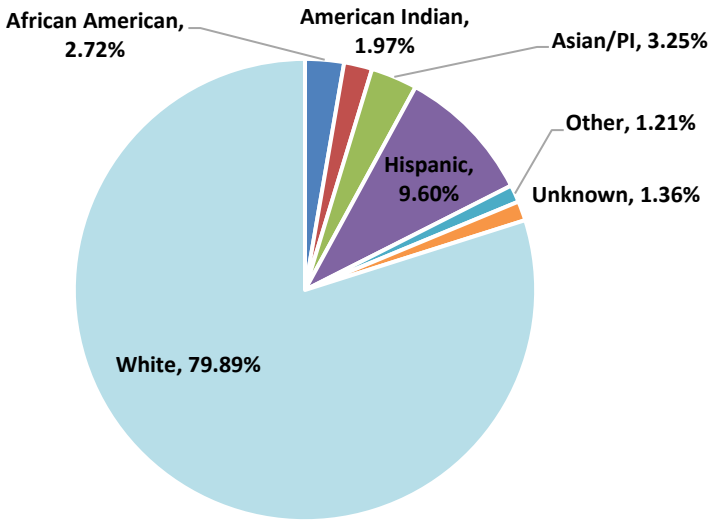
[a] Source population for race-specific race from ASHRO Estimates and Projections Summary Without Group Quarters Estimates 2000 to 2020.

Demographic Characteristics

Table 4 depicts demographic characteristics of trauma patients by age, and gender. In 2020, nearly eight out of ten (79.8%) trauma patients were white, non-Hispanic. Hispanics of any race accounted for 9.6%, while 3.2% were Asian/Pacific Islander, non-Hispanic, 2.7% were African American, non-Hispanic, 2% were American Indian, non-Hispanic, 1.2% were of an unknown race/ethnicity, and 1.3% were an "Other" race (Figure 1). Race-specific rate calculated for trauma reveal trauma incidents affecting American Indian population disproportionately compared to other races in Washoe County (Table 3b). Almost half of the trauma incidents reported in 2020 captured trauma patients 55 years and older (Table 4).

Case Fatality Rate (CFR) per 100 trauma patients in Washoe County decreased overall in all age groups in 2020 (Figure 3). Compared to 2019, case fatality rate dropped significantly by 54% in 2020; 7.5 per 100 trauma patients (2019) to 3.5 per 100 trauma patients (2020) (Figure 3). The largest decrease in fatality rate was observed among trauma patients in the 20-24 years age group; CFR: 3.96 per 100 trauma patients compared to 2019; CFR: 11.1 per 100 trauma patients (Figure 3).

Figure 1: Percent of Trauma Patients by Race/Ethnicity, Washoe County, 2020



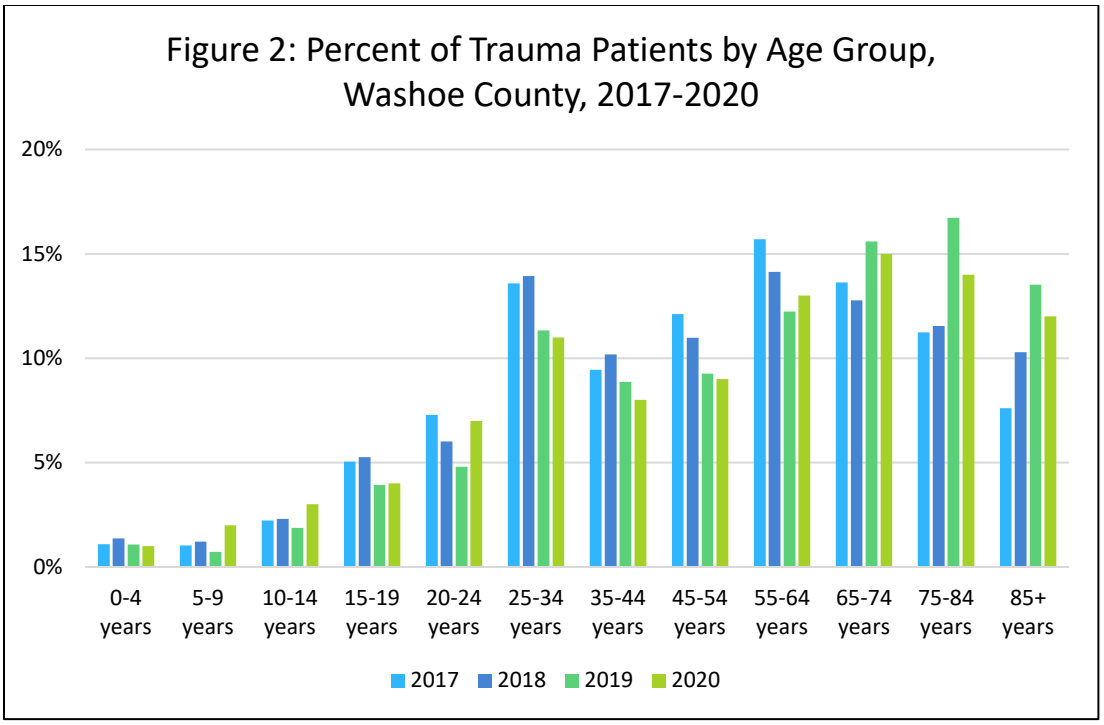
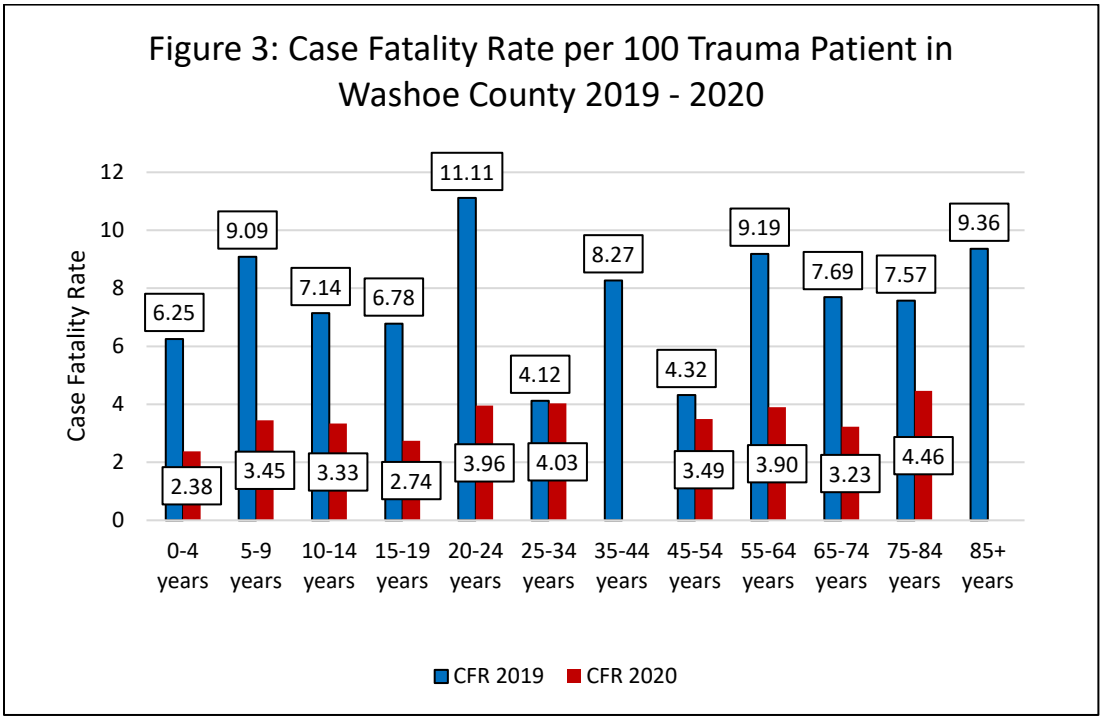


Table 4. Number & Percent of Patients by Sex & Age Group, Washoe County, 2020

Age Group	All Incidents		Male		Female		Unknown	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0-4 years	19	1%	17	2%	2	1%	0	-
5-9 years	42	2%	15	2%	9	2%	0	-
10-14 years	58	3%	31	4%	11	2%	0	-
15-19 years	90	4%	43	5%	15	2%	0	-
20-24 years	146	7%	65	8%	23	4%	2	29%
25-34 years	101	11%	110	14%	35	6%	1	14%
35-44 years	124	8%	79	10%	22	4%	0	-
45-54 years	24	9%	80	10%	42	8%	2	29%
55-64 years	172	13%	109	14%	61	12%	2	29%
65-74 years	205	15%	106	13%	99	19%	0	-
75-84 years	186	14%	77	10%	109	21%	0	-
85+ years	157	12%	59	7%	98	19%	0	-
Total	**1,324**	**100%**	**791**	**100%**	**526**	**100%**	**7**	**100%**

Table 5: Rate of Fatality Among Trauma Patients by Age Group, Washoe County, 2020				
Age Group	**Number of Incidents**	**Percent of Incidents**	**Number of Deaths**	**Case Fatality Rate[a]**
0-4 years	19	1%	-	-
5-9 years	42	2%	1	2.38
10-14 years	58	3%	2	3.45
15-19 years	90	4%	3	3.33
20-24 years	146	7%	4	2.74
25-34 years	101	11%	4	3.96
35-44 years	124	8%	5	4.03
45-54 years	24	9%	-	-
55-64 years	172	13%	6	3.49
65-74 years	205	15%	8	3.90
75-84 years	186	14%	6	3.23
85+ years	157	12%	7	4.46
Total	**1,324**	**100%**	**46**	**3.47**

[a] Rate per 100 trauma patients



Injury Characteristics

Intent of Injury

Unintentional injuries accounted for 93.2% of trauma, with reported case fatality rate of 3.3 per 100 trauma patients. Intentional injury accounted for 6.5% of overall trauma reported, with case fatality rate of 3.5 per 100 trauma patients (Table 6). The intent of injury reported over the span of four years from 2017 – 2020 has predominantly captures unintentional injuries. Intentional injuries make up 6.5% of all trauma incidents, with fatality rate less than unintentional injuries fatality in 2020 (Figure 4).

Table 6: Rate of Fatality Among Trauma Patients by Intent, Washoe County, 2020

Intent of Injury	Number	Percent of Total	Deaths	Case Fatality Rate [a]
Unintentional	1,234	93.2%	44	3.3
Intentional	87	6.5%	1	1.1
Undetermined	3	0.2%	1	33.3
Total	**1,324**	**100%**	**46**	**3.5**

[a] Rate per 100 trauma patients

Mechanism of Injury

Mechanism of injury (MOI) was determined by the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD10-CM) primary external cause code (e-code) reported as the main cause of the injury. ICD10-CM is a standardized classification system of diagnosis in medical reporting for healthcare systems in the United States. Based on analysis of ICD10-CM, over one third of unintentional traumatic injuries in Washoe County (36.1%) were due to falls. The second highest contributing factor to unintentional traumatic injuries in Washoe County involved occupants in transportation or motor vehicles collisions (Table 8). In 2020, all patients sustaining intentional traumatic injuries due to rifle, shotgun and large firearms did not survive (Table 7). The highest number of intentional injuries reported was due to assaults from unarmed brawl or fight.

Figure 4. Percent of Traumatic Injuries by Intent, Washoe County, 2017-2020

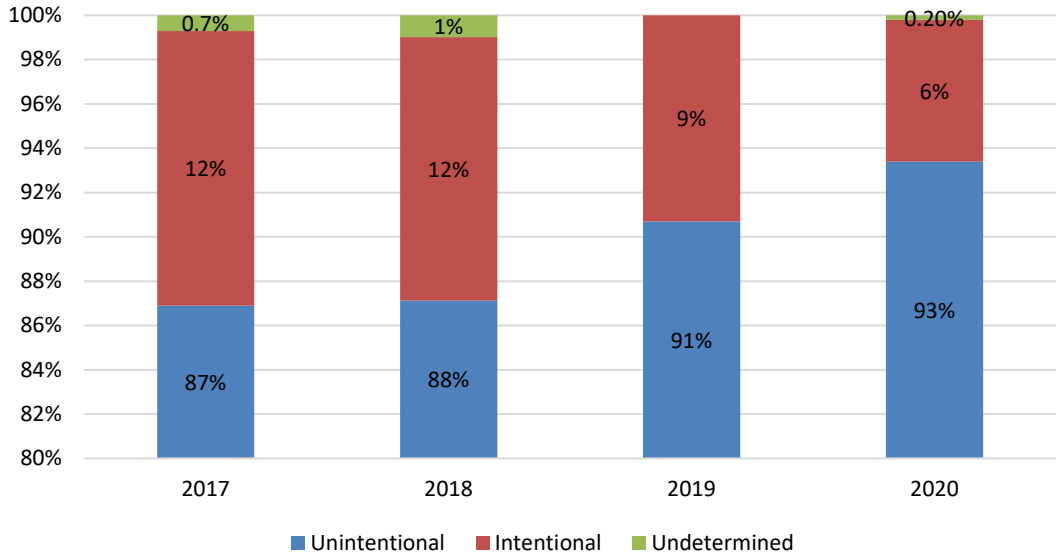


Table 7: Rate of Fatality Among Trauma Patient Due to Intentional Injuries, Washoe County, 2020				
Mechanism of Injury (MOI)	**Number**	**Percent of Total**	**Deaths**	**Case Fatality Rate** [a]
Asphyxiation	1	1.2%	-	-
Intentional (combined)				
Firearm and gun discharge	-	-	-	-
Self-harm by sharp object	4	4.7%	-	-
Self-harm by other means	1	1.2%	-	-
Assault (combined)				
Firearm and gun discharge	8	9.4%	-	-
Unarmed brawl or fight	25	29.4%	-	-
Sharp object and knife	19	22.4%	-	-
Bodily force	6	7.1%	-	-
By sport equipment	1			
Rifle, shotgun and larger firearm	2	2.4%	1	50.0
Unspecified means	16	17.6%	-	-
Legal intervention	4	4.7%	-	-
Total	**87**	**100.0%**	**1**	**1.1**

***Rate per 100 trauma patient**

Table 8: Rate of Fatality Among Trauma Patient Due to Unintentional Injuries, Washoe County, 2020				
Mechanism of Injury (MOI)	**Number**	**Percent of Total**	**Deaths**	**Case Fatality Rate[a]**
Accidents				
Accident to occupant in aircraft	2	0.16%	1	50.0
Accidental discharge firearms and guns	5	0.41%	-	-
Accidental rifle, shotgun and larger firearm	2	0.16%	-	-
Animal-rider injured in transport accident	19	1.54%	-	-
Car occupant(s)				
Collision with car, pick-up truck or van	78	6.32%	3	3.8
Collision with fixed or stationary object	31	2.51%	-	-
Collision with heavy transport vehicle or bus	9	0.73%	-	-
Non-collision transport accident	62	5.02%	1	1.6
Other and unspecified transport accidents	3	0.24%	1	33.3
Crushed, jammed in or between objects	3	0.24%	-	-
Contact with specified object				
Contact with dog	9	0.73%	-	-
Contact with other mammals	11	0.89%	-	-
Contact with other sharp objects	9	0.73%	-	-
Exposure to inanimate mechanical forces	4	0.32%	-	-
Exposure to smoke, fire and flames	2	0.16%	-	-
Falls				
Fall due to ice and snow	19	1.54%	-	-
Fall from non-moving wheelchair, scooter	2	0.16%	-	-
Fall from, out of or through building	16	1.30%	-	-
Fall on and from playground equipment	4	0.32%	-	-
Fall on and from stairs and steps	52	4.21%	-	-
Fall on same level from slipping or tripping	351	28.44%	15	4.2
Fall, jump or diving into water	2	0.16%	-	-
Motorcycle				
Collision with car, pick-up truck or van	31	2.51%	3	9.6
Collision with fixed or stationary object	7	0.57%	-	-
Collision with heavy transport vehicle or bus	2	0.16%	-	-
Collision with two or three motor vehicles	3	0.24%	-	-
Non-collision transport accident	44	3.57%	2	4.5
Other and unspecified transport accidents	3	0.24%	-	-

***Rate per 100 trauma patient**

Table 8: Rate of Fatality Among Trauma Patient Due to Unintentional Injuries, Washoe County, 2020 (cont'd)				
Mechanism of Injury (MOI)	**Number**	**Percent of Total**	**Deaths**	**Case Fatality Rate[a]**
Occupant in transport accidents				
Vehicle injured in non-collision	21	1.70%	-	-
Pick-up truck or van injured in collision	9	0.73%	-	-
Special all-terrain or other off-road motor	52	4.21%	4	7.6
Railway train or railway vehicle	1	0.08%	-	-
Three-wheeled motor vehicle non-collision	5	0.41%	1	20.0
Other specified incidents				
Other fall from one level to another	31	2.51%	-	-
Other slipping, tripping, and stumbling	102	8.27%	-	-
Other land transport accidents	3	0.24%	-	-
Other specified air transport accidents	1	0.08%	-	-
Other unspecified effects of external causes	4	0.32%	-	-
Overexertion and strenuous movements	1	0.08%	-	-
Pedal cycle rider				
Collision with car, pick-up truck or van	8	0.65%	-	-
Collision with motor vehicle	1	0.08%	-	-
Collision with fixed or stationary	7	0.57%	-	-
Collision with other pedal cycle	-	-	-	-
Collision with pedestrian or animal	-	0.00%	-	-
Non-collision transport accident	40	3.24%	-	-
Other and unspecified transport accidents	3	0.24%	-	-
Pedestrian				
Conveyance accident	99	8.02%	5	5.0
Collision with car, pick-up truck or van	38	3.08%	7	18.4
Other and unspecified transport accidents	1	0.08%	-	-
Water transport accidents	2	0.16%	-	-
Perpetrator of assault, maltreatment	1	0.08%	1	100.0
Striking against or struck by other objects	16	1.30%	-	-
Contact with venomous animals or plant	3	0.24%	-	-
Total	**1,234**	**100.0%**	44	3.5

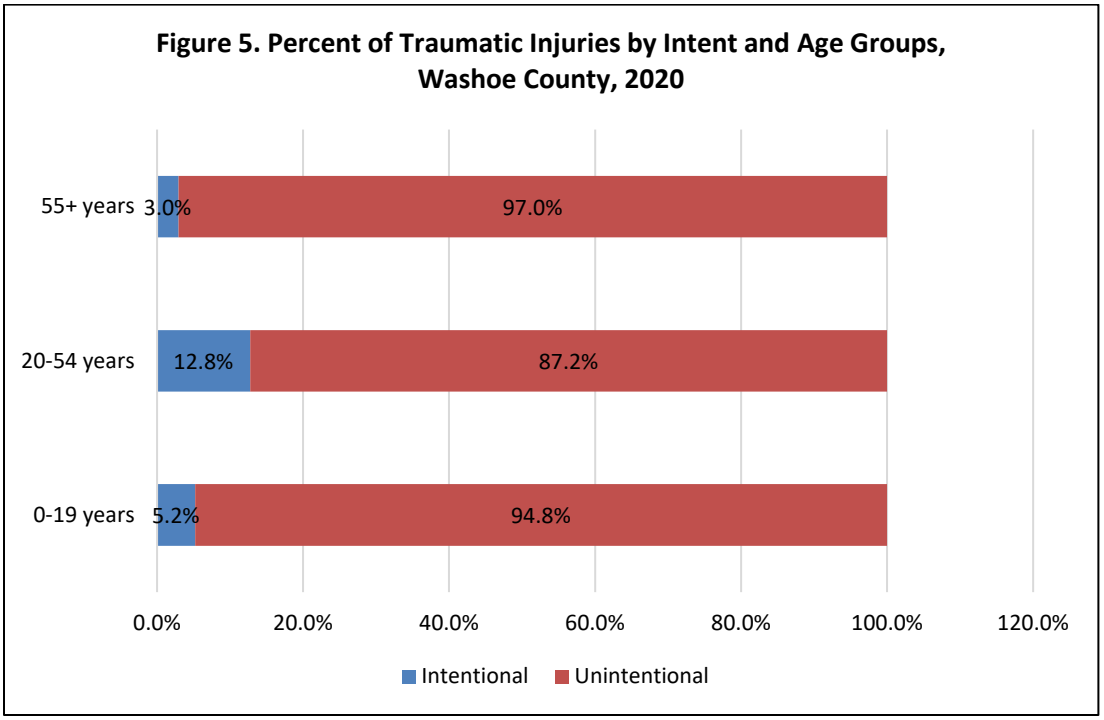
***Rate per 100 trauma patient**

Mechanism of Injury by Age Group

Table 9 indicates the top three mechanisms of intentional and unintentional traumatic injury by selection of age groups: 0-19 years, 20-54 years old, and 55 years and older. Pedestrian, falls and motor vehicles were among the top three mechanisms of injury across all age groups. Pedestrian injuries were the top mechanism for 0-19 years age group. Intentional assault reported varies in mechanism of injury from assaults due unarmed brawl or fight (29.4%), by sharp object and knife (22.4%) and unspecified means (17.6%). Pedestrian were among the top three unintentional injuries across all age group with a case fatality rate of 18 per 100 trauma patients (Table 8).

Table 9: Top 3 Mechanisms of Injury by Number of Incidents by Age Group in Washoe County, 2020

Rank	0-19 years	20-54 years	55+ years
1	Pedestrian	Transport/Motor Vehicle	Falls, Stumbling, Slipping
2	Transport/Motor Vehicle	Pedestrian	Transport/Motor Vehicle
3	Falls & Pedal Cycle (tied)	Falls & Intentional Assault	Pedestrian



Place of Injury

The Nevada Trauma Registry database captures place of injury through ICD-10-CM codes, which allows for detailed classification of the place of injury. Over one third of trauma cases reported in Washoe County occurred in a local and private residence, business streets and interstate highway (Table 10).

Table 10: Detailed Place of Injury, Washoe County, 2020

Place of Injury	Number	Percent
Bathroom		
Bathroom in apartment	9	0.68%
Bathroom in mobile home	-	-
Bathroom in nursing home	7	0.53%
Bathroom in other non-institutional residence	1	0.08%
Bathroom in other specified residential institution	1	0.08%
Bathroom in prison	-	-
Bathroom of single-family (private) house	29	2.19%
Bathroom of unspecified non-institutional residence	6	0.45%
Beach	1	0.08%
Bedroom		0.00%
Bedroom in apartment	8	0.60%
Bedroom in mobile home	-	-
Bedroom in nursing home	4	0.30%
Bedroom in other non-institutional residence	1	0.08%
Bedroom in other specified residential institution	-	-
Bedroom of single-family (private) house	29	2.19%
Bedroom of unspecified non-institutional residence	5	0.38%
Bike path	1	0.08%
Boat	1	0.08%
Bus station	1	0.08%
Courtyard of prison	1	0.08%
Daycare center	-	-
Derelict house	8	0.60%
Desert	40	3.02%
Dining room		0.00%
Dining room in other specified residential institution	-	-
Dining room of single-family (private) house	1	0.08%
Dining room of non-institutional residence	-	-

Table 10: Detailed Place of Injury, Washoe County, 2020 (cont'd)		
Place of Injury	**Number**	**Percent**
Driveway of mobile home	1	0.08%
Driveway of nursing home	1	0.08%
Exit ramp or entrance ramp of street or highway	9	0.68%
Football field	-	-
Forest	12	0.91%
Garden		
Garden or yard in single-family (private) house	45	3.40%
Garden or yard of mobile home	2	0.15%
Garden or yard of nursing home	2	0.15%
Garden or yard of unspecified non-institutional (private) residence	6	0.45%
Gas station	3	0.23%
Health care provider office	1	0.08%
Ice skating rink (indoor) (outdoor)	-	-
Interstate highway	83	6.27%
Kitchen		
Kitchen in apartment	3	0.23%
Kitchen in mobile home	1	0.08%
Kitchen in other specified residential	5	0.38%
Kitchen of single-family (private) house	23	1.74%
Kitchen of unspecified non-institutional (private) residence	5	0.38%
Local residential or business street	175	13.22%
Other		
Other athletic field	1	0.08%
Other paved roadways	15	1.13%
Other place in apartment	24	1.81%
Other place in mobile home	1	0.08%
Other place in nursing home	-	-
Other place in other non-institutional residence	2	0.15%
Other place in other specified residential institution	9	0.68%
Other place in prison	2	0.15%
Other place in single-family (private) house	54	4.08%
Other place in unspecified non-institutional (private)	9	0.68%
Other recreation area	102	7.70%
Other school	-	-
Other transport vehicle	1	0.08%

Table 10: Detailed Place of Injury, Washoe County, 2020 (cont'd)		
Place of Injury	**Number**	**Percent**
Other wilderness area	21	1.59%
Parking lot	31	2.34%
Parkway	1	0.08%
Private driveway to single family (private) house	18	1.36%
Private garage of single family (private) house	4	0.30%
Public park	11	0.83%
Railroad track	3	0.23%
Restaurant or café	5	0.38%
Shop (commercial)	1	0.08%
Sidewalk	57	4.31%
State road	18	1.36%
Supermarket, store or market	8	0.60%
Tennis court	1	0.08%
Unspecified place		
Unspecified place in apartment	18	1.36%
Unspecified place in mobile home	3	0.23%
Unspecified place in nursing home	11	0.83%
Unspecified place in other non-institutional residence	6	0.45%
Unspecified place in other specified residential institution	1	0.08%
Unspecified place in prison	6	0.45%
Unspecified place in single-family (private) house	79	5.97%
Unspecified place in unspecified non-institutional (private)	40	3.02%
Unspecified street and highway	75	5.66%
Unspecified place in apartment	18	1.36%
Unspecified place in mobile home	3	0.23%
Unspecified place in nursing home	11	0.83%
Unspecified place in other non-institutional residence	6	0.45%
Missing	117	8.84%
Total	**1,324**	100.0%

Injury Severity

The Injury Severity Score (ISS) is an ordinal anatomical scoring system that provides an overall score for patients with multiple injuries. The score may range from 1-75. The ISS score is calculated as the sum of the squares of the highest Abbreviated Injury Score (AIS) for the three most severely injured region out of six AIS grouped regions: head or neck, face, chest, abdominal, or pelvic contents, extremities or pelvic girdle, and external[7]. The category of the injury severity is minor, moderate, severe, or very severe. Categories derived based on the 2016 National Trauma Data Bank Annual Report which assigns ISS into the groups identified in Table 11.

Table 11: Injury Severity Score & Category

Injury Severity Score (ISS)	ISS Category
1 to 8	Minor
9 to 15	Moderate
16 to 24	Severe
25 or higher	Very Severe

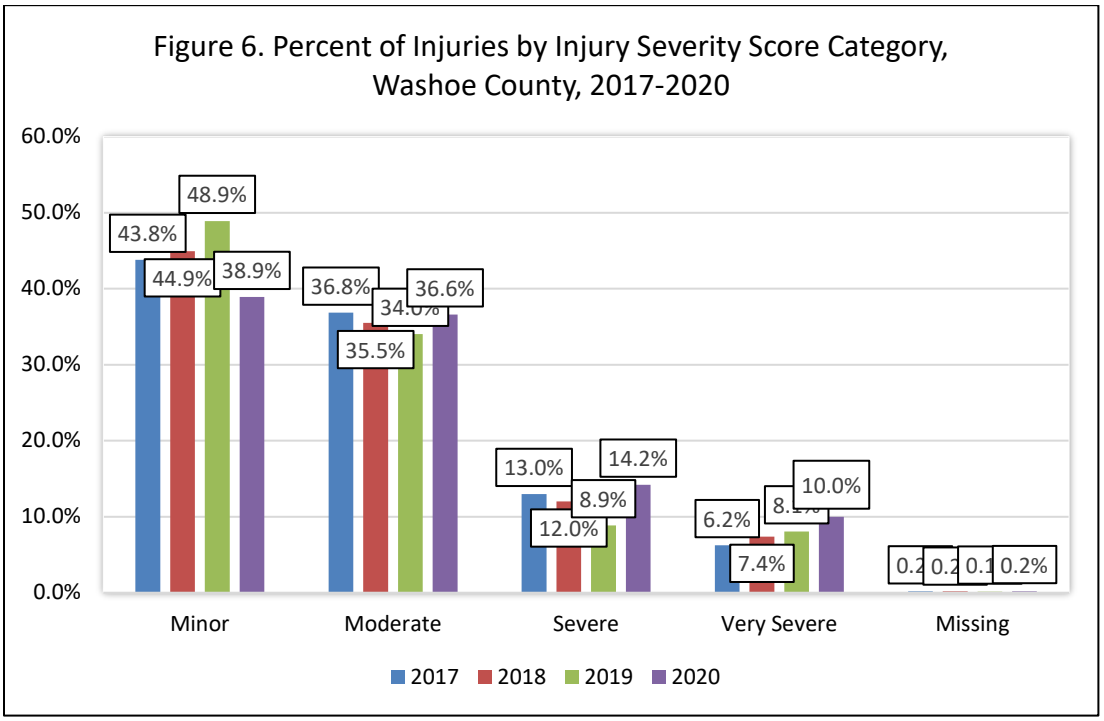
Table 12: Rate of Fatality by Injury Severity Score Category, Washoe County, 2020

Injury Severity Score Category	Number of Injuries	Percent of Injuries	Number of Deaths	Case Fatality Rate*
Minor	515	38.9%	3	0.5
Moderate	485	36.6%	2	0.4
Severe	188	14.2%	6	3.1
Very Severe	133	10.0%	35	26.3
Missing	3	0.2%	0	0
Total	**1,324**	**100%**	**46**	**3.4**

[a] Rate per 100 trauma patients

Eight in ten traumatic injuries in Washoe County were categorized as minor or moderate injuries (Table 12). While nearly one in ten incidents were categorized as very severe. The case fatality rate increases dramatically with each increase in ISS category. In 2020, trauma cases with very severe injuries accounted for more 70% of deaths reported (76%).

[7] An overview of the injury severity score and the new injury severity score. BMJ Injury Prevention. Accessed https://injuryprevention.bmj.com/content/7/1/10



Over the span of 2017 – 2020, the trends for minor injuries based on ISS decreased from 43.8% to 38.9% and very severe injuries increased from 6.2% to 10.0% in Washoe County. Severe injuries increased by 2.0% over the span of three years from 12.0% in 2018 to 14.2% in 2020 (Figure 6).

Figure 7. Percent of Arrivals by Mode of Arrival, Washoe County, 2017-2020

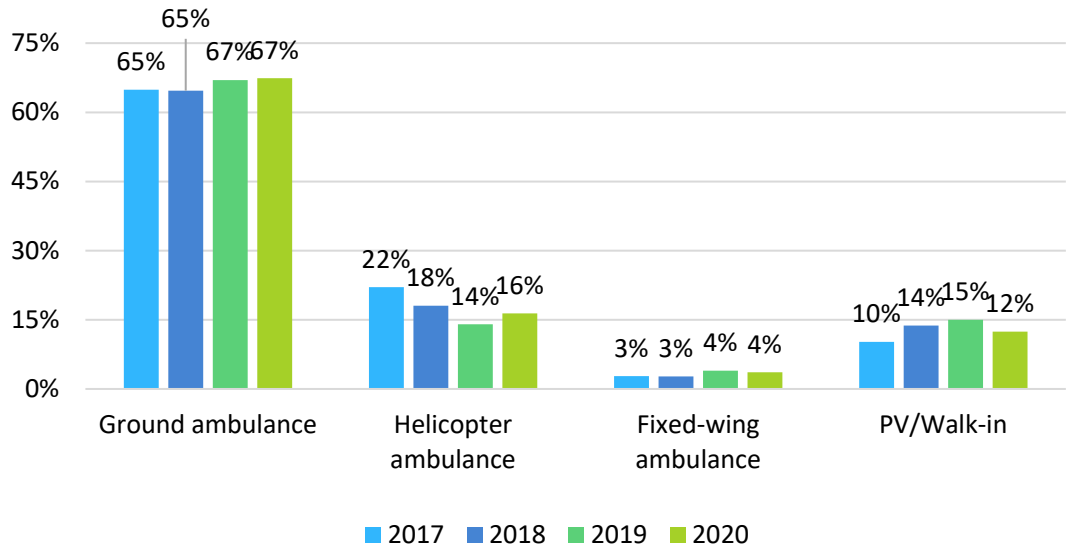


Figure 8. Mode of Arrival by Injury Severity Score Category, Washoe County, 2020

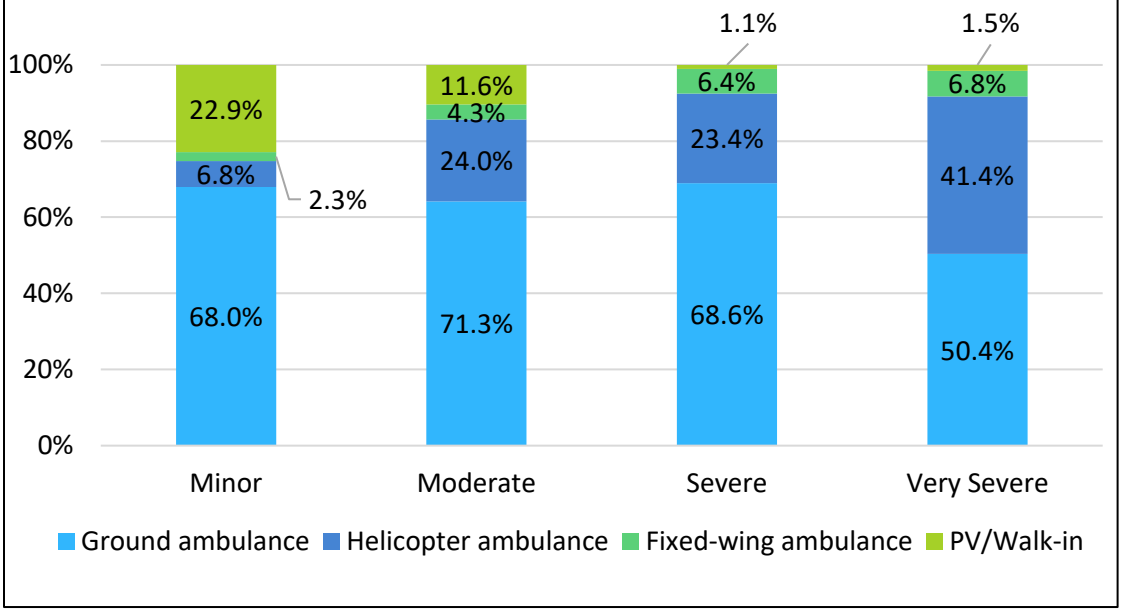


Figure 7 summarizes the distribution of transport by mode of arrival from 2017 – 2020. Majority of trauma patients in Washoe County was transported by ground ambulance (67%), followed by PV/Walk in (12%), and by helicopter ambulance (16%). Trauma transport by helicopter ambulance decreased by 3% from 2019 – 2020 in Washoe County (Figure 7). In 2020, about one in three patients with injuries classified as severe (28.6%) or very severe (41.4%) were transported by helicopter ambulance (Figure 8).

Highest case fatality rate reported in Washoe County were among trauma patients transported by fixed wing, and helicopter ambulance [CFR:8.3]. Case fatality rate (CFR) by transport increases by almost four folds among patients transported in helicopter ambulance compared to ground ambulance. Forty percent of trauma patients with very severe injuries was transported by helicopter ambulance (Figure 8).

Table 13: Rate of Fatality by Mode of Arrival, Washoe County, 2020

Mode of Arrival	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate[a]
Ground ambulance	892	67.4%	23	2.5
Helicopter ambulance	217	16.4%	18	8.3
Fixed-wing ambulance	48	3.6%	4	8.3
PV/Walk-in	164	12.4%	1	0.6
Police	1	0.0%	-	0.0
Missing	3	0.3%	-	-
Total	**1,324**	**100%**	**46**	**3.5**

[a] Rate per 100 trauma patients

Substance Use

Approximately 44.5% of patients with traumatic injury in Washoe County were not tested for alcohol use in 2020. Among those patients who were tested for alcohol use, less than 15% had alcohol detected in their system via trace levels or tested above the legal limit .

Table 14: Detected Substance Use Among Trauma Patients, Washoe County, 2017 – 2020

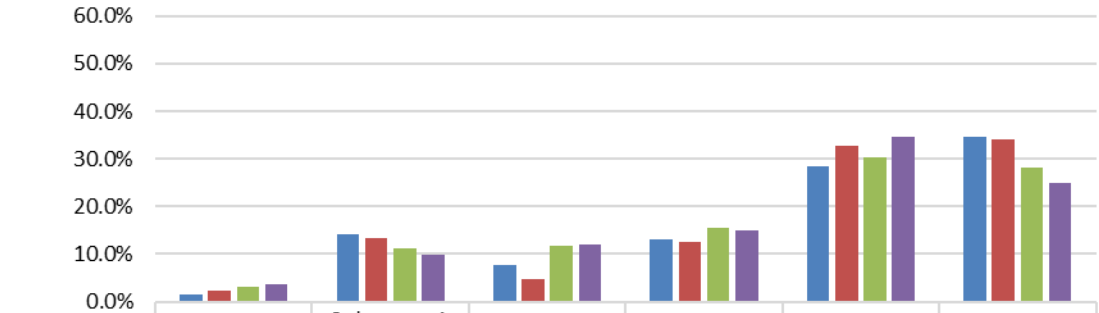
Alcohol Use	2017		2018		2019		2020	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No/Not Tested	700	38.0%	834	39.2%	719	47.9%	589	44.5%
No/Confirmed by Test	656	35.6%	841	39.5%	535	35.6%	515	38.9%
Yes/Confirmed by Test, Trace Levels	249	13.5%	196	9.2%	116	7.7%	63	4.7%
Yes/Confirmed by Test, > Legal Limit[a]	226	12.3%	256	12.0%	129	8.6%	154	11.6%
Unknown	10	0.5%	3	<1%	1	<1%	1	0.1%

[a] Legal alcohol limit less than **0.08 blood alcohol limit NRS 484C.110**

Patient Outcomes

Patient outcomes highlighted in this section include median length of stay spent in an intensive care unit, total length of stay by ISS category and top ten highest median length of stay by MOI. Fifteen percent of patients with traumatic injury classified as minor were discharged within a week. The length of stay increases as the severity of the injury increases, as demonstrated by nearly 30% of patients with severe traumatic injury, and 35% of patients with very severe traumatic injuries being hospitalized up to four weeks (Figure 9).

Figure 9. Incidents by Length of Stay & Injury Severity Score Category, Washoe County, 2020



	1 day	2 days to ≤1 week	1-2 weeks	2-3 weeks	3-4 weeks	4+ weeks
Minor	1.6%	14.2%	7.8%	13.2%	28.5%	34.8%
Moderate	2.3%	13.4%	4.7%	12.6%	32.8%	34.2%
Severe	3.2%	11.2%	11.7%	15.4%	30.3%	28.2%
Very Severe	3.8%	9.8%	12.0%	15.0%	34.6%	24.8%

Intensive Care Unit

The median number of days spent in an intensive care unit (ICU) increased as the severity of injury increased every year (Table 15) incidents including water transport accidents and toxic exposure had the longest median length of stay in an ICU, 31.0 days and 29.0 days, respectively (Table 16).

Table 15: Incidents by Injury Severity Score and Median Days in ICU, Washoe County, 2017 - 2020

ISS Category	2017	2018	2019	2020
Minor	0	0	0	0
Moderate	2	2	2	2
Severe	3	4	4	4
Very Severe	5	6	4	6
Missing	1	-	-	-

Table 16: Top Ten Highest Median Length of Stay (LOS) Mechanism of Injury, Washoe County, 2020

Mechanism of Injury	2020 (LOS)
Water transport accidents	31.0
Toxic effects of substances	29.0
Exposure to animate mechanical forces	27.5
Legal intervention, operations of war, military operations	27.5
Pedestrian injured in transport accident	26.0
Pedal cycle rider injured in transport accident	26.0
Motorcycle rider injured in transport accident	25.5
Air and space transport accidents	25.5
Other land transport accidents	25.0
Exposure	24.0
Slipping, tripping, stumbling and falls	24.0

Conclusion

The impact of the coronavirus disease pandemic influenced trauma injury trends and fatality rates in Washoe County. Pedestrian injuries by collision with van, car or truck, and motor vehicle transport incidents are the most common preventable injuries reported in 2020. A large percentage of unintentional injuries continues to be attributed due to falls from slipping or tripping. The distribution of injuries in this category affected senior communities, and individuals 65 years and older. Limited mobility during the stay-at-home directives, and social distancing adoption impacted quality of life, and reduced physical mobility. In 2020, patients with injuries sustained due to falls spend ten percent of a single year in a trauma center based on the statistics among fall cases reported for hospitalization [median Length of Stay:24 days] in Washoe County.

Injuries sustained in transport accidents and motor vehicle collisions increase the likelihood of deaths on the road. Seat belt education for adults and children in moving vehicles continue to be the most effective strategy to prevent deaths. A well enforced seat belt laws under a moving violation in Washoe County may assist in ensuring public safety on the road and highway.

Suggested Citation

Washoe County Health District, Division of Epidemiology and Public Health Preparedness. (February 2022). Washoe County 2020 Trauma Data Report. Reno, NV.

Additional Information

For additional information regarding the Washoe County Trauma Report contact

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REMSA HEALTH

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: February 3, 2022

TO: EMS Advisory Board Members

FROM: *Adam Heinz, MBA, NRP, AEMD, Executive Director of Integrated Healthcare*
775-353-0782, aheinz@remsa-cf.com

SUBJECT: *REMSA Quarterly EMS Advisory Report*

SUMMARY

A brief overview of operational, clinical and community highlights from the past quarter.

DATA PERFORMANCE REPORTS.

REMSA Ground EMS						
	July	**August**	**September**	**October**	**November**	**December**
REMSA Responses	6724	6835	6693	7318	7133	6707
REMSA Transports	3672	3757	3685	4269	4323	4166
ILS unit Responses	40	72	111	364	312	407
ILS unit Transports	24	38	67	190	163	228
REMSA Clinical Communications						
EMS calls triaged by our medically trained Emergency Medical Dispatchers	6704	6836	6752	7318	7213	6820
Average time from call to EMS unit assigned	43 seconds	57 seconds	66 seconds	56 seconds	44 seconds	44 seconds

Low Acuity EMS calls transferred to Emergency Communications Nurse for secondary triage	54	56	40	47	42	43

Mutual Aid Received to REMSA						
	July	**August**	**September**	**October**	**November**	**December**
Reno Fire Department	41	32	34	42	19	10
Truckee Meadows Fire Rescue	299	335	258	291	15	21
Storey County Fire	20	17	14	15	4	5
North Lake Tahoe Fire	0	6	0	0	0	0

Mutual Aid Provided by REMSA						
	July	**August**	**September**	**October**	**November**	**December**
Storey County Fire	2	4	3	0	0	0
Plumas County	2	0	1	0	0	0
Carson City	0	0	1	0	0	1
Lassen County	6	0	4	5	2	1

Hospital Offload Delays						
	July	**August**	**September**	**October**	**November**	**December**
Offload Delays	329	546	728	432	298	186
Median Offload Delay	29m37s	34m42s	29m21s	25m28	22m33	20m24
Maximum Offload Delay	4h01m	3h28m	5h34m	4h16m	3h57	2h22

EMS OPERATIONS

Hospital Offloading Delays

REMSA Health continues to experience hospital offload delays with September breaking a record at 728 incidences. REMSA Health leadership coordinated a daily stakeholder meeting with local healthcare organizations and co response partners to discuss different strategies to work to mitigate the impact of these delays affecting EMS response times and availability in our community. Code catchment, a plan to transport patients to the closest facility based on catchment zone was implemented for approximately a week, while the health systems and REMSA worked on plans to ensure that ambulances could offload timely. A process in which REMSA would deploy transport expeditors, paramedics who were able to receive patients, assign an acuity and provide treatment based on regional protocols until the hospital was able to accept transfer of care was created and implemented. In addition, Renown Regional Medical Center worked to create an EMS offload area ("Orange pod"), staffed with Registered Nurses and Emergency Technicians to reduce offload delays at their facility. REMSA Health continues to meet, review performance data, and collaboratively discuss further mitigation strategies with all of the healthcare partners. Mid-January 2022, REMSA Health notified the healthcare partners that they would be adhering to NRS 450B.790.

NRS 450B.790 Hospital required to ensure that certain persons in need of emergency services are transferred to appropriate places in hospital within 30 minutes after arrival; civil and criminal liability.
1. Each hospital in this State which receives a person in need of emergency services and care who has been transported to the hospital by a provider of emergency medical services shall ensure that the person is transferred to a bed, chair, gurney or other appropriate place in the hospital to receive emergency services and care as soon as practicable, but not later than 30 minutes after the time at which the person arrives at the hospital.

American Heart Association Award

REMSA Health was recently awarded the American Heart Association Mission: Lifeline – EMS - Gold Plus Award for recognition of the quality care we continue to provide to ST-segment Elevation Myocardial Infarction (STEMI) and Acute Coronary Syndrome (ACS) patients. This recognition becomes our sixth American Heart Association Mission: Lifeline EMS Award and our fourth Gold Plus Award.

To receive this distinguished award, REMSA Health ground crews had to meet all Mission: Lifeline EMS quality measures of criteria with a 75% or higher compliance. To provide some background, in 2020 REMSA Health served an approximate population of 471,000 residents and maintained an annual volume of approximately 75,000 calls for service.

The following statistics are notable contributions that helped us achieve this award:

- Over 1,100 of those 75,000 calls were patients who called 9-1-1 for chest pain or other symptoms of ACS.
- 78 of these patients were positively identified to be suffering from a STEMI.
- For the 1,100 patients who called 9-1-1 for chest pain or other symptoms of ACS, REMSA Health paramedics were able to obtain an electrocardiograph within 10 minutes, 75% of the time.

- Patients who did suffer a STEMI received definitive care and a cardiac stent placed within 90 minutes of our arrival on scene at least 75% of the time.

Each year, more than 250,000 Americans experience a STEMI, the deadliest type of heart attack, caused by a blockage of blood flow to the heart that requires timely treatment. The American Heart Association's Mission: Lifeline program helps reduce barriers to prompt treatment for heart attacks – – starting from when 9-1-1 is called, to EMS transport and continuing through hospital treatment and discharge. At REMSA Health we are grateful for our community partners who aid in our opportunity to be recognized in such a way as this achievement.

Assess and Refer Protocol
REMSA Health has been working with our regional co response partners, the EMS oversight team, agency medical directors, and local healthcare organizations to create an additional alternative care path for clinically qualifying and consenting patients who contact 9-1-1, are assessed by EMS providers and are found to have injuries or low acuity complaints that can be safely treated without the need to be transported by an emergency ambulance. Eligible individuals will be provided with a list of local resources and counseled on the most appropriate locus of care. The intention is to safely navigate patients to the right level of care, preserving emergency services for emergencies.

COMMUNITY RELATIONS, EMPLOYEE ENGAGEMENT & CELEBRATIONS

REMSA Health in the News
Throughout June, July and August, REMSA Health ground operations saw record-breaking call volume, and we worked with our media partners to share the message that it's important to preserve 911 for emergencies. Symptoms of stroke, cardiac arrest, severe allergic reaction and difficulty breathing are medical emergencies and we want the highest level of care to be available to respond. So, when people call 911 and do not have a medical emergency, we may navigate them through a different and more appropriate care pathway. KTVN, KOLO, and KRNV all recently worked with us to share this critically important message.

In early July, REMSA Health hosted a media event to encourage that a Water Watcher - a responsible, sober, undistracted adult is designated to actively watch children near a body of water in order to prevent accidental drownings. All three local television stations covered this important message which included remarks from Dr. Jenny Wilson, REMSA Health's medical director as well as a mock drowning scenario response.

In mid-September, Adam Heinz provided an interview to KTVN about the impact to REMSA Health's ability to offload patients at hospitals due the surge in emergency transports and emergency room visits. The story focused on the operational adaptations REMSA Health has made to manage the situation.

In mid-September, Adam Heinz and Dr. Jenny Wilson were featured on Nevada Newsmakers for an in-depth segment about the critical importance of matching the right emergency and out-of-hospital healthcare resource with the call for service.

Community News

In late September, REMSA Health was the lucky recipient of a thoughtful show of appreciation from the City of Reno. Members of the Reno Fire Department along with Mayor Schieve and Councilperson Neoma Jardon visited the campus to talk with our crews, medical dispatchers and administrative staff. There were also therapy dogs and ice cream bars.

Digital Announcements
Adam Heinz and Alexia Jobson were guests on the Dispatch in Depth podcast produced by the International Academies of Emergency Dispatch. Public relations and communications opportunities for dispatch centers of all kinds was discussed.

Industry News
In mid-July, REMSA Health sent a delegation of 10 people to the International Academies of Emergency Dispatch Navigator conference in Las Vegas. Our representatives presented conference sessions, participated in mentoring programs, met with IAED leadership and earned continuing education credits. REMSA Health's Regional Emergency Communications Center was recognized for its 20 continuous years as an Accredited Center of Excellence. Also, during the event REMSA Health's Executive Director of Integrated Healthcare Adam Heinz was installed as a member of the board of accreditation. Four of our medical dispatchers were recognized for their nomination as dispatcher of the year. At REMSA Health, care starts with the call.

On August 19, Jerry Overton, the president of the International Academies of Emergency Dispatch visited REMSA Health. We hosted a community conversation breakfast event that morning where Mr. Overton gave an address on the state of emergency dispatch for medical, fire and law enforcement. The event was well-attended and there were engaging questions and meaningful dialogue. Later in the day, Mr. Overton had the opportunity to visit our Regional Emergency Communication Center. He celebrated our ACE accreditation and listened to ideas and insights from REMSA Health registered nurses and medical dispatchers.

CLINICAL STANDARDS & PRACTICES REPORT

	July	August	September	October	November	December
Cases reviewed by Clinical Standards & Practices	82	140	157	91	80	393
STEMI Alerts	29	30	19	24	28	26
Stroke Impressions	47	55	50	48	57	63
Cardiac Arrests	43	43	39	57	49	45
Advanced Airways	30	34	25	45	31	45
Drug Facilitated Airways	2	5	2	4	5	3

SPARKS FIRE DEPARTMENT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
STAFF REPORT
MEETING DATE: November 5th, 2021

TO: EMS Advisory Board Members

FROM: Jim Reid, Fire Chief
(775) 353-2254, Email: jreid@cityofsparks.us

SUBJECT: City of Sparks Fire Department EMSAB Report

SUMMARY

Brief update for the third quarter of 2021.

DATA PERFORMANCE REPORTS

Sparks Fire Department				
	July	**Aug.**	**Sept.**	**Total**
EMS Responses	1006	1077	1116	3199
EMS Automatic Aid Given	14	16	26	56
EMS Mutual Aid Given	1	5	1	7
EMS Mutual Aid Canceled Responses	0	1	1	2

EMS Operations Report

No new operations to report during this period.

SPARKS FIRE DEPARTMENT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
STAFF REPORT
MEETING DATE: February 3rd, 2022

TO: EMS Advisory Board Members

FROM: Jim Reid, Fire Chief
(775) 353-2254, Email: jreid@cityofsparks.us

SUBJECT: City of Sparks Fire Department EMSAB Report

SUMMARY

Brief update for the fourth quarter of 2021.

DATA PERFORMANCE REPORTS

Sparks Fire Department				
	Oct.	**Nov.**	**Dec.**	**Total**
EMS Responses	1,081	1,022	1,041	3,144
EMS Automatic Aid Given	22	20	6	48
EMS Mutual Aid Given	1	3	0	4
EMS Mutual Aid Canceled Responses	1	3	0	4

EMS Operations Report

No new operations to report during this period.

Item 9C

TRUCKEE MEADOWS FIRE PROTECTION DISTRICT
STAFF REPORT
Meeting Date: November 5, 2021

TO: Emergency Medical Services Advisory Board

FROM: Joe Kammann, Division Chief
Phone: (775) 240-5863 Email: jkamman@tmfpd.us

SUBJECT: Truckee Meadows Fire Protection District (TMFPD) Advisory Board update

SUMMARY

Brief update of Emergency Medical Services (EMS) Operation and incident Data for Quarter 3 of 2021

DATA PERFORMANCE REPORTS

TMFPD Incident Response Data:

Truckee Meadows Fire Protection District			
	July	Aug	Sep
District Wide EMS Responses	706	749	810
Mutual Aid Responses	201	217	223
Mutual Aid Transports	170	193	196

COVID -19 News

1. TMFPD Continues to stay abreast on current COVID 19 news and data. We continue to follow protocols associated with current polices and administrative directives for our employees.

2. We have a vaccination rate of 86.7% of our staff.

EMS Operations Report

1. 10 new probationary Firefighters/Paramedics (FF/PM) that have rotated from "4th-riding" to second seat training on the ambulances as well as, 3rd seat FF/PM on the engines.

2. We started another fire academy on Oct, 18th 2021 with 15 EMT, AEMT, and Paramedic certified probationary employees.

3. 110 Total State Certified Paramedics on TMFPD Staff

4. We are working on the following re-certification of our current line staff:
    - EMS Certifications
    - AHA Certifications, to include CPR, ACLS, PHTLS, and PALS.

5. The first of two "Paramedic Refresher" courses was completed in October with 28 students from the local area.

6. TMFPD has been assisting the TMCC Paramedic program with instruction and multiple days of scenario work with the students.

7. Medic 30 and Medic 45 ambulances are staffed and responding to mutual aid requests in Washoe Valley, Sun Valley, City of Reno, and City of Sparks.

8. We have also ordered two more ambulances to service the community.

TRUCKEE MEADOWS FIRE PROTECTION DISTRICT
STAFF REPORT
Meeting Date: February 3, 2022

TO: Emergency Medical Services Advisory Board

FROM: Joe Kammann, Division Chief
Phone: (775) 240-5863 Email: jkammann@tmfpd.us

SUBJECT: Truckee Meadows Fire Protection District (TMFPD) Advisory Board update

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SUMMARY

Brief update of Emergency Medical Services (EMS) Operation and incident Data for Quarter 4 of 2021

DATA PERFORMANCE REPORTS

TMFPD Incident Response Data:

Truckee Meadows Fire Protection District			
	October	November	December
District Wide EMS Responses	780	737	748
Mutual Aid Responses	230	218	338
Mutual Aid Transports	180	167	266

COVID -19 News

1. Our most current community-wide COVID-19 surge began in late December 2021. This has resulted in a ramp-up of TMFR testing and contact tracing. Staffing plans have been modified as a result of decreased available personnel District-wide to ensure coverage for TMFR areas.

EMS Operations Report

1. 10 new probationary Firefighters/Paramedics (FFPM) currently in their 3rd quarter of probation and have met all training assessment milestones to date.

2. 15 new FF/AEMT and FF/PM personnel are enrolled in the Carson City Regional Fire Academy with a January 22nd graduation date.

3. 4 Lateral FF/PMs have been hired and are currently in their probationary year training.

4. TMFR completed our first annual Paramedic refresher, with attendance and instructor

assistance from all county fire departments. This cooperation allowed the program to be taught at no cost to the participants, as well as helping to promote regional training opportunities.

5. The TMFR ambulance transport program has expanded and now encompasses the District 46 area with Medic-46. This has been a valuable fire and EMS resource to TMFR citizens and adds to our District 45 and District 30 ambulance response model.

6. TMFR has been working jointly with Truckee Meadows Community College (TMCC) and their Paramedic Program staff to enhance their training development and delivery by providing multiple instructors and joint training opportunities.

7. TMFR has expanded our regional Paramedic Program internship support to include REMSA and TMCC programs.

Reno Fire Department

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: November 5, 2021

TO: EMS Advisory Board Members

FROM: Dennis Nolan, EMS Division Chief
Phone (775) 657 4690, E-mail: noland@reno.gov

SUBJECT: Reno Fire Department's EMSAB update.

SUMMARY

Brief update of the emergency medical services (EMS) operations for the 3rd Quarter of 2021

DATA PERFORMANCE REPORTS

RENO FIRE DEPARTMENT				
	July	**August**	**September**	**Total**
TOTAL RESPONSES	4352	4415	4328	13,095
TOTAL EMS RESPONSES	2758	2869	2803	8430
EMS MUTUAL AID	45	28	45	118

COVID-19 UPDATE: RFD Continues to cooperate with regional partners on providing vaccination PODs. Providing 10 PODs over the previous three months administering approximately 120 vaccines. We continue to perform both rapid and PCR testing for department personnel as needed and are preparing for state direction on the booster vaccines.

EMS Operations Report:

1). Currently RFD maintains 65-Paramedic, 103 AEMT and 61 EMT certified personnel

2). Switched all unit narcotic safes to KNOX Cloud Based system for improved operability and security

3) Coordinated with REMSA and Washoe County Correctional Center for better coordinated response

4). Provided Mass Casualty Incident (MCI) Training for RFDs Acting Captains Training,

5). Accommodated 52 EMS Student Rides for Truckee Meadows and Western Nevada Community Colleges

6). Provided Two Week EMS Training for Recently Graduated Academy of 14

*RFD regularly attends and participates in the following meetings: WCHD's; DBOH, PMAC, EMSAB, EMS Protocol Task Force, Joint Advisory Committee (JAC), Strategic Plan Committee, E.D. Consortium and the Inter-hospital Coordinating Council (IHCC). Additionally, RFD s represented on the Nv. EMS Advisory Commission, State Emergency Response Commission (SERC) and, the Northern Nevada Fire Chiefs Assoc. EMS Committee.

Reno Fire Department

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: Feb 3, 2022

TO: EMS Advisory Board Members

FROM: Dennis Nolan, EMS Division Chief
Phone (775) 657 4690, E-mail: noland@reno.gov

SUBJECT: Reno Fire Department's EMSAB update.

SUMMARY: *Update of the emergency medical services (EMS) operations for the 4th Quarter of 2021*

DATA PERFORMANCE REPORTS

RENO FIRE DEPARTMENT				
	October	**November**	**December**	**Total**
TOTAL RESPONSES	4223	3943	4336	12,,502
TOTAL EMS RESPONSES	2759	2869	2803	7946
EMS MUTUAL AID	35	13	8	56

COVID-19 UPDATE: RFD Continues to cooperate with regional partners on providing vaccination PODs. Providing 15 PODs over the previous three months administering approximately 655 vaccines. We continue to perform both rapid and PCR testing for department personnel as needed and are preparing for state direction on the booster vaccines.

EMS Operations Report:

1). Currently RFD maintains 63-Paramedic, 100 AEMT and 65 EMT certified personnel

2). Re-Certified 165 line personnel in Paramedic, AEMT, and EMT levels

3) Participated with DEM, WCHD & regional partners on initial planning for full-scale CBRNE exercise 3/21-23

4). Accepted from IHCC 12 "Med-Sleds" and trained all line personnel in building evacuation, using them,

5). Accommodated 61 EMS Student Rides for Truckee Meadows and Western Nevada Community Colleges

6). Upgraded all medical bags on each apparatus. Configured similarly to REMSA's for better inter-agency patient care

7) Participated with EMS/FD Community to reverse NAC re: requirement for AEMT to enroll in Paramedic program

*RFD regularly attends and participates in the following meetings: WCHD's; DBOH, PMAC, EMSAB, EMS Protocol Task Force, Joint Advisory Committee (JAC), Strategic Plan Committee, E.D. Consortium and the Inter-hospital Coordinating Council (IHCC). Additionally, RFD s represented on the Nv. EMS Advisory Commission, State Emergency Response Commission (SERC) and, the Northern Nevada Fire Chiefs Assoc. EMS Committee.

February 1, 2022

Board of Directors
Emergency Medical Services Advisory Board
Washoe County Health District
1001 East Ninth Street
Reno, Nevada 89512

RE: Public Comment for February 3, 2022

Dear Members of the Board,

On January 21, 2022, a cardiac arrest occurred in the City of Reno, on Silver Lake Road. The location of the call was about the length of two football fields (200 yards) away from TM fire station #44 on Silver Lake Boulevard. Although a TM ambulance responded from Sun Valley Station 45, TMFR offered to assist with the response of a fire engine, whose crew consisted of three paramedics. Reno Fire Department did not accept the assistance. (Please see the enclosed map).

The patient did not survive. I cannot say whether a different outcome would have resulted in the response from our engine crew. Still, I can say that the shortest response time in cardiac arrest incidents is one of many important factors for patient survival.

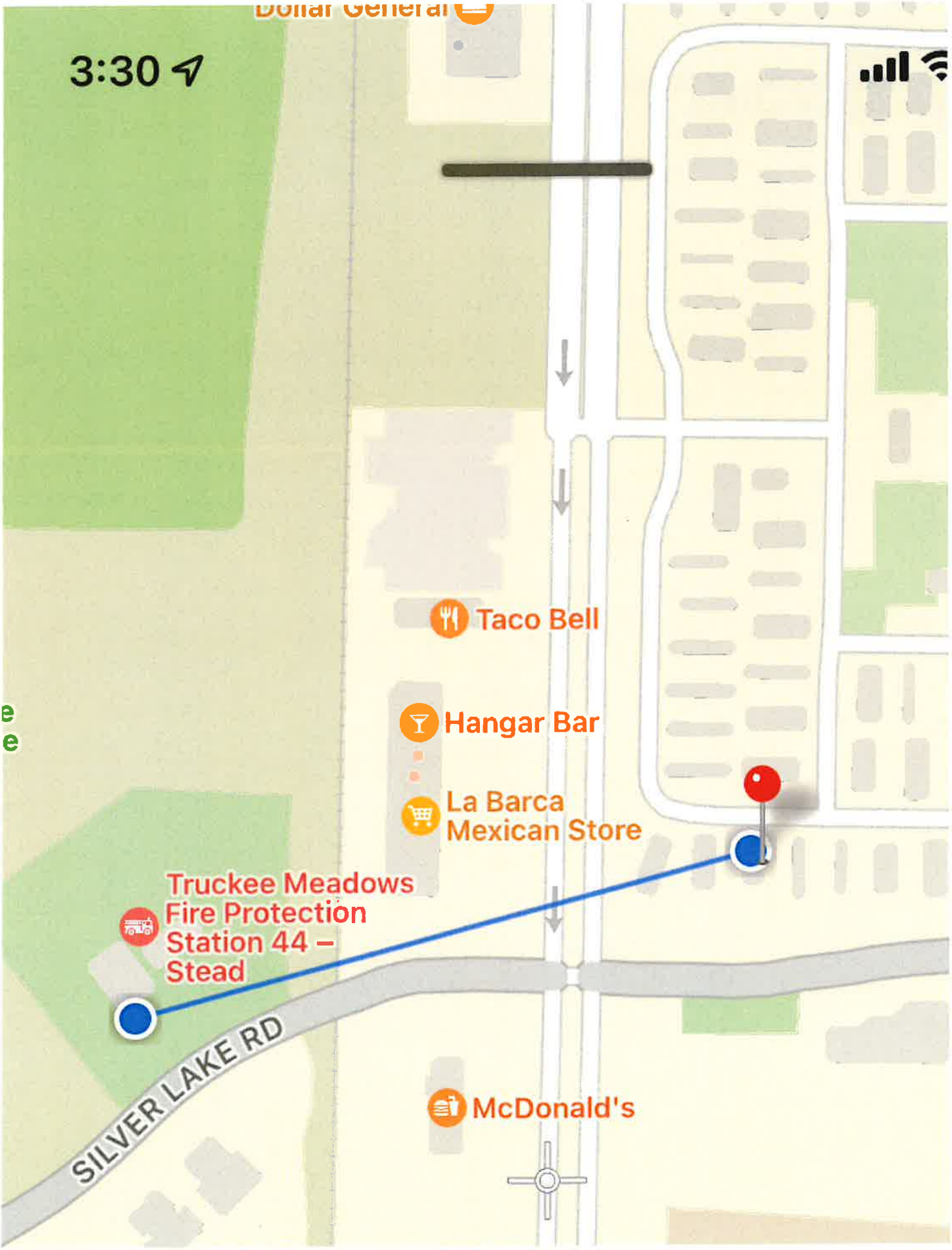
It seems incongruous that a TM ambulance can respond from 7 miles and 14 minutes away, but not a paramedic fire engine who were yards and seconds to the emergency and available to help.

I urge this Board to support decisions that promote boundary drops and automatic vehicle location (AVL) technology. I believe that a failure to timely dispatch the closest responder, such as what occurred on January 21, results in harm to the public, which will continue without serious efforts to enact reforms. The Board of Fire Commissioners for Truckee Meadows supports the response of the closest emergency provider.

Regards,

Charles A. Moore, Fire Chief

cc: Board of Fire Commissioners


3:30
Dollar General
Taco Bell
Hangar Bar
La Barca
Mexican Store
Truckee Meadows
Fire Protection
Station 44 –
Stead
SILVER LAKE RD
McDonald's