WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

1001 East Ninth Street, Reno, Nevada 89512
P.O. Box 11130, Reno, Nevada 89520
Telephone 775.328-2400 • Fax 775.328.3752
www.washoecounty.us/health

MEETING NOTICE AND AGENDA

Emergency Medical Services Advisory Board

Date and Time of Meeting:	Thursday, August 3, 2017, 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**
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 Agenda**
      July 6, 2017
   B. **Approval of Draft Minutes**
      April 6, 2017
4. ***Prehospital Medical Advisory Committee (PMAC) Update**
   Dr. Andrew Michelson
5. ***Program and Performance Data Updates**
   Christina Conti
6. ***Presentation to the EMS Advisory Board**
   - ALS Implementation, Sparks Fire Department
   - REMSA Health Line & Community Paramedicine, REMSA
   - REMSA System Status Management Overview, REMSA
7. **Presentation, discussion and possible acceptance of the EMS Program's FY 16-17 Annual Report template (**For possible action**)**
   Heather Kerwin

8. **Presentation and possible acceptance of an update on the Nevada Trauma Registry data for Washoe County (**For possible action**)**
   Heather Kerwin

9. **Presentation, discussion and possible acceptance of a presentation regarding the conferences attended by the EMS Statistician (**For possible action**)**
   Heather Kerwin

10. **Presentation and possible acceptance of an update on the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight (**For possible action**)**
    Christina Conti

11. **Presentation and possible direction to staff on changes to completion dates outlined within the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight (**For possible action**)**
    Christina Conti

12. **Presentation, discussion and possible acceptance of an update on the regional protocol project, an objective of the Washoe County EMS 5-Year Strategic Plan (**For possible action**)**
    Christina Conti, on behalf of, Brittany Dayton

13. **Presentation, discussion and possible acceptance on an update of the public service announcement (PSA) project relating to the appropriate use of 911 (**For possible action**)**
    Heather Kerwin, on behalf of, Brittany Dayton

14. ***Board Comment**

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

15. ***Public Comment**

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

16. **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.

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, PO Box 11130, Reno, NV 89520-0027, or by calling 775.328.2415, 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 attend and make 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."

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

Reno City Hall, 1 E. 1st St., Reno, NV
Sparks City Hall, 431 Prater Way, Sparks, NV
Downtown Reno Library, 301 S. Center St., Reno, NV
Washoe County Administration Building, 1001 E. 9th St, Reno, NV
Washoe County Health District Website www.washoecounty.us/health
State of Nevada Website: https://notice.nv.gov

Supporting materials are available to the public at the Washoe County Health District located at 1001 E. 9th Street, in Reno, Nevada. 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 is located at the Washoe County Health District and may be reached by telephone at (775) 326-6049 or by email at dspinola@washoecounty.us. Supporting materials are also available at the Washoe County Health District Website www.washoecounty.us/health pursuant to the requirements of NRS 241.020.

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

1001 East Ninth Street, Reno, Nevada 89512
P.O. Box 11130, Reno, Nevada 89520
Telephone 775.328-2400 • Fax 775.328.3752
www.washoecounty.us/health

MEETING MINUTES

Emergency Medical Services Advisory Board

The Emergency Medical Services Advisory Board met on Thursday, April 6, 2017, in the Health District Conference Room B, 1001 East Ninth Street, Reno, Nevada.

1. *Roll Call and Determination of Quorum

The following members and staff were present:

Members present: John Slaughter, Manager, Washoe County, Chair
Kevin Dick, District Health Officer, Vice Chair
Steve Driscoll, Manager, City of Sparks
Bill Thomas, Acting Manager, City of Reno
Dr. Andrew Michelson, Emergency Room Physician, St. Mary's

Ms. Spinola verified a quorum was present.

Staff present: Leslie Admirand, Deputy District Attorney
Dr. Randall Todd, Division Director, Epidemiology & Public Health Preparedness
Christina Conti, EMS Program Manager
Brittany Dayton, EMS Coordinator
Heather Kerwin, EMS Statistician
Dawn Spinola, Administrative Secretary, Recording Secretary

---

2. *Public Comment

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

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

---

3. Consent Items

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 Agenda**
April 6, 2017

B. **Approval of Draft Minutes**
January 5, 2017

Mr. Driscoll moved to approve the agenda for the April 6, 2017 meeting. Mr. Thomas seconded the motion.

Mr. Dick asked if both of the items were being approved. Mr. Driscoll requested separate approvals for the agenda and the minutes.

Chair Slaughter stated he would request approval for the two items separately. He noted a motion and a second for approval of the agenda portion of Consent had been presented, and requested a vote. **The motion was approved five in favor and none against.**

Mr. Driscoll stated that he would need to abstain from voting on Item B since he had not been present at the meeting. **Dr. Michelson moved to approve the minutes of January 5, 2017. Mr. Dick seconded the motion** which was approved **five in favor and none against**.

---

4. *Prehospital Medical Advisory Committee (PMAC) Update
Dr. Andrew Michelson

Dr. Michelson explained there had been discussion by the Medical Directors about developing a plan to discuss, review and critique any cases of performance concerns, submitted by Fire or REMSA. The PMAC has begun reviewing the protocol drafts that are coming from the task force. He noted the PMAC's purpose was not to authorize final approvals, but only to provide recommendations to the task force in their pre-hospital advisory committee capacity.

Dr. Michelson noted that the PMAC had also finalized the Mission Statement.

---

5. *Program and Performance Data Updates
Christina Conti

Ms. Conti stated she was available to answer any questions.

Ms. Conti pointed out that the triennial exercise would be held at the end of the month, so the planning continues for that. She noted an NTSB training had been held the day prior to the meeting that was very much focused on family assistance, and that component will be exercised during the triennial.

Ms. Conti explained to the Board that the first behavioral health facility had signed on to the Mutual Aid Evacuation Annex, which was Northern Nevada Adult Mental Health Services. She noted their emergency manager is very active with emergency planning and so that is a positive development for the region.

Ms. Conti explained the program staff of Preparedness and EMS had met with community partners from Carson and Douglas counties. Together, they will develop a regional seminar focused on health care evacuations for first responders and health care facilities.

Ms. Conti informed the Board that the program had begun receiving REMSA CAD data in January and so are using that instead of the First Watch program data to monitor system performance. She noted the trauma data is being reviewed and is already posing some

challenges. Ms. Conti explained that at the next meeting, Heather Kerwin would bring forward a presentation on that data to explain how it can be used and what the current challenges are. Ms. Kerwin will also discuss some options of how procedures can be altered to fully utilize the data. The program does have 911 calls to hospital disposition, but it is not as easy to match up as previously anticipated.

Ms. Conti explained there were other notable items in the report that will be addressed later in the meeting. She stated she would point out the CAD to CAD update, and that Rishma Khimji, Assistant Director of Information Technology from the City of Reno, was in the audience and was available to answer questions.

Mr. Dick asked if the transition from the First Watch (OCU data) to the CAD data from REMSA was beneficial and what the difference was between the two.

Ms. Conti stated there was always a benefit to using the CAD data because it allows a look at the entire incident and not just the incident-level data. Ms. Kerwin was invited to come up and talk about the differences and why the program chose to utilize the CAD data.

Ms. Kerwin stated the primary difference between the CAD data for REMSA and OCU data was that it gives the equivalent of seeing all responding units to a call for a complete view of the call instead of just the first arriving unit's time stamps.

Chair Slaughter asked if, under the Legislative Updates, if the EMS Oversight Program was aware of discussions happening in the South Washoe Valley, Duck Hill area. Ms. Conti stated she was.

Chair Slaughter asked if it was going to be reflected in the current meeting at any time. He further clarified that AB140 had led to a discussion about some changes to the EMS response in that area, south of Bellevue Bridge.

Ms. Conti replied that, during the previous legislative session, a running list was compiled, but the EMSAB had met twice and Legislatively, everything was always moving.

Chair Slaughter stated he had communicated to the Chair of the Government Affairs that Truckee Meadows Fire and REMSA are working on the proposed changes, and the Chair has asked if there will be ongoing performance monitoring of that area.

Ms. Conti stated the EMS Oversight Program could add it as a special interest area and asked if Carson City was amenable to providing their data so that the Program staff could have a complete look at that area. Chair Slaughter responded that it could certainly be requested.

---

6. Presentation, discussion and possible acceptance of an update regarding EMS data and demonstration of the online heat map of response times.
Heather Kerwin

Ms. Kerwin, EMS Statistician, stated she had nothing further to add to the staff report.

Ms. Kerwin explained that the attached mid-year quarterly report had four tables. She pointed out that only Priority 1 and 2 calls are utilized in looking at travel times on Table 2 and Table 3. The first and fourth tables stratify the data by priority.

Ms. Kerwin then reviewed the heat map. She noted the region did isolate the analysis to only Priority 1 and Priority 2 calls. Based on the feedback, data caveats had been added regarding how the maps should be utilized and what they include. She explained that another caveat discussed the limitations to Fire partner data in outskirt areas such as North Lake Tahoe Fire

Protection District (NLTFPD) and partner counties, as the program did not have complete data for those areas.

Ms. Kerwin continued by explaining that the heat map adds the population density and REMSA response zones. Because only Priority 1 and Priority 2 calls were utilized, the time expectations for those are visible. She further explained that the Washoe County Geographic Information System department (GIS) developed versions that provide images of daytime versus nighttime calls, and then summertime versus wintertime, which were the only two subgroupings that were requested by the work group that met to discuss this.

Mr. Driscoll asked what the definition was of daytime versus nighttime. Ms. Kerwin replied that it followed the original quarterly reports in that it was 6 to 6. Further clarifying it does define that it is closer to 6:01. She stated the region was intending to go live with the link for the public as well, if it was approved.

Mr. Thomas asked if this was real-time data, or if there was a lag time of months or days. Ms. Kerwin replied it was only current fiscal year data. Call data can be added once it is matched on a quarterly basis. She noted there were some current concerns about some of the hot spots and staff worked with GIS to pull out anything that appeared to be an anomaly. There were only five calls that showed irregular time stamps and those calls were removed. The rest are truly reflective of that call response time.

Mr. Thomas asked if the end goal was to use the map for determining service areas. Ms. Kerwin replied she did not believe that was the intention, it was just a more helpful way to visualize response times independent of which agency arrived first for the entire region. Going public, it was to be used more for informative purposes and however it might be utilized for future planning.

Mr. Thomas opined that one thing that would be of value is, if it could be accessible to the public, people would know what the true expectations of service should be in certain areas, so people in the red spot areas do not expect to get a four-minute response. If the public has that, then to some degree, it makes it a little more palatable to them when they do not get the answer they wanted when it comes to services. Mr. Thomas opined that public access to the map would be a value to the community. He suggested the Realtors should know about it, because they would be the first point of contact for a buyer.

Mr. Thomas moved to accept the report. Mr. Driscoll seconded the motion.

Chair Slaughter noted a motion and second had been presented and requested a vote. **The motion was approved five in favor and none against.**

---

7. Presentation, discussion and possible acceptance of a presentation regarding the EMS Today conference attended by the EMS Program Manager and EMS Coordinator.
Christina Conti and Brittany Dayton

Ms. Dayton and Ms. Conti had attended the EMS Today conference again this year in Salt Lake City. Ms. Conti explained they wanted to share some of the exciting things that they had learned. They went to over 30 sessions between the two of them.

Ms. Conti pointed out that the conference tracks, which included topics like leadership, operations, managing threats, Multi-Casualty Incidents (MCIs), special topics and staff, always appeared to focus more on leadership, special topics and managing threats and MCIs because that falls more with EMS oversight and emergency planning than operations and community

paramedicine would for Washoe County.

Ms. Conti reviewed three sessions for the Board. The first session was called Beyond Lockdown. She opined this was very important to bring to the Board's attention because last year she presented the initiative of active bystanders and the region has not done anything with that yet. She pointed out the public expectations of the 911 system is that you call and there is going to be tangible results. But the medic is rarely the first person there, and so citizens and communities should be empowered with some tools, in case they find themselves in this situation.

Ms. Conti then reviewed the second session that focused more on schools, but the lessons could be applied to the region. Two quotes made an impression on her: "When all primary plans center around prevention, what is your organization's contingency plan for when prevention fails?" And then right in line with that, "The failure to train is training to fail." She explained they were focusing on preparing and empowering citizens. An additional tactic was to provide the school employees and the students little emergency kits that can be made for $20 and teaching them how to take steps in an emergency. Ms. Conti noted that one of the major points they focused on had to do with understanding whether if somebody is not getting treatment, are they going to be okay or not whether they get treatment or not. A goal of the outreach was to help everybody understand that the expectancy of that person really is defined by what kind of interventions they get.

Ms. Conti noted a recurring statement in the MCI events was that MCIs are becoming longer in duration. That meant there is going to be more lag time between something happening and whoever is the first agency to come in. There might be a law enforcement component and then the medics that are teamed with them or there may be some other things going on, a hostage situation, whatever it is, and so the duration of it might be different.

Ms. Conti explained that continued faith in government to get it right is definitely something that stuck out. As government employees, we are all public servants and so we are going to do the greatest good for the greatest amount of people. One of the themes that was common throughout the presentations was that the important element is two-thirds of patients will bypass the EMS system. When something frightening is happening, people are going to leave, and they are going to get themselves to the health care system as best they can. That may be through self-transport, law enforcement transport, or by other means, they are leaving the area.

Ms. Conti opined EMS needs to begin planning for longevity and the waves of patients in multi-hour events. She noted there was a paradigm shift happening within the country, in that two waves of patients are coming through, the two thirds that bypass the system and then the ones that are coming in through the system. Another common thread was that unified command with law enforcement occurs immediately, as well as the interoperability with the law enforcement agencies. Ms. Conti explained there had been one incident where all responders had the same radio system but they did not have the same radio channels, so they were not able to communicate with each other, even being on the same system.

Ms. Conti noted the question had been raised as to the plans in place being flexible enough, as there was an MCI plan, then have an Alpha plan. The existing plan is geographically centered as if it was happening in one location. Can it flex with an evolving incident or a long incident, do we have that ability within the plans as we have them written? Ms. Conti opined she was impressed with the theme of Engage the Partners. It was saying that when you engage with your partners you can help attribute to their successes, so it is not just learning from them, but also helping each other get better. She noted the final thought that she took away from one of the

sessions was that we obviously cannot change the EMS universe, but we can look for small ways in which we can make it better.

Ms. Conti presented the idea of developing a pre-hospital outcome measure. She opined it was very much in line with what Washoe County has been trying to do for the last several months, working on finding a way to know how well the system performs. Everybody has an idea, but do we, as a system, really understand, and do we have public accountability for our performance? The heat map is definitely a step in the right direction.

Ms. Conti explained the presentation taught that there are three kinds of measures, the infrastructure measure, process measure and outcome measure. Staff would have to define what these different measures look like and what information the program would like to glean from them. The challenge with pre-hospital outcome measures is the standardization of that data, and making sure that it is the same across all the partners that it is received from. How does it transmit to health care so that they would have that, and then how does it affect the standardization of equipment?

Ms. Dayton reviewed her sessions. The first was The Anatomy of a Burn Disaster presented by the Disaster Coordinator for the University of Utah's Burn Center. They simulated an earthquake that would have happened in Utah and how it would have impacted the health care system, with multiple burn patients. There were really two key elements to this presentation, one being that there is an extremely limited amount of burn beds in the country. There are just under 2,000, and most operate at capacity. Generally only one or two are open any given day. Ms. Dayton explained the presentation focused on encouraging EMS to start using the concept of Telemedicine, where they would be able to contact burn center doctors on scene to determine whether or not that patient was appropriate for a burn center, and then focusing on the need for planning for burn MCIs.

Ms. Dayton explained that in July 2016, the EMS program had added the American Burn Association burn MCI information into their plan, but acknowledged there are gaps that still needed to be addressed.

Ms. Dayton went on to discuss another presentation by Chief Williams of the Orlando Fire Department, along with two of his firefighter paramedics that were first on scene for the Pulse nightclub terror attack. Chief Williams presented an overview of the incident and the challenges of a long-term, dynamic scene. This was very different than most active-shooter events that traditionally end within minutes. This turned into a hostage situation, so they were on a three-hour standoff which presented different challenges that they were not expecting. 50 were killed including the gunman and then 117 were transported to the hospital, with 9 dying at the hospital.

Ms. Dayton stated that lessons learned from this presentation touched home for all the planning that has been done with the Multi-Casualty Incident Plan (MCIP). Patient tracking had been a major challenge for the Orlando responders. It took them almost three weeks to track every patient that was involved. Part of this was because people were avoiding or bypassing the EMS system and trying to transport themselves straight to the hospital, because there was a hospital that was less than a quarter of a mile away from the nightclub. And they also had communication issues with law enforcement. They initially started in Unified Command, and then split at 3:00 when the standoff started and fire lost all communication with law enforcement. Finally, Family Assistance Center operations began, and this was a success. They set up a hotline very quickly, and this is how they were able to gather patient and victim information to reunify loved ones with their family members.

Ms. Dayton explained a presentation by the Office of EMS from the Department of

Transportation (DOT), called Performance Measures, was a general session about their policy-making office and how they can help locals. They talked about not having any regulatory authority in the Office of EMS, and they do not get grants, so they do all of their work through a systems approach maximizing partner collaboration. The main discussion point was NEMSIS 3 which is the national database system that the Federal government implemented, and they were promoting their office as being able to help agencies get data from both healthcare facilities and also EMS agencies. The quote was "Data out is only as good as data in."

Ms. Dayton noted the final presentation she attended was EMS Protocol Reboot, given by the Medical Director from MedStar in Texas. It was very helpful, since Washoe County is currently going through the regional protocol process. The presenter highlighted a few reasons why agencies should overhaul their protocols and consider looking at it from a regional rather than agency perspective.

Ms. Dayton explained the presenter gave a few points on how to approach it, and pointed out the region is right on target with what has been done. She noted the presenter had said a committee needs to be assembled, and that committee should include first responders, EMTs, and paramedics Additionally, outside experts should be brought in, which was done here, and then utilizing databases, websites, textbooks and articles to make the final decision, not just necessarily what the team thinks is best. He had advised them to be ready for a substantial time commitment.

Mr. Thomas moved to accept the presentation and Mr. Dick seconded the motion. Chair Slaughter stated there was a motion and a second and called for the vote. **The motion passed five in favor and none against.**

---

8. Presentation and possible acceptance of an update on the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight. Christina Conti

Ms. Conti stated the staff report had been redesigned so that the completed Objectives could be easily located instead of being intermingled with the ones in process. Ms. Conti pointed out an error, or oversight. The first one, implement appropriate protocols to determine service level through the EMD process to low-acuity Priority 3 calls. In the last meeting, it was reported that was affiliated with the Omega protocols and it is not. She stated the region would begin working on that immediately but it really does coincide very well with the 911 project that was asked about by Mr. Dick at the last meeting.

Mr. Thomas moved to accept. Mr. Dick seconded the motion. Chair Slaughter stated there was a motion and a second and called for the vote. **The motion passed five in favor and none against**.

Ms. Conti asked if the Board understood that what was also accepted was the Omega algorithm review as well as the map revision process.

Chair Slaughter asked if there were any questions.

Mr. Thomas requested Ms. Conti translate what she had said. Ms. Conti stated that when the Board accepted the update they accepted what revisions will look like and what the algorithm review looks like. Indicating the page Chairman Slaughter held up, Ms. Conti said it was the algorithm, and then the next one is the map methodology. It goes into what the annual review, the five-year review and the 10-year review would look like.

Chair Slaughter opined it did not change anything on the motion and action.

---

9. Presentation, discussion and possible acceptance of an update on the regional protocol project, an objective of the Washoe County EMS 5-Year Strategic Plan.
Britany Dayton

Ms. Dayton reminded the Board Goal Number 5 is to design an enhanced EMS response system through effective regional protocols and quality assurance by December 31, 2018. An element of this goal is to build regional protocols and that deadline is June 30, 2017, with an implementation date of January 1, 2018. This item was being presented to give the Board an update on the process and what the agencies have accomplished for the region. The task force meets every other week for an hour and a half. There has been a significant amount of discussion, and Ms. Dayton stated she appreciated the thought that the task force has put into the protocols. However, progress is a little bit slower than initially anticipated, so the schedule will be changed so the June 30 deadline can be met.

Ms. Dayton explained the initial meeting focused on the format of the protocols, so the group has agreed on that. The contractor is still available for recommendations if there is any disagreement or further discussion. As Dr. Michelson briefly discussed, on March 8, PMAC was provided a general status update on the project. Ms. Dayton showed the Medical Directors some of the draft protocols that had minor changes or suggestions. To date, the task force has reviewed 35 different protocols; many of them are in draft form at this point and 12 have been finalized to send to the Medical Directors for review. Ms. Dayton took a moment to thank the task force members for their tremendous dedication to the process their patience with her while she learned many new medical terms.

Mr. Driscoll thanked Ms. Dayton, indicating his understanding of the challenges of working together on projects that affect the entire region. He asked how it was being resolved when the Medical Directors had protocol that they were not willing to move away from that was not regional.

Ms. Dayton stated the task force has talked about that and are aware that there are a few agencies that might have variances, mostly in medications at this point. The task force has discussed North Lake Tahoe and Gerlach being the two agencies that were focused on that just because of their transport time coming into the valley hospitals. The task force discussed making a medication list indicating what agencies are giving which medications. The Medical Director at North Lake Tahoe might be interested in pushing certain medications that are not necessary for a transport time of less than 10 minutes. The medication lists that the task force is developing will highlight the agencies that will be using them, so that is where more variety can come in.

Dr. Michelson asked if, with the regional protocols, there would be a plan for annual review and potential modifications if medications change in certain agencies.

Ms. Dayton replied that one of the presentations that she attended asked the question about what is the best practice for reviewing and updating protocols. The presenter had suggested a two-year review, and then on a case-by-case basis, review any protocol that field crews indicate is not working.

Dr. Michelson opined this was probably a major change or even consideration for these agencies to practice in this type of joined direction, and there should be a lot of open-mindedness for them to get feedback and readdress issues that may affect their daily practice.

Mr. Thomas asked if there was a liability issue in terms of trying to get the joint agreement on protocol. Rephrasing, he asked if physicians feel like there is a certain outcome or certain way to handle an incident, and it was different from the way the other ones would, is it an issue of liability, or is it an issue just of judgement in terms of those kind of conflicts.

Dr. Michelson stated that he would not know the answer to that as far as pre-hospital law considerations.

Mr. Thomas further stated the only reason he asked was if it was liability, that might be something regionally the Board can deal with. He noted the judgement piece is between the physicians so that would be difficult regionally, but if there was a concern that one physician wanted to handle it one way and another one a different way because they were afraid of litigation and outcome, perhaps that is where the region could step in.

Ms. Conti replied to Mr. Thomas, stating that when the Medical Directors sign off on the protocols, that is their insurance and their malpractice and everything that goes with it. So if some of the Medical Directors do not feel like they can get behind a protocol then that might be where we have some differences or where we come together as a region like you suggested to talk about it and see what can be done. That is where the Medical Directors input and support and sign off on the regional protocol becomes important.

Wayne Harwick, introduced himself as the Medical Director for Sparks Fire Department, Airport Fire Department, Storey County and Central Lyon County. Dr. Harwick stated there is no reason to have separate protocols. He noted somebody might be able to make an argument for long transport times; there may be a few minor alterations. But there is no difference. All it does is confuse people. He pointed out that many of the paramedics work in more than one system and it gets confusing. That does not support patient care. There is no outcome data that shows that these differences have any effect on patient care.

Mr. Thomas moved to accept. Mr. Driscoll seconded the motion. Chair Slaughter stated there was a motion and a second and called for the vote. **The motion passed five in favor and none against.**

---

10. Presentation, discussion and possible direction on an update of the public service announcement (PSA) for project relating to the appropriate use of 911.
Brittany Dayton

Ms. Dayton stated that during the last EMS Advisory Board meeting, Vice Chair Dick had requested information on the media campaign related to misuse of 911. She explained that the regional partners met in early March to discuss a media project to address some of the matters that are taxing the 911 system. Some of the items that came up were unintentional calls from cell phones, frequent fliers, and low-acuity, non-emergent calls. The team discussed those topics and came up with a goal to try to minimize the misuse of 911. They had had a second meeting on March 22nd, discussing kicking off the project in coordination with National Public Safety Health Communicators week, as well as how they planned to handle this project.

Ms. Dayton went on to explain they sent out a letter on March 30th to invite all the agencies into a friendly competition. They can either make a 30-second PSA or a graphic that is focused on the area that they identified that was the biggest misuse of the 911 system. A meeting with all the chiefs is scheduled for April, and the logistics of starting the campaign and doing some media interviews will be coordinated. They will have until the end of May to submit their PSA should they want to participate in the competition. The PSAs and the graphics will be posted

online and sent out through all of the social media accounts for each of the agencies participating so the public can vote on their favorite.

Mr. Thomas asked if there had been any discussion about economic disincentives for misuse. Ms. Dayton replied that she could not speak for the region although she had read several EMS articles from across the country and there are communities that have implemented a fine for misuse of 911. Douglas County had had someone who was misusing the system, and it turned out to be a lonely, elderly individual with no family or anyone to contact so they would call 911. That agency ended up paying to put that person in a long-term care facility, which was less expensive for them to do that than to continue to respond via 911.

Ms. Dayton stated there were a variety of options to discourage people from misusing the 911 system but none had been implemented. Mr. Thomas noted private services such as the Nurse Helpline that could divert people away from 911. He asked if there was some way to analyze those services to see if there is a way to move people over to those systems instead of over-utilizing 911.

Ms. Conti stated they would write that down.

Mr. Driscoll noted PSAs are very effective when there is a common message with a different delivery. He asked that, since there are multiple agencies having ideas that will be similar yet different, if it was possible that more than one could be produced, and they could be rotated to keep the message fresh with the different presentations.

Ms. Dayton replied that was what they were hoping to do. The letter that Ms. Conti sent out provided a few different examples. The region wanted something that was catchy, funny. There have been several cities that have done a variety of things, including lip synching and doing some more catchy PSAs, so those were sent out as examples. Mr. Driscoll noted everyone was using social media and asked if there was an intention to take this beyond traditional media and use other available media sources.

Ms. Dayton replied that the one request was that the PSA include every participating agency's logos, so it would be a regional project. She added it was necessary to utilize social media because of the limited budget associated with the project. The majority of people have social media accounts, so the team thought that would reach the masses better than TV ads or radio ads.

Vice Chair Dick stated Ms. Dayton had mentioned the budget for the project being limited, and the report discusses budget with the partners. He asked if there was an opportunity to have agencies contributing toward a full budget. For a small investment, there could be a substantial payoff in reduced cost if the region can get people to use 911 properly.

Ms. Conti replied the region had discussed that at the last meeting. In this fiscal year, the EMS Oversight budget has a small amount that it can contribute towards the project and funds have been included for it in the budget for the next fiscal year. The amount available is not at all robust enough to do a meaningful campaign with professional support. At the last meeting we did ask each agency to go back and take a look at their own budgets for next fiscal year to see if they could contribute $500, $1,000 or any other amount. Pooled together, funds from all the fire departments, police departments, the dispatch centers and Washoe County could be a significant amount. It would be a small investment for the agencies and a big payoff for the region.

Ms. Conti added that the people who had attended that meeting were not necessarily the final decision makers on their budget, although they do create their budgets. There did appear to be some support in being able to contribute some funds for it. At the next meeting, they will share

whether or not they received approvals from the decision makers.

Vice Chair Dick thanked staff for working on that. He further opined that for a meaningful campaign it would be necessary to add at least one zero to those numbers.

Mr. Thomas suggested that the group start with asking the hospitals before the local governments. From the City of Reno perspective, even though it was a small amount and is very timely for everyone, the budget process was in full swing, and Reno is talking about getting rid of things or cutting back on things as opposed to adding them.

Ms. Dayton replied that had been discussed and one of the members is going to reach out to the hospital CEOs to see if that would be a viable option.

Ms. Conti added on to what Ms. Dayton was saying, clarifying the reach-out to the CEOs was not for financial reasons. It was more from the notion of the group did not want to do anything on the front end, pre-hospital education, that would end up being something that the hospitals deal with negatively on the back end. Getting their buy-in in the PSA project was where the team was going with the reach-out to the hospitals, but certainly the funding is also needed now.

Mr. Driscoll stated Sparks would not be opposed to providing in-kind funding. He noted all of the hospitals that in the region are part of national chains that have national capabilities and production capabilities. Some of them may even have production capabilities locally. To utilize their expertise to do that would be just as good as requesting money. He requested staff keep that in mind.

Mr. Thomas moved to approve. Mr. Driscoll seconded the motion. Chair Slaughter stated there was a motion and a second and called for the vote. **The motion passed five in favor and none against**

---

11. *Board Comment

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

Mr. Thomas asked if there was a plan going forward regarding how REMSA is going to address geographic and demographic growth and requested an agenda item be added so that they could provide an update to the Board.

Mr. Thomas then noted the first thing he goes to for medical advice is his phone. He asked if there was a way to drive people to using either a chat service or even an answering service, similar to the Nurse Hotline that people could use to do their own self-triage instead of just going to the emergency room.

Dr. Michelson opined there was a future in telemedicine that is coming. It is slow to develop, but is definitely on the horizon for medicine. He noted it was difficult to ever find a physician that backs a self-directed care plan because the patient is being asked to make their own medical decisions, which is not how doctors are trained. He added that until there is an increased digital access to physicians, there probably will not be an improvement in accurate web knowledge for medical decisions.

Chair Slaughter suggested the item be brought back as a future agenda item.

Mr. Driscoll noted that REMSA's Nurse Health Line was very successful, that the grant that was originally provided and the outcomes that were expected were met. It is obviously not taking off all the pressure from the 911 system but it has done a good job.

Mr. Driscoll requested a future item in which REMSA would provide an overview of the project and how it is and where it is going now that the grant process is finished, and how they are evolving it into some of the great outcomes that they have. That may be something that the region, through PSAs and other things, might be something to join into as a resource.

Mr. Thomas stated that as a member of this Board and as a member of the public, he would like to know if a governmental approach could be developed to allow responders to be more flexible in not using the most expensive answer to a given situation because of the potential litigation. He requested that be brought back as a future item.

Chair Slaughter requested comments and no one responded.

---

12. *Public Comment

Ms. Conti followed up in a public comment capacity on Board comments made regarding Mr. Driscoll's suggestion regarding the PSA project. She stated staff could take a look at adding nurse hotlines, whether it is through insurance or through REMSA, as alternatives to WebMD so that when a citizen has a medical concern, they have someone to contact so that they do not overestimate the severity.

Ms. Conti added that as far as the REMSA plan to address geographic growth, she felt that that would be something worthwhile and opined that REMSA would be willing to share that information, because it is all part of system status management . The Oversight Program does get REMSA's new staffing at every bid change.

Chair Slaughter thanked Ms. Conti and asked if there was any other public comment.

Dr. Harwick noted there were all kinds of referrals from Dr. Google. He stated there has been some discussion and some utilization of non-transport, and almost all of the litigation in EMS is non-transport. He noted that as long as the legal system exists as it does in this country, he insists that they transport everyone.

Chair Slaughter closed the public comment period.

---

13. Adjournment

At 10:02 a.m., **Mr. Driscoll moved to adjourn. Mr. Thomas seconded the motion.**

Respectfully submitted,

Dawn Spinola
Administrative Secretary

Approved by Board in session on _____, 2017.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
BOARD MEETING DATE: August 3, 2017

TO: EMS Advisory Board

FROM: Christina Conti, EMS Program Manager
775-326-6042, cconti@washoecounty.us

SUBJECT: Program and Performance Data Updates

Meetings with Partner Agencies:

The EMS and PHP program staff attended a two-day National Transportation Safety Board (NTSB) training on April 4 and 5. The training included a variety of topics from an overview of the NTSB to family assistance legislation to the medicolegal aspects of family assistance. The training was extremely beneficial to the region in developing a better understanding of legal aspects of transportation disasters.

On April 17, the EMS Coordinator conducted WebEOC training with Reno-Tahoe Airport Authority (RTAA) and American Red Cross (ARC) personnel that would respond to an incident as part of the Family Assistance Center (FAC) team. The hands-on training included step-by-step instruction on how to enter individuals into the Victim Report board on WebEOC.

EMS staff attended the EMS Stakeholders and EMS Committee meetings held by State EMS on April 20. The Stakeholders meeting focused on three topics: policies/procedures, trauma protocols and air ambulance regulations. The group determined that each topic needed a designated workgroup to address the identified areas of improvement; EMS staff will participate in the policy work group. The EMS committee meeting included similar discussions as well as updates on the State EMS Program and the EMS for Children Committee.

On April 27 the airport held the 2017 triennial exercise. The EMS Statistician responded as the Medical Unit Leader (MUL) and entered all patient information received from REMSA and entered 89 patient triage status and destination hospitals in Washoe County's WebEOC patient tracking board. This exercise also provided the opportunity to partner with American Red Cross for the purpose of patient reunification.

For several weeks the EMS Coordinator worked with regional partners to create an evacuation video that will be used as a training resource for healthcare facilities. The video was filmed on May 2 and could not have been accomplished without the Emergency Manager and PIO of the VA Sierra Nevada Health Care System. Both individuals were integral to this project because they provided a location and conducted all the filming for the video. It is the region's hope that this video will provide effective training for staff on the Mutual Aid Evacuation Annex (MAEA) should a facility need to evacuate for a disaster.

On May 9 and 10 the EMS Coordinator participated in training that focused on the use of social media in disaster preparedness, response and recovery. The course defined social media and its uses and identified the tools, methods, and models to properly make use of social media during a disaster.

The EMS Coordinator and REMSA Emergency Manager provided training to Renown's leadership on May 18. The training provided an executive overview of the Multi-Casualty Incident Plan (MCIP), Mutual Aid Evacuation Annex (MAEA) and the Family Service Center (FSC) Annex. There was specific focus on the critical hospital component of preparedness and response to disasters.

The EMS Oversight Program coordinated a Press Conference on May 23 with regional response agencies including dispatch, fire, EMS, and law enforcement in an effort to educate the community on appropriate 911 use. Locally, responding agencies are seeing an increase in accidental dials, non-emergency calls and inappropriate requests to 911. During the conference two PSAs were debuted; they were created by local agencies (Sparks Police Department and Carson City Sheriff's Office) and addressed local concerns about 911 usage. The EMS Oversight Program intends to continue 911 education throughout the summer months.

The EMS Statistician attended the 2017 annual Council for State and Territorial Epidemiologists (CSTE) in Boise, ID from June 4-7. The CSTE conference is an international gathering of 1,500 applied epidemiologists working to advance public health policy and promote the effective use of public health data.

The EMS Coordinator assisted the Quad-County Healthcare Coalition in presenting the West Region HealthCare Evacuation Annex to the Statewide Medical Surge Plan on June 21. The training included more than 20 personnel from various EMS, preparedness and healthcare agencies. The presentation included an overview of the plan and a tabletop exercise using the evacuation system for healthcare facilities.

The regional protocols project has continued to have forward movement. On June 14 the EMS Oversight Program Manager presented the work of the task force to the PMAC fore discussion and review. Additionally, the task force met several times to finalize the regional protocols document. Once finalized, the document will be sent to PMAC and the EMS agencies' Medical Directors for review, final input and possible adoption. Ideally, regional protocols will be implemented in January 2018 to allow for sufficient time for training all EMS personnel.

CAD-to-CAD (C2C) Update:
No update at this time.

Mass Gatherings:
Below are mass gathering/special event permits reviewed by the EMS Program this quarter:

Red, White and Tahoe Blue: July 1-4, 2017
Mason T. Ortiz Youth Outdoor Skills Camp: July 14-16, 2017
Classical Tahoe: July 28-August 12, 2017
Barracuda Golf Tournament: August 3-6, 2017

Other Items of Note:

During the previous EMS Advisory Board meeting (April 6, 2017) the Regional Response Heat Map was approved for public dissemination. On May 22, 2017 EMS Statistician sent patient perspective response time call data from the first three quarters of FY 16-17 to GIS in order to update the Regional Response Heat Map. The map can be found at https://www.washoecounty.us/health/programs-and-services/emergency-medical-services-oversight-program/ems_response.php

Data Requests to EMS Oversight Program

Requestor	Summary of request	Date of request	Request completed
EMSAB	Update Heat Map with most current data	4/6/2017	Yes; 5/22/2017
EMSAB	Inquiry of Duck Hill calls for 2017 Legislative Session and/or ongoing monitoring of area.	4/6/2017	Provided a proposal for retrospective and prospective measurement; 4/14/2017; Approval to proceed with proposal received 6/22/17
Truckee Meadows Fire Protection District	Duck Hill analysis	5/3/2017	Provided copy of the proposal provided to EMSAB; 5/3/2017
Sparks Fire Department	Comparison of matched calls to look at Sparks dispatch call prioritization relative to REMSA's EMD prioritization. Looking at change in call prioritization over time.	5/17/2017	Yes; 5/18/2017
City of Reno Planner	Estimate of number of calls to look-alike facilities for proposed apartment complex.	5/19/2017	Yes; 5/23/2017
Reno Fire Department	RFD matched calls (to REMSA) prioritization by month, proportion of calls in each prioritization over time.	5/22/2017	Yes; 5/23/2017
Gerlach Volunteer Fire Department	Initial baseline of turnout and travel times including mean, median and 90th percentile.	5/30/2017	Yes; 6/1/2017

Investigations Conducted by EMS Oversight Program

Date Received	Individual/Organization Requested Investigation	Reason for Request	Investigation Outcome
6/22/	Citizen compliant to Manager's Office	Perceived delay in response	Materials requested of involved agencies

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: August 3, 2017

TO:	Regional Emergency Medical Services Advisory Board
FROM:	Heather Kerwin, EMS Statistician 775-326-6041, hkerwin@washoecounty.us
SUBJECT:	Presentation, discussion and possible acceptance of the EMS Program's FY 16-17 Annual Report template.

SUMMARY

The EMS Oversight Program is proposing to continue to provide an Annual EMS Report that includes the work performed and achievements of the entire region and is not solely focused on data analyses. The annual report will be designed so people will be able to better understand how the EMS system is designed to work in our community. This report will expand on the previous annual report for FY 15-16 to include measurement of jurisdictional Tier 1 standards.

PREVIOUS ACTION

The previous EMS Program Annual Report for FY 15-16 was approved on July 7, 2016 and had shifted from a solely analyses-based data report to a more holistic approach that includes how the 911 system works, regional accomplishments, with minimal data analyses.

BACKGROUND

The first annual report produced by the EMS Oversight Program was focused primarily on agency response times by month. The format illustrated agency's response times were consistent from month to month. The previous and current proposed annual report template shifts the focus from a data-heavy report to an educational and informational resource for our community to utilize more effectively.

Measurement of Tier 1 response standards for those jurisdictions that have selected standards are available and have been added to the proposed FY 16-17 Annual Report template. This will continue to serve as a report on the status of the EMS system and the achievements from all the partner agencies.

FISCAL IMPACT

There is no additional fiscal impact should the Advisory Board move to approve the FY 16-17 Annual Report template.

RECOMMENDATION

EMS Staff recommends the EMS Advisory Board accept the EMS Program's FY 16-17 Annual Report template.

POSSIBLE MOTION

Should the Board agree with staff recommendation, a possible motion would be: "Move to accept the EMS Program's FY 16-17 Annual Report template."

Proposed Table of Contents for FY 16-17 Annual Report

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: August 3, 2017

TO:	Regional Emergency Medical Services Advisory Board
FROM:	Heather Kerwin, EMS Statistician 775-326-6041, hkerwin@washoecounty.us
SUBJECT:	Presentation and possible acceptance of an update on the Nevada Trauma Registry data for Washoe County.

SUMMARY

The EMS Statistician was able to obtain the Nevada Trauma Registry data for hospitals in Washoe County for calendar years 2015 and 2016. The state produces a quarterly report, which is summative in nature and does not provide level of detail needed to gain a better understanding of the nature of trauma-related incidents in Washoe County. The EMS Statistician developed a Washoe County-specific trauma report which provides descriptive epidemiology of trauma and patients admitted for trauma to Washoe County hospitals during 2015 and 2016.

PREVIOUS ACTION

The Nevada Trauma Registry data were reported to the EMS Program for Washoe County facilities for calendar years 2015 and 2016. The EMS Statistician has been cleaning and exploring the data available to determine how it might best be communicated to lay audiences. Initially the EMS Oversight Program thought there may be potential to utilize the data to explore trends in patient outcomes based on transport mode and pre-hospital care provided. There was also the thought the EMS Program could match the incident from time of call through discharge from hospital.

BACKGROUND

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 allows for a big-picture overview of the descriptive characteristics of trauma and trauma patients in the county. The Washoe County-specific trauma report includes areas such as demographic characteristics, injury characteristics, mode of arrival, payment type, substance use, and patient outcomes. The analyses include were modeled from the 2016 National Trauma Data Bank Annual Report.

Limitations of the Washoe County trauma data include incomplete reporting of variables, lack of necessary variables to conduct match to REMSA call data, and few pre-hospital variables being captured in the Nevada Trauma Registry which limits the ability to evaluate pre-hospital care.

FISCAL IMPACT

There is no additional fiscal impact should the Advisory Board move to approve the presentation and distribution of the Washoe County Trauma Data Report.

RECOMMENDATION

EMS Staff recommends the EMS Advisory Board approves the presentation and distribution of the Washoe County Trauma Data Report.

POSSIBLE MOTION

Should the Board agree with staff recommendation, a possible motion would be: "Move to accept the presentation and distribution of the Washoe County Trauma Data Report."

Washoe County Trauma Report

2015 & 2016 Trauma Data

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Washoe County EMS Oversight Program

Published 2017

Thank you to the Nevada Division of Public and Behavioral Health for providing Nevada Trauma Registry data reported by Washoe County facilities in 2015 and 2016.

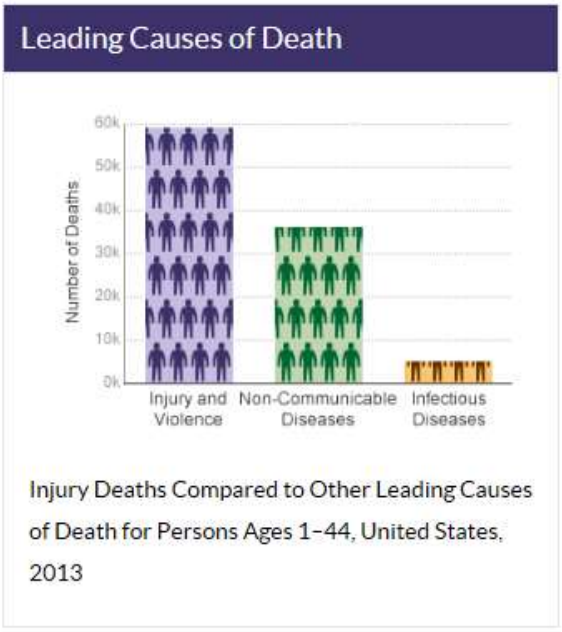
For further reading, the American College of Surgeon's National Trauma Reports can be accessed at https://www.facs.org/quality-programs/trauma/ntdb/docpub

Questions regarding the Washoe County Trauma Report can be sent to the EMS Oversight Program email at EMSProgram@washoecounty.us

Traumatic Injury in the United States

According to the National Center for Health Statistics, injuries are the leading cause of death among persons 1 to 44 years of age, accounting for 59% of deaths in that age group in the United States. The majority of traumatic injuries do not result in death. However, non-fatal injuries often result in long-term impacts including mental, physical, and financial complications. For every fatality due to injury and violence there are 13 people hospitalized and another 135 people treated in an emergency room. In 2013, injury and violence resulted in a $671 billion cost due to medical expenditures and work-loss related costs.[1]

There are three major categories of injury. These categories are unintentional, intentional, and undetermined injuries. Falls and motor vehicle crashes account for the largest proportion of traumatic unintentional injuries, while homicide/assault and suicides are the leading causes of traumatic intentional injuries both across the United States and locally in Washoe County.



Injury Deaths Compared to Other Leading Causes of Death for Persons Ages 1–44, United States, 2013

Source: Centers for Disease Control and Prevention. Injury Prevention & Control, Key Injury and Violence

Reducing the risk of unintentional injury involves basic preventive mechanisms, such as following traffic safety laws and wearing seatbelts to reduce the likelihood and severity of injury due to motor vehicle accidents. Other methods of risk reduction include incorporating non-slip surfaces and hand railings into homes of elderly adults to reduce the likelihood of high impact falls.

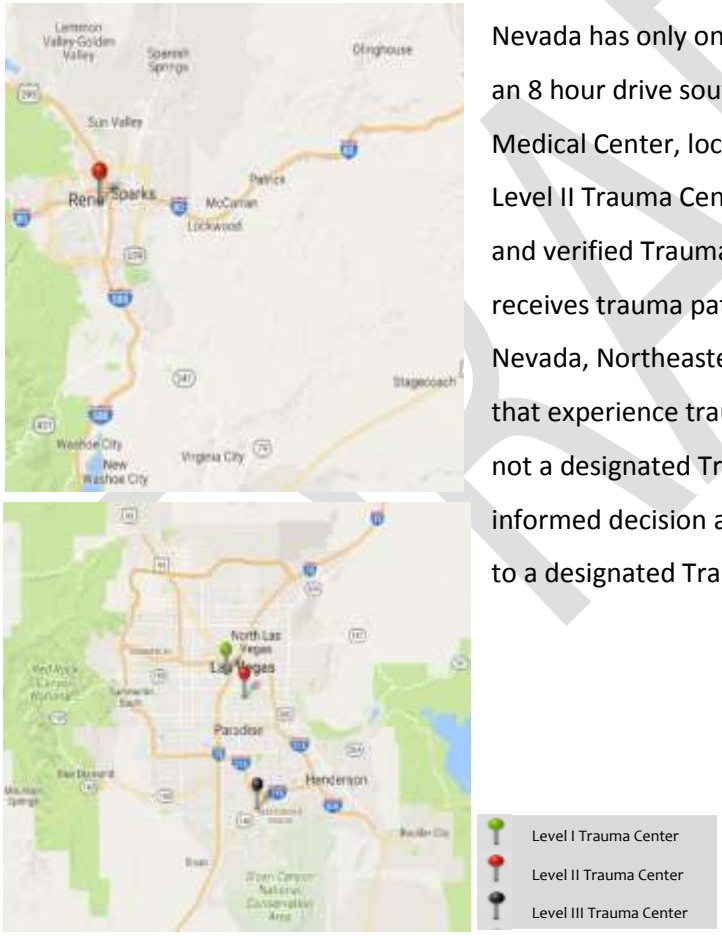
Trauma Centers

There are two processes for identifying trauma centers in the United States, a designation process and a verification process. The designation of trauma centers is done at the state and local level and involves the jurisdictions identifying the criteria to categorize a facility as a trauma center. Trauma center verification is conducted by the American College of Surgeons (ACS), which confirms the resource

[1] Centers for Disease Control and Prevention. Injury Prevention & Control. Key Injury and Violence Data. Accessed https://www.cdc.gov/injury/wisqars/overview/key_data.html

capability of a facility in order to verify it as a Trauma Center.[2] Trauma Centers are classified into various Levels (Level I, II, II, IV, or V), based on the kinds of resources available in the facility and the number of patients admitted annually.[3]

Trauma Center Levels and Capabilities	
Trauma Center Level	**Capability**
Level I	Total care for every aspect of injury from prevention through rehabilitation.
Level II	Initiate definitive care for all injured patients.
Level III	Prompt assessment, resuscitation, survey, intensive care, and stabilization of injured patients and emergency operations.
Level IV	Provide advanced trauma life support prior to transfer of patients to a higher level trauma center. Provide evaluation, stabilization, and diagnostics for injured patients.
Level V	Provide initial evaluation, stabilization and diagnostic capabilities and prepares patients for transfer to higher levels of care.



Source: American Trauma Society

Nevada has only one Level I Trauma Center, located in Las Vegas, an 8 hour drive south of Washoe County. Renown Regional Medical Center, located near downtown Reno, is designated as a Level II Trauma Center and is Northern Nevada's only designated and verified Trauma Center. Renown Regional Medical Center receives trauma patients from across the northern part of Nevada, Northeastern California, and Southern Idaho. Patients that experience 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.

[2] American College of Surgeons. Searching for Verified Trauma Centers. Accessed https://www.facs.org/search/trauma-centers
[3] American Trauma Society. Trauma Center levels Explained, Designation vs Verification. Accessed http://www.amtrauma.org

Trauma Data Registry

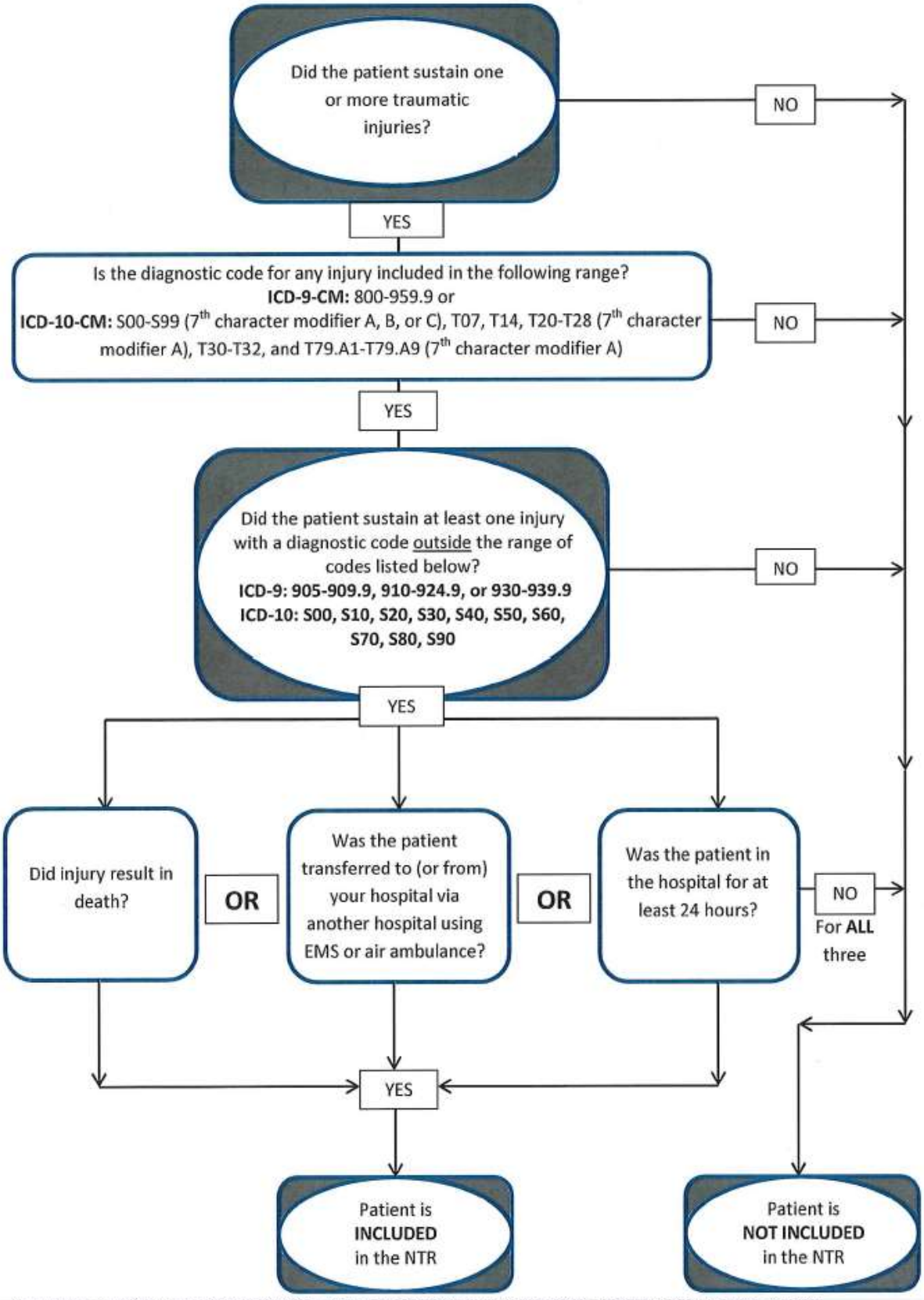
Hospital-based trauma registries are the foundation for research and evaluation which is conducted to assist clinicians and policy makers to positively impact patient outcomes. Having a well-defined and standardized set of variables is necessary to better understand and evaluate trauma patients.

The National Trauma Data Bank (NTDB) is the largest combined trauma registry in the United States with over 7 million records. Healthcare facilities across the nation submit data related to trauma patients to the NTDB including basic demographic information and other factors which categorize and help to describe traumatic injuries. The National Trauma Data Standard (formerly known as the National Trauma Registry) defines a core set of variables to be captured and reported to the NTDB.[4]

The flow chart on page 5 illustrates the criteria a patient must meet in order to be reported to the Nevada Trauma Registry. A facility does not have to be a designated or verified Trauma Center to have the ability to report data on a patient experiencing traumatic injury. Trauma data are currently reported to the Nevada Trauma Registry 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.

[4] American College of Surgeons. What is the NTDS?. Accessed https://www.facs.org/quality-programs/trauma/ntdb/ntds/about-ntds

Nevada Trauma Registry (NTR) Inclusion Criteria (ICD-9 and ICD-10)



Adapted from: American College of Surgeons. (2015). ACS NTDB National Trauma Data Standard: Data Dictionary, 2016 admissions. Available at: http://www.ntdsdictionary.org/documents/NTDSDataDictionary-2016Admissions_08202015.pdf

Washoe County Trauma Data Analyses

The American College of Surgeons produces annual adult and pediatric trauma reports which contain descriptive information about trauma patients, demographics and injury characteristics, and outcomes. The Washoe County Trauma Data Report contains analyses modeled from the 2016 National Trauma Data Bank Annual Report. These analyses are descriptive in nature and define Washoe County trauma patients in terms of age, sex, and race/ethnicity. The tables and figures also describe the epidemiology of traumatic injuries, including where and how injuries occur, as well as the severity of the injuries. These analyses are intended to serve as a baseline for measuring incidences of trauma in the region and to help identify subgroups which might benefit from preventive educational messages designed to reduce the risk of experiencing traumatic injury.

Limitations to the data analyses provided in this report are as follows:

- **Patients represented:** Any trauma patient admitted to an emergency room or hospital which reported patient data to the Nevada Trauma Registry is counted. This includes out of state and international visitors who may have experienced a traumatic injury in or near Washoe County.

- **Duplicates:** When a patient with traumatic injury arrives at a facility that is unable to provide the level of care warranted, the patient may be transferred to a facility which can provide a higher level of care. All of the standardized patient variables are entered into the Nevada Trauma registry by each facility that has seen the patient. Each patient entry is assigned a number by each facility and this number does not follow the patient from one facility to the next. The reported data are stripped of patient identifiers such as name. Therefore, duplicates are identifiable only if a record contains an identical date of birth, sex, and injury date.

- **Small numbers:** It was not feasible to replicate every analysis in the 2016 National Trauma Data Bank Annual Report. This was largely due to the relatively low number of traumatic injuries reported by Washoe County facilities each year.

- **Totals used for each table:** The numbers presented in each table may not add up to the complete number of trauma patients reported each year. This is due to missing or incomplete data and varies from table to table depending on the variables utilized for each analysis.

Number and Rate of Traumatic Injuries

The number of patients experiencing traumatic injury increased from 2015 (n=1,765) to 2016 (n=2,154), resulting in 83.6 more traumatic injuries per 100,000 population.

Table 1: Number, Percent, & Rate of Trauma Incidents by Year, Washoe County, 2015-2016

Year	Number of Incidents	Percent of Incidents	Rate per 100,000 population
2015	1,765	45.0%	399.4
2016	2,154	55.0%	483.0
Total	3,919	100.0%	441.4

Note: Population totals used to calculate rates per 100,000 population are based on Nevada Department of Taxation, Nevada State Demographer (2016). Source: Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2035 (https://tax.nv.gov).

Demographic Characteristics

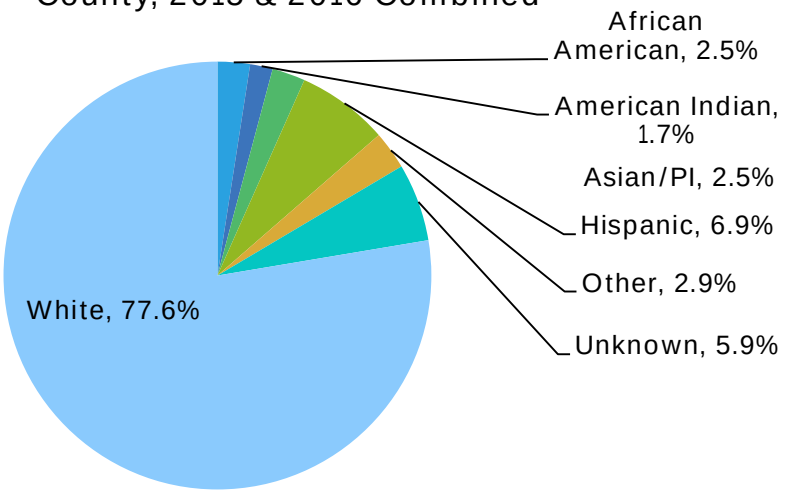
Males accounted for the majority (67.3%) of trauma patients in Washoe County during 2015 and 2016. Approximately three out of four (77.6%) trauma patients were white, non-Hispanic. Hispanics of any race accounted for 6.9%, while 2.5% were African American, non-Hispanic, 2.5% were Asian/Pacific Islander, 1.7% were American Indian, and 2.9% were an "other" race. The majority of trauma patients were between 25 and 74 years of age at the time of injury. Those 20 to 54 years of age accounted for over half of the injuries due to motor vehicle accidents, while those 55 years of age and older represented more than half of the injuries due to falls. As age increased the case fatality increased, with the highest fatality rates experienced by those 85 years of age and older in both 2015 and 2016.

Table 2: Percent of Patients, by Sex and Age Group, Washoe County, 2015 & 2016 Combined

Age Group	Male	Female	Unknown
0-4 years	1.2%	0.9%	0.0%
5-9 years	1.9%	2.7%	4.4%
10-14 years	2.7%	2.4%	0.0%
15-19 years	7.7%	4.5%	4.4%
20-24 years	9.0%	6.0%	17.4%
25-34 years	17.3%	9.6%	43.5%
35-44 years	11.6%	8.9%	4.4%
45-54 years	14.6%	12.3%	0.0%
55-64 years	14.4%	14.8%	8.7%
65-74 years	10.1%	12.7%	13.0%
75-84 years	6.1%	12.7%	4.4%
85+ years	3.4%	12.7%	0.0%
Total Number (%)	1,188 (67.3%)	553 (31.3%)	23 (1.3%)

- The majority of trauma patients in Washoe County were male (67.3%).
- The age groups from 25 to 64 years represented the largest proportion of male trauma patients.
- The age groups from 45 years and older represented the largest proportion of female patients.

Fig 1: Percent of Trauma Patients, by Race/Ethnicity, Washoe County, 2015 & 2016 Combined



- The majority of trauma patients in Washoe County during 2015 and 2016 were white, non-Hispanic (77.6%), followed by those identified as Hispanic of any race (6.9%).

Fig 2: Percent of Trauma Patients, by Age Group, Washoe County, 2015 & 2016

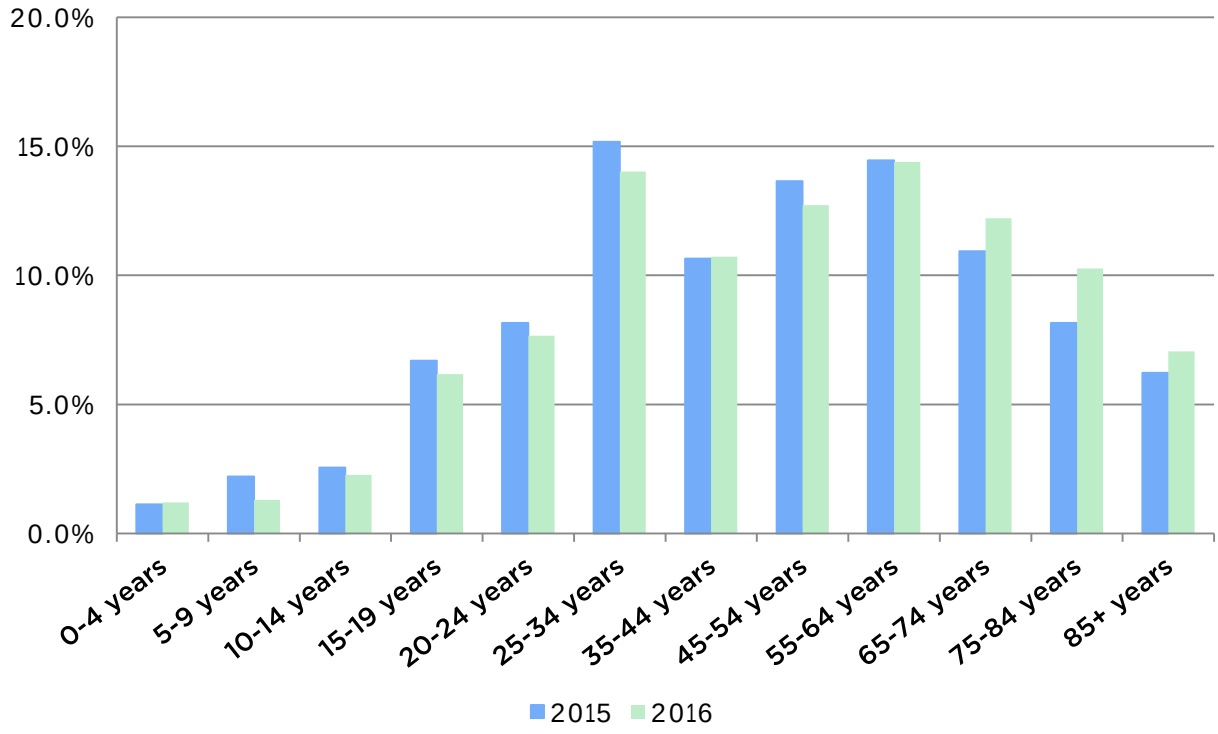


Table 3: Incidents by Age and Case Fatality, Washoe County, 2015				
Age Group	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
0-4 years	20	1.1%	0	0.0
5-9 years	39	2.2%	0	0.0
10-14 years	45	2.5%	1	2.2
15-19 years	118	6.7%	6	5.1
20-24 years	144	8.2%	8	5.6
25-34 years	268	15.2%	15	5.6
35-44 years	188	10.7%	12	6.4
45-54 years	241	13.7%	14	5.8
55-64 years	255	14.4%	17	6.7
65-74 years	193	10.9%	16	8.3
75-84 years	144	8.2%	19	13.2
85+ years	110	6.2%	22	20.0
Total	1,765	100.0%	130	7.4
*Rate per 100 trauma patients				

- In 2015, the highest case fatality rates occurred among those aged 75-84 years (13.2 per 100) and those 85 years of age and older (20.0 per 100).

Table 4: Incidents by Age and Case Fatality, Washoe County, 2016				
Age Group	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
0-4 years	26	1.2%	1	3.8
5-9 years	28	1.3%	0	0.0
10-14 years	49	2.3%	1	2.0
15-19 years	133	6.2%	5	3.8
20-24 years	165	7.7%	11	6.7
25-34 years	302	14.0%	16	5.3
35-44 years	231	10.7%	14	6.1
45-54 years	274	12.7%	21	7.7
55-64 years	310	14.4%	15	4.8
65-74 years	263	12.2%	24	9.1
75-84 years	221	10.3%	16	7.2
85+ years	152	7.1%	18	11.8
Total	2,154	100.0%	142	6.6
*Rate per 100 trauma patients				

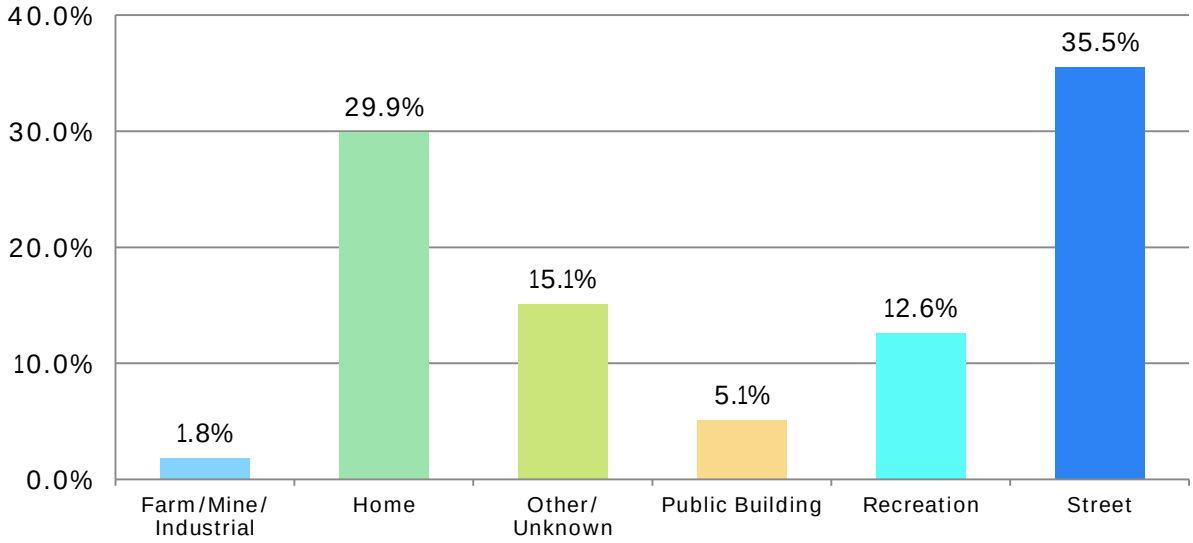
- In 2016, the highest case fatality rates occurred among those aged 55-74 years (9.1 per 100) and those 85 years of age and older (11.8 per 100).

Injury Characteristics

Place of Injury

Place of injury was broken out into those injuries occurring in the street, in a home, during recreation, or in public buildings. Injuries occurring on farms, mines, or industrial locations were combined. Over one in three (35.5%) traumatic injuries in Washoe County during 2015 and 2016 (combined) occurred in the street, while nearly one in three (29.9%) occurred in the home. Injuries which occurred in a public building had the highest case fatality rates, compared to all other locations. From 2015 to 2016 the overall case fatality rate decreased from 7.4 deaths per 100 trauma patients in 2015 to 6.6 deaths per 100 trauma patients in 2016.

Fig 3: Percent of Trauma Patients, by Place of Injury, Washoe County, 2015 & 2016 Combined



- Over one in three (35.5%) traumatic injuries during 2015 and 2016 occurred in the street, largely due to motor vehicle accidents.
- Nearly one in three traumatic injuries occurred in the home (29.9%), followed by other/unknown (15.1%), and recreation (12.6%).

Table 5: Incidents by Place, Washoe County, 2015 & 2016 Combined				
Place of Injury	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Street	1,390	35.5%	108	7.8
Home	1,170	29.9%	112	9.6
Recreation	494	12.6%	11	2.2
Public Building	199	5.1%	21	10.6
Other/ Unknown	591	15.1%	16	2.7
Farm/Mine/ Industrial	72	1.8%	4	5.6
Total	3,916	100.0%	272	6.9
*Rate per 100 trauma patients				

- The highest case fatality rates were among incidents in public buildings (10.6 per 100) and homes (9.6 per 100) during 2015 and 2016 in Washoe County.

Mechanism of Injury

Mechanism of injury is determined by the primary external cause code (e-code) reported as the factor that caused the injury event. Approximately one in three traumatic injuries in Washoe County during 2015 (32.8%) and 2016 (39.6%) were due to falls, the majority of which occurred in the home. The second highest contributing factor to traumatic injury in Washoe County during 2015 (30.2%) and 2016 (28.0%) involved motor vehicles. During 2015 suffocation was responsible for the highest case fatality rate, followed by injury due to firearms. During 2016 the highest case fatality rate was also due to suffocation, followed by unspecified injuries, and injury due to firearms.

Table 6: Incidents by Mechanism of Injury, Washoe County, 2015

Mechanism of Injury	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Cut/Pierce	100	5.7%	3	3.0
Fall	579	32.8%	50	8.6
Fire/Burn	8	0.5%	1	12.5
Firearm	58	3.3%	16	27.6
Machinery	11	0.6%	0	0.0
Motor vehicle	533	30.2%	45	8.4
Natural/Environmental Factors	9	0.5%	0	0.0
Other specified, classifiable	17	1.0%	1	5.9
Other specified, not elsewhere classifiable	13	0.7%	0	0.0
Overexertion	4	0.2%	0	0.0
Pedal Cyclist, other	70	4.0%	3	4.3
Pedestrian, other	2	0.1%	0	0.0
Poisoning	7	0.4%	0	0.0
Struck by/Against	154	8.7%	5	3.2
Suffocation	5	0.3%	3	60.0
Transport-other	152	8.6%	0	0.0
Unspecified	14	0.8%	2	14.3
Unknown	29	1.6%	1	3.4
Total	1,765	100.0%	130	7.4

*Rate per 100 trauma patients

- More traumatic injuries were due to falls (n=579) and motor vehicles (n=533) in 2015 than other causes of injury.
- In 2015, the highest case fatality rates were due to suffocation (60.0 per 100), firearms (27.6 per 100), and unspecified mechanisms of injury (14.3 per 100).

Table 7: Incidents by Mechanism of Injury, Washoe County, 2016

Mechanism of Injury	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Cut/Pierce	111	5.2%	3	2.7
Fall	853	39.6%	47	5.5
Fire/Burn	12	0.6%	0	0.0
Firearm	75	3.5%	26	34.7
Machinery	8	0.4%	2	25.0
Motor vehicle	604	28.0%	45	7.5
Natural/Environmental Factors	12	0.6%	0	0.0
Other specified, classifiable	11	0.5%	3	27.3
Other specified, not elsewhere classifiable	6	0.3%	1	16.3
Overexertion	1	0.0%	0	0.0
Pedal Cyclist, other	61	2.8%	0	0.0
Pedestrian, other	7	0.3%	1	14.3
Poisoning	5	0.2%	0	0.0
Struck by/Against	152	7.1%	1	0.7
Suffocation	5	0.2%	2	40.0
Transport-other	212	9.8%	7	3.3
Unspecified	8	0.4%	3	37.5
Unknown	11	0.5%	1	9.1
Total	2,154	100.0%	142	6.6

*Rate per 100 trauma patients

- More traumatic injuries were due to falls (n=853) and motor vehicles (n=604) in 2016 than other mechanisms of injury.
- In 2016, the highest case fatality rates were among injuries caused by suffocation (40.0 per 100), unspecified mechanisms of injury (37.5 per 100), and firearms (34.7 per 100).

Intent of Injury

In 2015, unintentional injuries accounted for 83.3% of all traumatic injuries reported by Washoe County facilities. Intentional injury due to homicide/assault (10.1%), self-inflicted injury/suicide (3.6%) and (legal interventions (0.5%) combined accounted for 14.2% of traumatic injury, while 1.6% of traumatic injuries were not classified as either intentional or unintentional. In 2016, unintentional injuries accounted for 87.0% of all traumatic injuries. Intentional injury due to homicide/assault (7.9%), self-inflicted injury/suicide (3.2%) and (legal interventions (0.3%) combined accounted for 11.5% of traumatic injury, while 1.0% of traumatic injuries were not classified as either intentional or unintentional.

Table 8: Incidents by Intent and Case Fatality, Washoe County, 2015

Type of Intent	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Unintentional	1,470	83.3%	99	6.7
Intentional (combined)	251	14.2%	27	10.8
Homicide/Assault	178	10.1%	14	7.9
Legal Intervention	9	0.5%	1	11.1
Self-inflicted	64	3.6%	12	18.8
Unspecified	15	0.9%	3	20.0
Missing	28	1.6%	1	3.6
Total	1,764	100.0%	130	7.4

*Rate per 100 trauma patients

- In 2015, the majority of traumatic injury was unintentional (83.3%), followed by intentional incidents combined (14.2%) - homicide/assault (10.1%), legal interventions (0.5%), and self-inflicted harm or suicide (3.6%).
- The case fatality rate in 2015 was highest among unspecified injuries (20.0 per 100), as well as intentional injuries (10.8 per 100).

Table 9: Incidents by Intent and Case Fatality, Washoe County, 2016

Type of Intent	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Unintentional	1,875	87.0%	102	5.4
Intentional (combined)	247	11.5%	34	13.8
Homicide/Assault	171	7.9%	10	5.8
Legal Intervention	7	0.3%	3	42.9
Self-inflicted	69	3.2%	21	30.4
Unspecified	21	1.0%	5	23.8
Missing	11	0.5%	1	9.1
Total	2,154	100.0%	142	6.6

*Rate per 100 trauma patients

- In 2016, the majority of traumatic injury was unintentional (87.0%), followed by intentional incidents combined (11.5%) - homicide/assault (7.9%), legal interventions (0.3%), and self-inflicted harm or suicide (3.2%).
- The case fatality rate in 2016 was highest among unspecified injuries (23.8 per 100), as well as intentional injuries (13.8 per 100).

Injury Severity

The injury severity score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries. The score may range from 1-75. The category of the injury severity (minor, moderate, severe, or very severe) was based on the 2016 National Trauma Data Bank Annual Report which assigned ISS into the following groups;

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

The majority of traumatic injuries in Washoe County during 2015 and 2016 were categorized as minor or moderate injuries, while less than one in four incidents were categorized as severe or very severe [Fig 4]. The case fatality rate increased dramatically with each increase in ISS category for both 2015 [Table 10] and 2016 [Table 11], as those with severe or very severe injuries accounted for over half of all deaths during both years.

Fig 4: Percent of Injuries by Injury Severity Score Category, Washoe County, 2015 & 2016

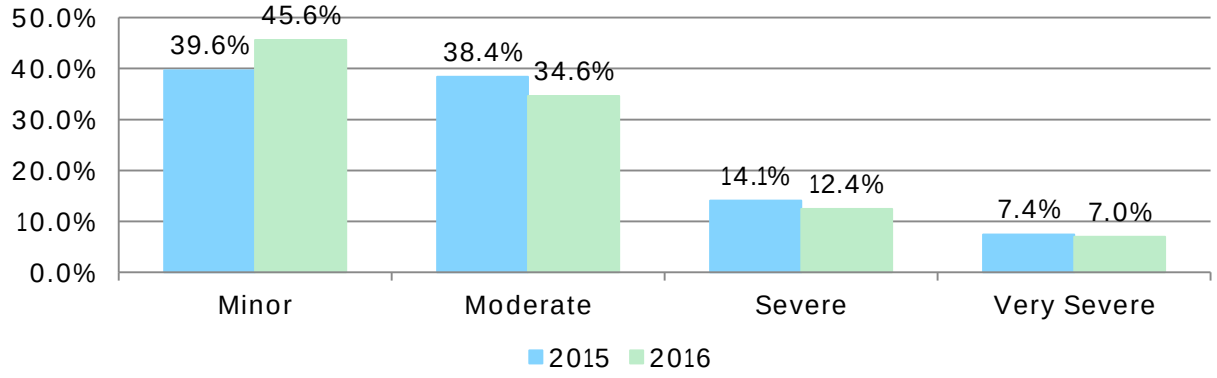
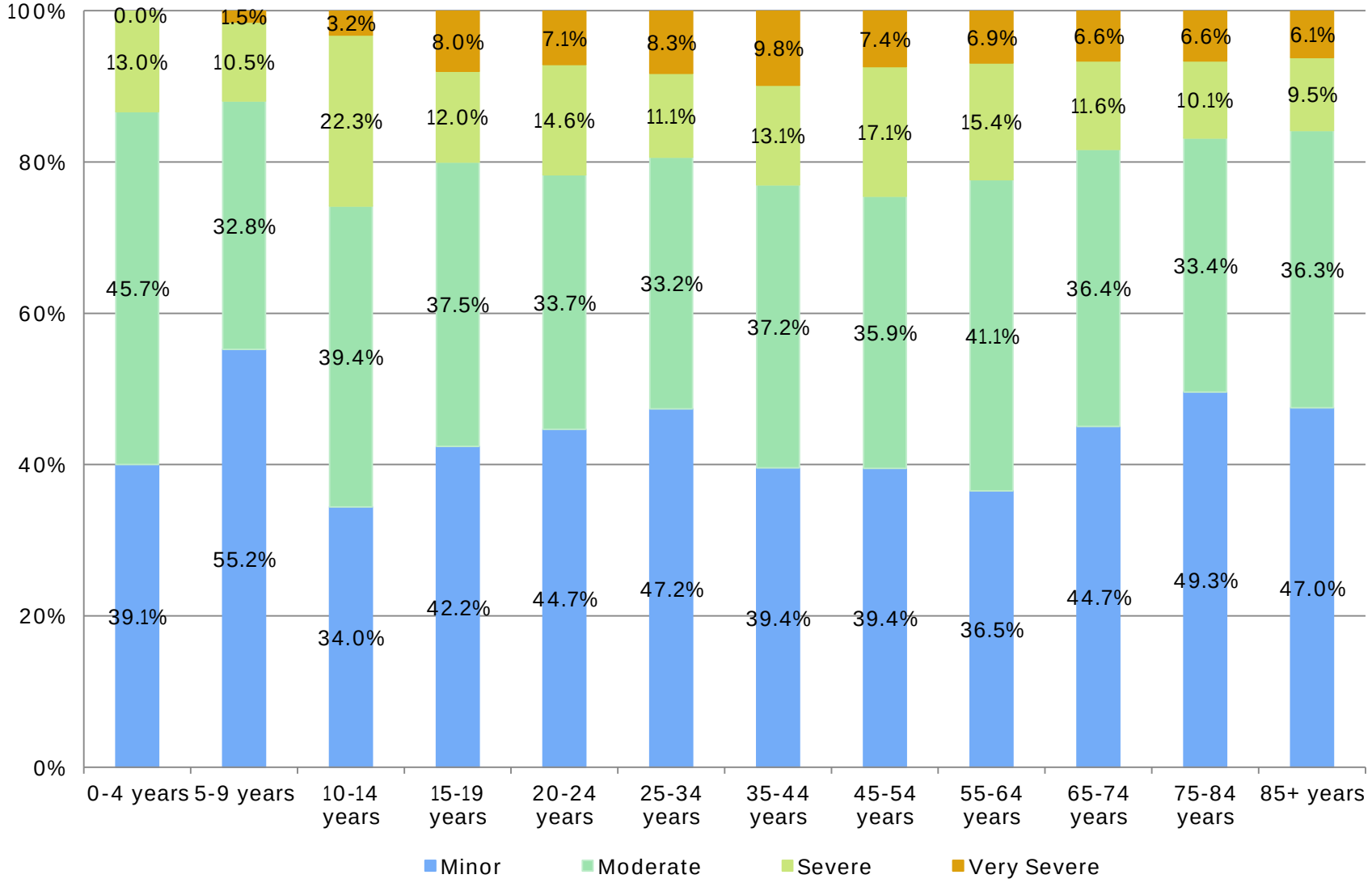


Fig 5: Percent of Patients, by Age Group & Injury Severity Score Category, Washoe County, 2015 & 2016 Combined



- Over one in three traumatic injuries were categorized as minor among all age groups, except for those 5-9 years old. For this age group over half (55.2%) of patients experienced "minor" traumatic injury.
- A higher proportion of patients 0-4 years old (45.7%), 10-14 years (39.4%), and 55-64 years (41.1%), experienced traumatic injury which was categorized as moderate.
- A higher proportion of patients 10-14 years old (22.3%) and 45-54 years (17.1%), experienced traumatic injury categorized as severe.
- Nearly one in ten (9.8%) patients aged 35-44 years experienced traumatic injury categorized as very severe.

Table 10: Incidents by Injury Severity Score Category, Washoe County, 2015

Injury Severity Score Category	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Minor	699	39.6%	20	2.9
Moderate	677	38.4%	24	3.5
Severe	249	14.1%	28	11.2
Very Severe	130	7.4%	58	44.6
Total	1,764	100.0%	130	7.4
*Rate per 100 trauma patients				

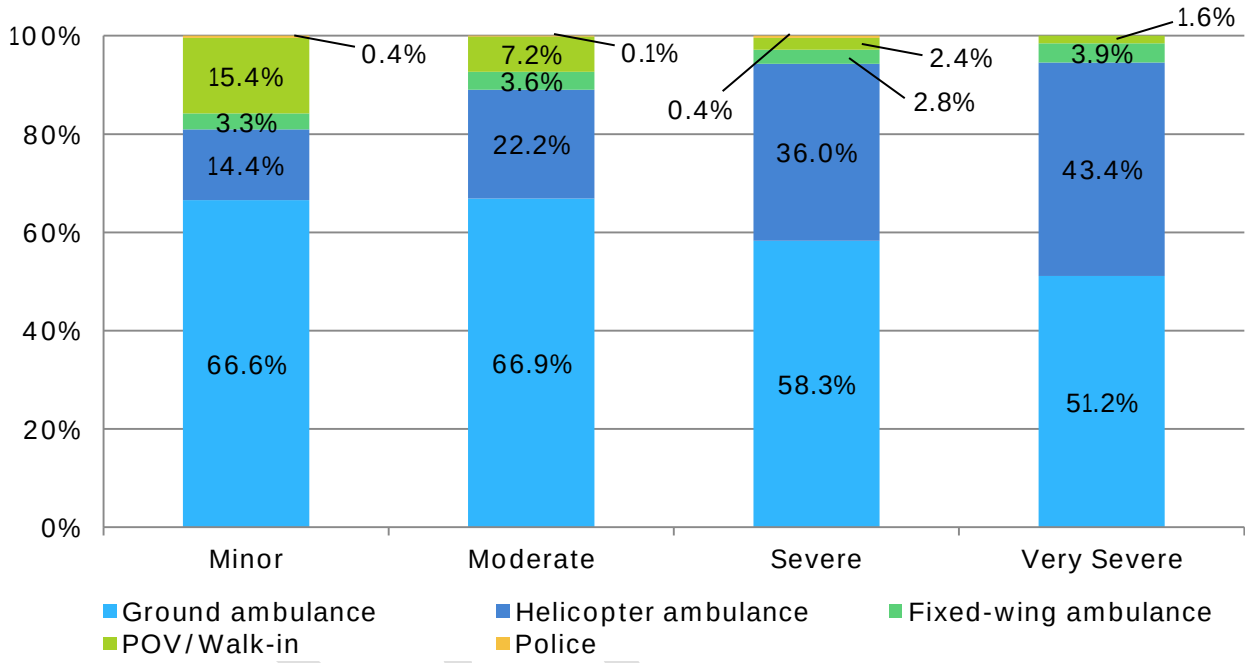
Table 11: Incidents by Injury Severity Score Category, Washoe County, 2016

Injury Severity Score Category	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Minor	982	45.6%	17	1.7
Moderate	746	34.6%	38	5.1
Severe	268	12.4%	27	10.1
Very Severe	151	7.0%	59	39.1
Total	2,154	100.0%	142	6.6
*Rate per 100 trauma patients				

Prehospital Characteristics

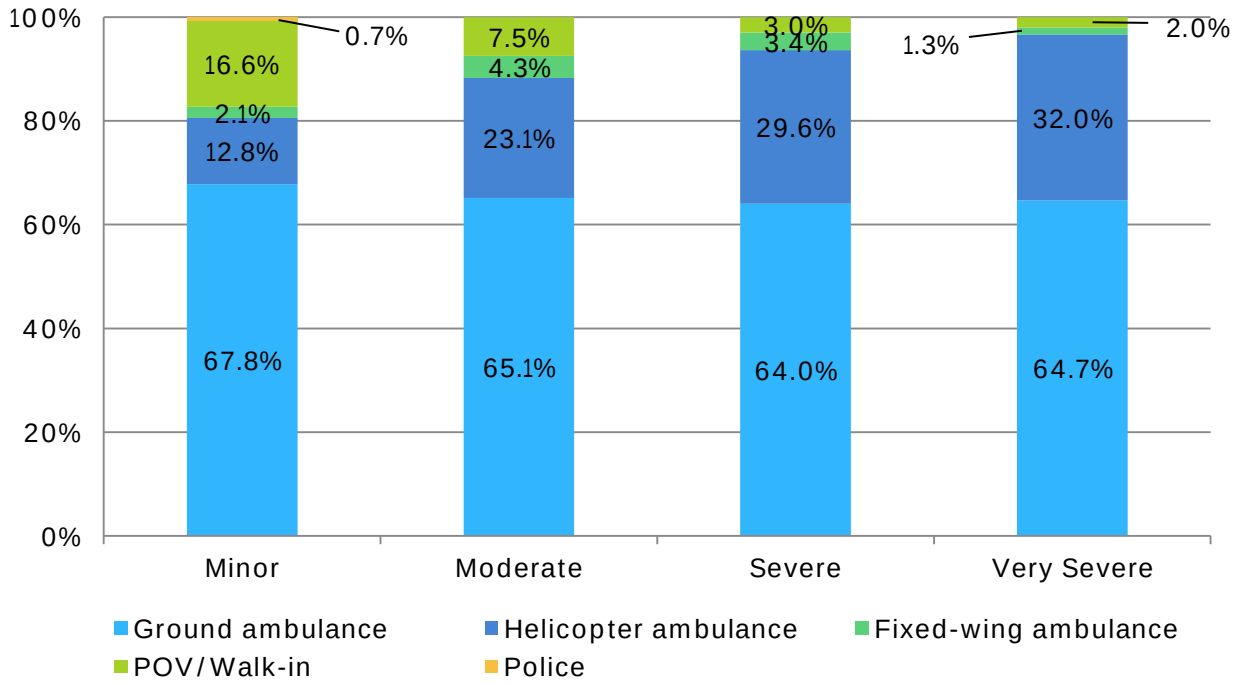
The majority of trauma patients were transported via ground ambulance. However, as injury severity increased the proportion of patients transported via helicopter ambulance also increased.

Fig 6: Mode of Arrival by Injury Severity Score Category, Washoe County, 2015



- In 2015, the majority of patients were transported by ground ambulance across all four categories of injury severity.
- Over one in three patients with injuries classified as severe (36.0%) or very severe (43.4%) were transported by helicopter ambulance.
- As the injury severity score category increased, the proportion of patients transported in a personally owned vehicle (POV/walk-in) decreased.

Fig 7: Mode of Arrival by Injury Severity Score Category, Washoe County, 2016



- In 2016, two out of every three patients were transported by ground ambulance across all four categories of injury severity.
- Just fewer than one in three patients with injuries classified as severe (29.6%) or very severe (32.0%) were transported by helicopter ambulance.
- As the injury severity score category increased, the proportion of patients transported in a personally owned vehicle (POV/walk-in) decreased.

Table 12: Incidents by Mode of Arrival, Washoe County, 2015

Mode of Arrival	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Ground ambulance	1,139	65.0%	81	7.1
Helicopter ambulance	394	22.5%	45	11.4
Fixed-wing ambulance	59	3.4%	2	3.4
POV/Walk-in	156	8.9%	1	0.6
Police	5	0.3%	0	0.0
Total	1,753	100.0%	129	7.4

*Rate per 100 trauma patients

- In 2015 two out of three (65.0%) patients arrived via ground ambulance.
- The case fatality rate was highest among those patients that arrived via helicopter ambulance (11.4 per 100).

Table 13: Incidents by Mode of Arrival, Washoe County, 2016

Mode of Arrival	Number of Incidents	Percent of Incidents	Number of Deaths	Case Fatality Rate*
Ground ambulance	1,433	66.7%	97	6.8
Helicopter ambulance	427	19.9%	41	9.6
Fixed-wing ambulance	65	3.0%	2	3.1
POV/Walk-in	217	10.1%	2	0.9
Police	7	0.3%	0	0.0
Total	2,149	100.0%	141	6.6

*Rate per 100 trauma patients

- In 2016 two out of three (66.7%) patients arrived via ground ambulance.
- The case fatality rate was highest among those patients that arrived via helicopter ambulance (9.6 per 100).

Primary Payment

The form of primary payment data are provided for 2015 and 2016 Washoe County trauma patients, as well as the United States overall for 2016 [Table 14]. The primary form of payment for traumatic injuries was private insurance in both 2015 and 2016.

Table 14: Primary Payment Source by Type, Washoe County 2015 & 2016, & the United States 2016

Primary Payment Source	Washoe County 2015	Washoe County 2016	United States 2016
Self	4.7%	2.8%	11.3%
Private Insurance	33.1%	28.6%	35.2%
Medicare	14.1%	16.5%	27.0%
Medicaid	15.2%	11.3%	16.3%
Military	0.3%	0.1%	NA
Other Government Insurance	4.1%	3.4%	2.5%
Workers Compensation	2.2%	1.6%	NA
Car Insurance	19.7%	12.9%	NA
Other/Unknown	6.7%	22.8%	NA

United States data source: American College of Surgeons. (2016). National Trauma Data Bank Annual Report 2016. Chicago, IL.
NA= data for specified category not available

Substance Use

Substance use data are provided for 2015 and 2016 Washoe County trauma patients, as well as the United States overall for 2016. Just over half (51.7%) of patients with traumatic injury in Washoe County were not tested for alcohol use. Additionally, the vast majority (91.4%) of patients with traumatic injury were not tested for drug use. However among Washoe County trauma patients tested for use of alcohol, a higher proportion tested positive for alcohol, both below (7.7%) and above (12.2%) the legal limit, relative to the United States. Among Washoe County trauma patients tested for use of drugs, a lower proportion tested positive for prescription drugs (0.6%) and illegal drugs (2.5%), relative to the United States.

Table 15: Alcohol Test Results, Washoe County & the United States, 2015-2016

Alcohol Use	Washoe County (2015 & 2016 Combined)		United States (2016 only)
	Number of Incidents	Percent of Incidents	Percent of Incidents
No (not tested)	2,023	51.7%	50.8%
No (confirmed by test)	960	24.5%	25.9%
Yes (confirmed by test, trace levels)	303	7.7%	3.5%
Yes (confirmed by test, beyond legal limit)	478	12.2%	9.8%
Unknown	151	3.9%	10.0%

United States data source: American College of Surgeons. (2016). National Trauma Data Bank Annual Report 2016. Chicago, IL.

- A higher proportion of trauma patients in Washoe County were confirmed to have been using alcohol, both below and above legal limits, compared to the United States overall.

Table 16: Drug Test Results, Washoe County & the United States, 2015-2016

Drug Use	Washoe County (2015 & 2016 Combined)		United States (2016 only)
	Number of Incidents	Percent of Incidents	Percent of Incidents
No (not tested)	3,582	91.4%	67.5%
No (confirmed by test)	65	1.7%	10.5%
Yes (confirmed by test, prescription drug)	22	0.6%	4.8%
Yes (confirmed by test, illegal drug)	98	2.5%	7.2%
Yes (confirmed by test, both prescription and illegal drugs)	4	0.1%	NA
Unknown	146	3.7%	10.0%

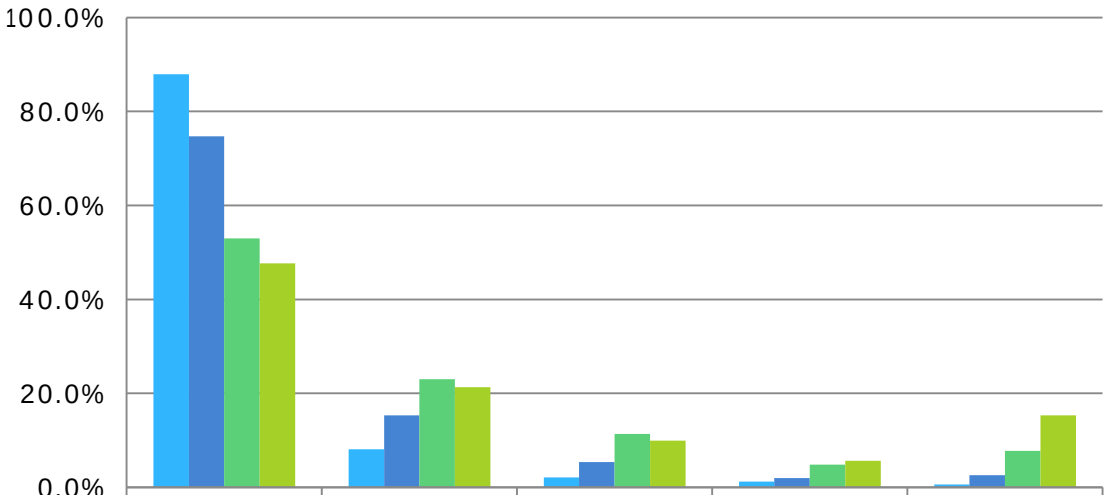
United States data source: American College of Surgeons. (2016). National Trauma Data Bank Annual Report 2016. Chicago, IL.

- A higher proportion of trauma patients in Washoe County were not tested for drug use (91.4%) compared to the United States overall (67.5%).

Patient Outcomes

Patient outcomes highlighted in this section include overall length of stay and days spent in an intensive care unit. Discharge status (dead or alive) was provided for many of the tables presented throughout the report.

Fig 8: Percent of Trauma Patients by Length of Stay & Injury Severity Score, Washoe County, 2015 & 2016 Combined



	<1 week	1-2 weeks	2-3 weeks	3-4 weeks	4+ weeks
Minor	87.9%	8.1%	2.1%	1.3%	0.6%
Moderate	74.7%	15.3%	5.4%	2.0%	2.6%
Severe	53.0%	23.0%	11.4%	4.8%	7.7%
Very Severe	47.7%	21.4%	10.0%	5.7%	15.3%

- The majority of patients with trauma classified as minor (87.9%) or moderate (74.7%) were hospitalized for less than one week.
- The length of stay increased as the severity of the injury increased, as demonstrated by over half of patients with a very severe traumatic injury being hospitalized for longer than one week.

Intensive Care Unit

The median number of days spent in an intensive care unit (ICU) increased as the severity of injury increased [Table 17]. In 2015, incidents involving suffocation had the longest median length of stay in an ICU, followed by incidents involving motor vehicles. In 2016, incidents involving pedestrians had the longest median stay in an ICU, followed by incidents with an unspecified mechanism of injury.

Table 17: Incidents by Injury Severity Score & Median ICU Days, Washoe County, 2015 & 2016

ISS Category	Median ICU Days 2015	Median ICU Days 2016
Minor	2.0	0.0
Moderate	2.0	3.0
Severe	4.0	4.0
Very Severe	7.0	5.0
Missing	0.0	2.0
Total	3.0	2.0

Table 18: Incidents by Mechanism of Injury & Median Days in ICU, Washoe County, 2015 & 2016

Mechanism of Injury	Median ICU Days 2015	Median ICU Days 2016
Cut/Pierce	2.0	2.0
Fall	2.0	0.0
Fire/Burn	3.0	0.0
Firearm	3.0	3.0
Machinery	3.0	0.0
Motor vehicle	3.5	3.0
No e-code Listed	2.0	2.0
Natural/Environmental Factors	2.0	2.0
Other specified, classifiable	2.0	0.5
Other specified, not elsewhere classifiable	0.0	0.0
Overexertion	0.0	0.0
Pedal Cyclist, other	3.0	3.0
Pedestrian, other	None	6.0
Poisoning	0.0	0.0
Struck by/Against	2.0	2.0
Suffocation	9.0	3.0
Transport-other	3.0	3.0
Unspecified	3.0	4.0
Total	3.0	2.0

Total Length of Stay

The total median number of days spent in the emergency room and hospital combined, increased as the severity of injury increased for both 2015 and 2016 [Table 19]. Incidents involving pedestrians had the longest median length of stay (days), followed by incidents involving motor vehicles, in both 2015 and 2016.

Table 19: Incidents by Injury Severity Score & Median Length of Stay (days), Washoe County, 2015 & 2016

ISS Category	Median Length of Stay (days) 2015	Median Length of Stay (days) 2016
Minor	2.0	2.0
Moderate	3.0	3.0
Severe	7.0	5.0
Very Severe	8.0	6.0
Total	3.0	3.0

Table 20: Incidents by Mechanism of Injury & Median Length of Stay (days), Washoe County, 2015 & 2016

Mechanism of Injury	Median Length of Stay (days) 2015	Median Length of Stay (days) 2016
Cut/Pierce	3.0	2.0
Fall	3.0	3.0
Fire/Burn	0.5	1.0
Firearm	3.0	3.0
Machinery	2.0	0.5
Motor vehicle	4.0	4.0
NO e-code LISTED	2.5	4.0
Natural/Environmental Factors	2.0	1.0
Other specified, classifiable	1.0	0.0
Other specified, not elsewhere classifiable	0.0	1.5
Overexertion	2.0	0.0
Pedal Cyclist, other	2.0	3.0
Pedestrian, other	4.5	4.0
Poisoning	3.0	2.0
Struck by/Against	2.0	2.0
Suffocation	2.0	3.0
Transport-other	2.0	2.0
Unspecified	3.0	2.5
Total	3.0	3.0

Conclusion

One in three traumatic injuries during 2015 and 2016 were due to falls, and nearly another third of traumatic injuries were related to motor vehicle accidents. The number and severity of traumatic injuries can be dramatically reduced and even fully prevented by addressing risks for falls and motor vehicle accidents.

During 2015 and 2016 the majority of falls were categorized as 'slips, trips, or stumbles.' The risk of a fall increases for persons with balance problems, slow reflexes, poor vision, reduced muscle strength or who were on certain medications. Falls are especially serious among elderly persons who are more likely to experience injury, such as breaking a bone, as a result of the fall. The risk of falling may be reduced by doing the following:

- Use cane or walker
- Install rails or support bars in bathrooms, hallways and all stairs
- Wear rubber soled low-heel or no-heel shoes
- Decrease clutter on floors
- Increase lighting in rooms and hallways
- Avoid uneven surfaces
- Avoid icy or even wet sidewalks, stairs and other surfaces
- Do exercises to increase core and leg muscles to improve balance and overall muscle function

The majority of motor vehicle-related traumatic injuries in 2015 and 2016 were due to two or more motor vehicles involved in collisions, followed by pedestrian versus motor vehicle collisions. There are many ways to reduce the likelihood of being involved in motor vehicle accidents. Unfortunately, not all accidents can be prevented or avoided. There are basic preventive actions which should be followed by all occupants of motor vehicles.

According to Nevada's Center for Traffic Safety Research, persons involved in motor vehicle accidents in Nevada that were not wearing a seat belt at the time of the crash had more severe injuries, longer hospital stays, more days in ICU, more days on a ventilator, and accrued a median of $12,110 more per person in hospital charges compared to persons wearing a seatbelt. Seatbelt use was the highest predictor of injury severity in Nevada.[5]

[5] Nevada Office of Traffic Safety, Department of Public Safety. (2017). Nevada's Traffic Research and Education Newsletter. 6(3). Carson City, NV.

In 2015, Nevada was ranked the 5th highest state for pedestrian fatalities (out of 51-including the District of Columbia) with a pedestrian fatality rate of 2.28 per 100,000 population compared to the national rate which was 1.67 per 100,000 population. Other states ranged from a high of 3.70 in Delaware to a low of 0.48 pedestrian fatalities per 100,000 population in Idaho.[6] Nationally children and the elderly are at higher risk for pedestrian-related accidents. Both drivers and pedestrians can reduce the risk for injury. Drivers can reduce speeds, not drive under the influence of alcohol or drugs, and be especially cautious on streets with higher rates of foot traffic, congested areas and streets surrounding schools, and long-term care facilities. Pedestrians should wear reflective clothing at night, cross in well-lit areas, use cross walks, and of course, look both ways before stepping off the sidewalk.

According to the National Highway Traffic Safety Administration, from 2006 through 2015, one in three fatal motor vehicle accidents in Nevada involved a driver with a blood alcohol content (BAC) equal to or over the legal limit of 0.08.[7]

The number and severity of traumatic injuries can be largely prevented by following safety guidelines, rules of the road, and taking additional measures to prevent risk of injury, or reduce injury severity when accidents occur.

[6] U.S. Department of Transportation, National Highway Traffic Safety Administration. (2016). Traffic Safety Facts 2015: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. Washington, D.C.

[7] National Highway Traffic Safety Administration, Fatality Analysis Reporting System. Accessed https://www-fars.nhtsa.dot.gov/Trends/TrendsGeneral.aspx

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
EMS ADVISORY BOARD MEETING DATE: August 3, 2017

TO: EMS Advisory Board Members

FROM: Heather Kerwin, EMS Program Statistician
775-326-6041, hkerwin@washoecounty.us

SUBJECT: **Presentation, discussion and possible acceptance of a presentation regarding the conferences attended by the EMS Statistician.**

SUMMARY

The EMS Program Statistician attended the 2017 Council of State and Territorial Epidemiologists (CSTE) Annual conference. The conference is the largest annual gathering of applied epidemiologists in the nation. There were over 700 presentations over the four day period in Boise, ID.

PREVIOUS ACTION

There has been no previous action by the EMS Advisory Board concerning this item.

BACKGROUND

The CSTE annual conference connects more than 1,500 public health epidemiologists from across the country and includes workshops, plenary sessions with leaders in the field of public health, breakout sessions, roundtable discussions, and poster presentations. Attendees from across the country meet and share their expertise in surveillance and epidemiology as well as best practices in a broad range of areas including informatics, infectious diseases, immunizations, environmental health, occupational health, chronic disease, injury control, and maternal and child health.

The 2017 CSTE Conference tracks include subjects pertaining to several areas relating to Public Health. Those tracks were:

- Chronic Disease/Maternal Child Health/Oral Health
- Environmental Health
- Infectious Disease
- Occupational Health
- Injury Epidemiology
- Surveillance/Informatics
- Substance Abuse
- Cross Cutting topics

The EMS Statistician attended over 45 presentations and roundtable discussions that focused on areas with an EMS component or surveillance/informatics. This presentation to the EMS Advisory Board will highlight some ideas presented during those conference discussions that could be implemented in the Washoe County region.

FISCAL IMPACT

There is no additional fiscal impact to the budget should the Board accept the presentation.

RECOMMENDATION

Staff recommends the EMS Advisory Board accept the presentation on the CSTE conference.

POSSIBLE MOTION

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

"Move to approve the presentation regarding the CSTE conference attended by the EMS Statistician."

2017 ANNUAL CONFERENCE
COUNCIL OF STATE AND TERRITORIAL EPIDEMIOLOGISTS

JUNE 4-7, 2017
BOISE, ID

COUNCIL OF STATE AND TERRITORIAL EPIDEMIOLOGIST (CSTE)

- CSTE is an organization which helps foster relationships among epidemiologists nationwide & internationally
- Work focused on advancing public health policy & epidemiologic capacity
- Promote effective use of epidemiologic data to guide public health practice & improve health
- Develop standards of practice
- 2017 annual conference
  - The largest gathering of applied epidemiologists in the nation (~1,500)
  - Over 700 presentations & roundtable discussions related to public health

CSTE CONFERENCE TRACKS

- Chronic disease
- Maternal child health
- Environmental health
- Infectious disease
- Occupational health
- Surveillance/informatics**
- Injury epidemiology**
- Substance abuse**
- Tribal epidemiology

**largely focused on these tracks

EXAMPLES OF SESSIONS ATTENDED

- Identifying risk factors for opioid overdose deaths using EMS data (Kansas)
- Impacts of bystander versus EMS administered Naloxone (Tennessee)
- Use of ED syndromic surveillance data to monitor opioid-related overdoses (New Hampshire)
- Monitoring for an increase in mental health-related ED admits after a terrorist event (New Jersey)
- Developing & importing electronic case report forms (CDC representative)
- Emergency preparedness & infection control practices in urgent care facilities (NYC)
- Attended over 45 presentations

REOCCURRING THEMES

- Fentanyl analogues are an increasing concern nationwide

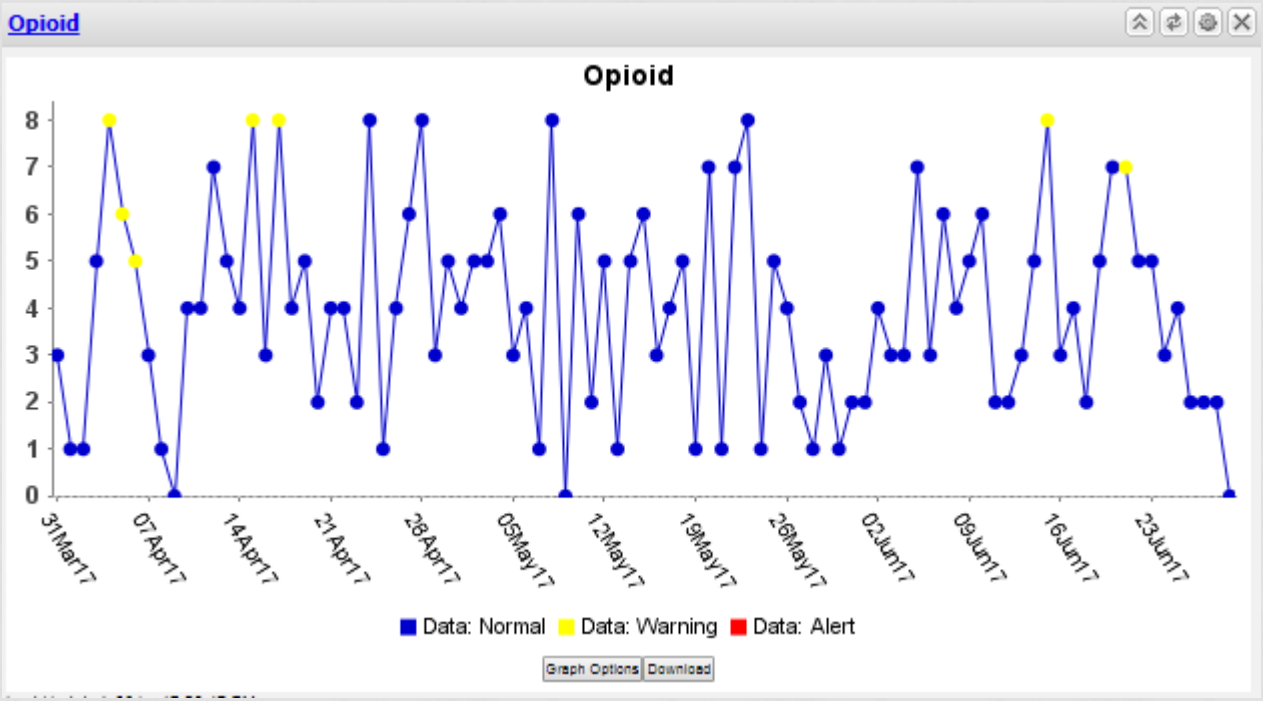
- Emergency room & hospital data are widely used for
  1. As an early warning system
     - Overdoses, environmental hazards, & foodborne illness

  2. To conduct retrospective studies to describe populations impacted by a public health issue or evaluate trends related to public health issues
     - Motor vehicle accidents, falls, & heat-related illnesses

SIMILAR TO 2016…

SYNDROMIC SURVEILLANCE REOCCURRING THEME

EXAMPLE OF ESSENCE UTILITY



FUTURE PROJECTS

- Work with state partners to explore utilization & application of Nevada's Prescription Drug Monitoring Program data
- Continue to build ESSENCE (syndromic surveillance tool) queries to include more than substance-related ED visits
- Continue to pilot with local hospitals in order to obtain pertinent information to evaluate pre-hospital patient care & work towards improving health outcomes

Data collection & analysis should result in action intending to improve public health

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
EMS ADVISORY BOARD MEETING DATE: August 3, 2017

TO: EMS Advisory Board Members

FROM: Christina Conti, EMS Oversight Program Manager

775-326-6042, cconti@washoecounty.us

SUBJECT: **Presentation and possible acceptance of an update on the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight.**

SUMMARY

The purpose of this agenda item is to discuss the progress on the implementation of the five-year emergency medical services strategic plan, as required in the Inter Local Agreement for Emergency Medical Services Oversight.

PREVIOUS ACTION

During the EMS Advisory Board on October 6, 2016, the Board approved the presentation and recommended staff present the five-year strategic plan to the District Board of Health.

During the District Board of Health meeting on October 27, 2017, the Board moved to accept the presentation and the five-year Strategic Plan to the District Board of Health.

BACKGROUND

The EMS Oversight Program was created through an Inter Local Agreement (ILA) signed by the City of Reno (RENO), City of Sparks (SPARKS), Washoe County (WASHOE), Truckee Meadows Fire Protection District (FIRE), and the Washoe County Health District. Within the ILA there are eight duties specifically outlined for the EMS Oversight Program. One of the items explicitly tasked the EMS Oversight Program to "Maintain a Five-Year Strategic Plan to ensure the continuous improvement of Emergency Medical Services in the area of standardized equipment, procedures, technology training, and capital investments to ensure that proper future operations continue to perform including Dispatching Systems, Automated Vehicle Locations Systems, Records Management Systems, Statistical Analysis, Regional Medical Supply and Equipment, and other matters related to strategic and ongoing Emergency Medical Services and approved by RENO, SPARKS, WASHOE and FIRE."

Beginning in August 2015, the EMS Program Manager worked with regional partners to develop a five-year regional strategic plan. The stakeholders participating in the developing of plan included representatives from each jurisdiction and REMSA from dispatch and operations, as well as a regional communications representative. Over the course of 11 months the workgroup identified the components that would be included in the strategic plan.

The first meetings were used to review the SWOT analysis and to identify goals for the region. Subsequent meetings reviewed the individual goals and the objectives within. To ensure the process was efficient, each meeting had an identified objective to accomplish. All items drafted by the EMS Oversight Program remained in red and turned to black once the group has discussed and reached consensus on the draft.

The final document of the strategic plan shows the efforts of the region in creating a path forward to improve the EMS system within Washoe County. The EMS Oversight Program, as part of the strategic plan Objective 6.1, will provide quarterly reports to the EMS Advisory Board on the progress of the various projects outlined within the plan.

Year 1 (2017) has twelve identified objectives or strategies to be completed
Year 2 (2018) adds several more objectives or strategies to be completed in conjunction with the ongoing items from Year 1.

Completed Objectives:

- **Establish ambulance franchisee response map review methodology**. (Objective 2.2, Strategy 2.2.2)
- **Determine data elements required for process verification of Omega Protocols**. (Objective 1.1, Strategy 1.1.4)
- **Coordinate and report on strategic planning objectives quarterly.** (Objective 6.1)
- **Promote the EMS Oversight Program through regional education of the strategic plan's goals and initiative.** (Objective 6.2)
- **Create a Gantt chart for the regional partners with the details of the goals.** (Objective 6.1, Strategy 6.1.2)
- **Increase depth of resources able to respond to EMS calls for service in Washoe County.** (Objective 2.3 – annual item) The mutual aid agreements for regional partners will be reviewed annually, with any revisions done by December annually. This item was completed for 2017 in January)

In process objectives:

- **Implement appropriate protocols to determine service level through EMD process to low acuity Priority 3 calls.** (Objective 1.2) The anticipated due date of this objective has been altered. The region has begun meeting on this objective and will begin reviewing the non-identified omega calls and alpha calls to identify calls that do not require a two-tier response.
- **Jurisdictional fire response measurement identified and review defined jurisdictional measurement with EMS Oversight Program.** (Objective 2.4, Strategies 2.4.1 & 2.4.2) The EMS Statistician received defined fire response measurement information from Sparks Fire Department. Truckee Meadows Fire Protection District is continuing to utilize their October 2011 approved Standards of Cover review. Gerlach Volunteer Fire Department has had a change in leadership, so the EMS Oversight Program will coordinate with the new leadership for measurement information.
- **Develop a regional set of protocols for the delivery of prehospital patient care.** (Objective 5.1)

- **Obtain clarification from District Board of Health regarding Amended and Restated Franchise section 5.1.** (Objective 3.1, Strategy 3.1.2) EMS Oversight Program has been tasked with this item from District Health Officer.
- **Establish a CAD-to-CAD interface between the primary PSAP and REMSA dispatch center.** (Objective 3.2)
- **Establish a two-way interface to provide visualization of AVL for all EMS vehicles for the primary PSAP and REMSA dispatch center.** (Objective 3.3) This item was associated with the CAD-to-CAD project. Strategy 3.3.1 will be conducted, which is an assessment of the existing AVL capabilities.
- **Evaluate how to transfer information between ePCR from the fire response unit to the REMSA unit.** (Objective 4.1, Strategy 4.1.2) The EMS Oversight Program will begin working with partners on this strategy once ePCR units are operating without error.
- **Pilot the annual report with hospital outcome data with one regional hospital.** (Objective 4.2, Strategy 4.2.2) The EMS Oversight Program continues to work with Northern Nevada Medical Center to pilot how the data could be matched and utilized.
- **Coordinate with PMAC to develop regional protocols based on national standards and recent clinical studies.** (Objective 5.1, Strategy 5.1.2)
- **Analyze and report franchise map reviews annually including any recommended modifications to the EMS Advisory Board.** (Objective 2.2, Strategy 2.2.4 – Annual item)
- **Establish a regional process that continuously examines performance of the EMS system.** (Objective 5.2) This is a new objective for Year 2, however, the PMAC has discussed this as it relates to specific cases.

FISCAL IMPACT

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

RECOMMENDATION

Staff recommends the Board to approve the update on the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight.

POSSIBLE MOTION

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

"Move to approve the update on the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight."

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
EMS ADVISORY BOARD MEETING DATE: August 3, 2017

TO: EMS Advisory Board Members

FROM: Christina Conti, EMS Oversight Program Manager
775-326-6042, cconti@washoecounty.us

SUBJECT: **Presentation and possible direction to staff on changes to completion dates outlined within the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight.**

SUMMARY

The purpose of this agenda item is to discuss the identified implementation dates contained within the five-year emergency medical services strategic plan, as required in the Inter Local Agreement for Emergency Medical Services Oversight.

PREVIOUS ACTION

There has been no action by the Board on this matter.

BACKGROUND

The EMS Oversight Program was created through an Inter Local Agreement (ILA) signed by the City of Reno (RENO), City of Sparks (SPARKS), Washoe County (WASHOE), Truckee Meadows Fire Protection District (FIRE), and the Washoe County Health District. Within the ILA there are eight duties specifically outlined for the EMS Oversight Program. One of the items explicitly tasked the EMS Oversight Program to "Maintain a Five-Year Strategic Plan to ensure the continuous improvement of Emergency Medical Services in the area of standardized equipment, procedures, technology training, and capital investments to ensure that proper future operations continue to perform including Dispatching Systems, Automated Vehicle Locations Systems, Records Management Systems, Statistical Analysis, Regional Medical Supply and Equipment, and other matters related to strategic and ongoing Emergency Medical Services and approved by RENO, SPARKS, WASHOE and FIRE."

Beginning in August 2015, the EMS Program Manager worked with regional partners to develop a five-year regional strategic plan. The stakeholders participating in the developing of plan included representatives from each jurisdiction and REMSA from dispatch and operations, as well as a regional communications representative. Over the course of 11 months the workgroup identified the components that would be included in the strategic plan.

The first meetings were used to review the SWOT analysis and to identify goals for the region. Subsequent meetings reviewed the individual goals and the objectives within. To ensure the process was efficient, each meeting had an identified objective to accomplish. All items drafted by the EMS Oversight Program remained in red and turned to black once the group has discussed and reached consensus on the draft.

The final document of the strategic plan shows the efforts of the region in creating a path forward to improve the EMS system within Washoe County. The EMS Oversight Program, as part of the strategic plan Objective 6.1, will provide quarterly reports to the EMS Advisory Board on the progress of the various projects outlined within the plan.

As Year 1 concludes, the EMS Oversight Program is requesting guidance from the EMS Advisory Board on what the process should be for notification of an objective or strategy not meeting the anticipated deadline. Year 1 included several items that did not conclude as anticipated.

FISCAL IMPACT

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

RECOMMENDATION

Staff recommends the Board approve the presentation on changes to completion dates outlined within the five-year Strategic Plan, a requirement of the Interlocal Agreement for Emergency Medical Services Oversight and direct staff to include any revised completion dates in the quarterly strategic plan agenda item.

POSSIBLE MOTION

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

"Acceptance of the changes to completion dates outlined within the five-year Strategic plan , a requirement of the Interlocal Agreement for Emergency Medical Services Oversight and direct staff to include any revised completion dates in the quarterly strategic plan agenda item."

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
BOARD MEETING DATE: July 6, 2017

TO: EMS Advisory Board Members

FROM: Christina Conti, on behalf of

Brittany Dayton, EMS Coordinator
775-326-6043, bdayton@washoecounty.us

SUBJECT: Presentation, discussion and possible acceptance of an update on the regional protocol project, an objective of the Washoe County EMS 5-Year Strategic Plan.

SUMMARY

The Washoe County EMS 5-Year Strategic Plan Goal #5 is to design an enhanced EMS response system through effective regional protocols and quality assurance by December 31, 2018. An element of this goal is the development of regional protocols. The purpose of this agenda item is to update the Board on progress of the regional protocol project (objective 5.1).

PREVIOUS ACTION

During the October 6, 2016 EMS Advisory Board meeting, the Board approved the Washoe County EMS 5-Year Strategic Plan and recommended presentation to the District Board of Health.

The January 5, 2017 EMS Advisory Board meeting included a brief update on the contractor's presentation to PMAC and the next steps for the regional protocols project.

The April 6, 2017 EMS Advisory Board meeting included an update on the progress made by the task force and steps taken to meet the June 30 deadline for developing a regional protocols document.

BACKGROUND

The EMS Oversight Program was created through an Interlocal Agreement (ILA) signed by the City of Reno (RENO), City of Sparks (SPARKS), Washoe County (WASHOE), Truckee Meadows Fire Protection District (FIRE), and the Washoe County Health District. Within the ILA there are eight duties specifically outlined for the EMS Oversight Program.

One of the items explicitly tasked the EMS Oversight Program to "Maintain a Five-Year Strategic Plan to ensure the continuous improvement of Emergency Medical Services in the area of standardized equipment, procedures, technology training, and capital investments to ensure that proper future operations continue to perform including Dispatching Systems, Automated Vehicle Locations Systems, Records Management Systems, Statistical Analysis, Regional Medical Supply and Equipment, and other matters related to strategic and ongoing Emergency Medical Services and approved by RENO, SPARKS, WASHOE and FIRE."

At the June 4, 2015 EMS Advisory Board meeting, through discussion with the Board, the purpose of the strategic plan was identified as a document that would create milestones, furthering the EMS system in Washoe County.

The EMS Program Manager worked with regional partners to develop the regional strategic plan. The stakeholders participating in the developing of plan included representatives from each jurisdiction and REMSA from dispatch and operations, as well as a regional communications representative. Over the course of 11 months the workgroup identified the components that would be included in the strategic plan. The first meetings were used to review the SWOT analysis and to identify goals for the region. Subsequent meetings reviewed the individual goals and the objectives within. To ensure the process was efficient, each meeting had an identified objective to accomplish. All items drafted by the EMS Oversight Program remained in red and turned to black once the group has discussed and reached consensus on the draft.

After approval by the EMS Advisory Board, the EMS Program Manager presented the Washoe County EMS 5-Year Strategic Plan to the District Board of Health (DBOH) on October 27, 2016. The Board unanimously approved the strategic plan.

In anticipation of possible approval, staff researched and spoke with several contractors about the proposed regional protocol project. EMS Consultant Group (Dr. Jordan Barnett and Mr. Eric Rosen), based in Philadelphia, was ultimately selected.

Immediately following approval of the EMS 5-Year Strategic Plan, staff began working on objective 5.1 with EMS Consultant Group. The contractors were provided the following project deliverables:

- Review current EMS agency protocols and identify protocol variances.
- Provide recommendations based on evidence-based practices.
- Facilitate Medical Directors discussion at PMAC.
- Develop regional protocols based on existing protocols.

Staff provided the contractor with a combined PDF of the protocols from the various participating agencies, promoting the ease of cross agency analysis. The contractors reviewed the protocols of all agencies, provided a summary of existing protocols and a recommendation for which protocols to use in the development of a regional protocol document. Recommendations were based on evidence-based practices, Emergency Medicine texts, American Heart Association Pediatric Advanced Life Support and Advanced Cardiac Life Support guidelines, and the American College of Surgeons Advanced Trauma Life Support guidelines.

The contractors' 129-page analysis was sent to PMAC members on December 1, 2016 for review prior to the December PMAC meeting. PMAC held their quarterly meeting on December 14, 2016 where Dr. Barnett and Mr. Rosen presented their initial analysis and facilitated discussion about select protocols.

PMAC moved to establish a task force to begin working on unified protocols. The task force will have two members of each agency (i.e., EMS coordinator and line staff).

The task force has met several times since the beginning of February 2017. The group is scheduled to meet every other week through June 2017 to develop a complete draft of EMS protocols for the region.

The initial meeting focused on a format of the regional protocols document, and subsequent meetings focused on discussing the recommendations of the contractors for all protocols. The group decided to approach the process by reviewing protocols in four categories: operational, medical, trauma and cardiac.

PMAC held their quarterly meeting on March 8, 2017 where the members received a status update on the project and examples of the draft protocols developed by the task force.

Since February the group has reviewed, developed, and reached consensus on more than 50 protocols. As of June 8, 2017 there were thirteen protocols remaining for the task force to review.

On June 14, 2017 PMAC held its regularly scheduled meeting and EMS Oversight Program staff provided an update on the project as well as the timeline for finalization. The task force met on June 22, 2017 to being a final review of the protocols in their entirety. It is anticipated the review of the document will conclude during the August 1-2 scheduled meetings. The recommended protocols will be then provided to the EMS Medical Directors for final review, possible approval and signatures.

FISCAL IMPACT

There will be no additional fiscal impact to the adopted FY17 budget as expenses for this contract were anticipated and projected in the EMS Oversight Program budget.

RECOMMENDATION

Staff recommends the Board accept the update on the regional protocol project.

POSSIBLE MOTION

Should the Board agree with staff's recommendation a possible motion would be: "Move to accept the update on the regional protocol project."

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
BOARD MEETING DATE: August 3, 2017

TO: EMS Advisory Board Members

FROM: Heather Kerwin, on behalf of

Brittany Dayton, EMS Coordinator
775-326-6043, bdayton@washoecounty.us

SUBJECT: Presentation, discussion and possible acceptance on an update of the public service announcement (PSA) project relating to the appropriate use of 911.

SUMMARY

Nationwide there is growing concern related to the misuse of the 911 system. Locally, excessive non-emergent calls have placed a strain on PSAP personnel and first responders and could impact callers who have life-threatening emergencies. The region held a press conference on May 23, 2017 which had leadership from dispatch, law enforcement, fire, EMS and healthcare. The goal of the press conference was educating the community on when to and when not to call 911.

Thus far, two regional partners, Sparks Police Department and Carson City Sheriff's Office, developed PSAs that address the region's concerns with the over utilization of the 911 system. The EMS Oversight Program plans to continue the messaging through the summer months.

PREVIOUS ACTION

During Board comment at the January 7, 2017 EMS Advisory Board meeting, Mr. Dick requested information on a media campaign related to appropriate use of 911.

The April 6, 2017 included a presentation on the process with the PSA project and the proposed plan to educate the community on appropriate uses for 911.

BACKGROUND

On March 2, 2017 regional EMS partners, met to discuss the requested media campaign and begin the planning process. Committee members include representatives from Reno Fire Department, Reno E-Communications, Sparks Fire Department, Truckee Meadows Fire Protection District, Washoe County dispatch, North Lake Tahoe Fire Protection District, REMSA and the Health District. The meetings are held to discuss and determine how to educate the community through proactive communication on the proper use of the 911 system, including when to call 911 and other options for non-emergency situations.

All partners had valuable input and the group discussed several media campaign options to address some of the more frequent misuses of the 911 system. Some examples of misuse include unintentional 911 calls, non-emergency calls and individuals that over utilize the system.

A second meeting was held March 22, 2017 and the group expanded to include Sparks dispatch, Sparks Police Department and the Washoe County Sheriff's Office. The group discussed the budget, timeline and structure for the media campaign. The region hopes to kick-off the project in coordination with National public Safety Telecommunicators Week, which is April 9-15, 2017. A letter inviting the regional agencies to participate in the project was drafted and sent out March 30, 2017.

The region met on April 11, 2017 and there was significant discussion between partners and EMS staff about the timeline. It was determined the region would launch this project in coordination with National Police Week (May 14-May 20, 2017) and Nation EMS week (May 21-27, 2017) by holding a press conference and joint messaging from all participating partners.

A logistics meeting was held on April 21, 2017 in order to prepare for the press conference. The press conference was held on April 23, 2017. There were multiple segments on two local television stations and the PSAs were aired on a Tahoe news broadcast.

FISCAL IMPACT

There will be no additional fiscal impact to the adopted FY17 budget; this project has been accounted for in the FY 17 and FY 18 EMS Oversight Program adopted budgets.

RECOMMENDATION

Staff recommends the Board accept the update on the PSA project relating to the appropriate use of 911.

POSSIBLE MOTION

Should the Board agree with staff's recommendation a possible motion would be: "Move to accept the update on the PSA project relating to the appropriate use of 911."