Whatcom County Emergency Medical Services

2024

2024 Annual report

Whatcom County Emergency Medical Services

2024 ANNUAL REPORT

System Overview

When the residents of Whatcom County need emergency help, they call 911 expecting the highest level of professional emergency services from the Public Safety system. The Whatcom County Emergency Medical Services System (WCEMS) provides Basic Life Support and Advanced Life Support emergency medical services from within a unified EMS system. WCEMS relies on partnerships with fire departments, paramedic provider agencies, dispatch centers, hospitals, search and rescue organizations, private ambulance services and industrial fire departments to provide the highest level of pre-hospital emergency care. The EMS system is managed by the Whatcom County Emergency Medical Services Division positioned within the County Executive's office.

Advanced Life Support (ALS) Paramedic services are provided by the Bellingham Fire Department and Ferndale Fire District 7 serving Whatcom County and are recognized providers of quality, cost-effective emergency medical services. The Medic Units are strategically located in the northwestern and central areas of the county. Fire District 5 (Point Roberts) supports an "on-call" Paramedic.

Basic Life Support (BLS) services are provided by the various fire districts through an integrated network of both paid and volunteer Emergency Medical Technicians (EMT's) or Firefighter/EMT's that serve those communities. BLS providers are the front line of emergency response and work closely with Paramedics to provide the best possible outcomes for the patients they serve.

Private Ambulance Companies provide additional capacity for the 911 system by handling non-emergent and routine inter-facility transports. Cascade Ambulance is the primary provider of private ambulance services serving Whatcom County. Cascade Ambulance provides Basic Life Support (BLS) transportation and response service in the region employing experienced Emergency Medical Technicians.

Regionally Operated Citizen Supported Model

The Whatcom EMS system has matured into a unified system responding to growth in the county over the last several years. In the fall of 2022, Whatcom County voters approved the renewal of the county-wide levy at .29 cents per thousand of the property owners Assessed Valuations. The Levy passed with almost 64% voter approval. The Levy provides a sustained funding source for a regionalized EMS system in Whatcom County (2024 to 2029).

Regional partnerships provide system oversight through the EMS Oversight Board (EOB), the Technical Advisory Committee (TAB) and the Finance Sub-Committee that includes representatives from local governments, labor organizations, fire districts, training organizations, hospitals and emergency responders. The successful passing of the current county-wide levy was preceded with work from "EMS Funding Work Group" that provides a strategic plan for implementing recommendations to respond to system grown and to create a stable funding source that allows for the highest level of EMS service to Whatcom County.

Other regional partnerships include the North Region Trauma and EMS Council, the Whatcom EMS/TC Council, St. Joseph Peace Health Hospital, the Fire District's (Fire Chiefs Association) and Fire Departments of Whatcom County, Bellingham Technical College, Whatcom County Search and Rescue, Whatcom County Office of Emergency Management, Whatcom County Health and Community Services Department (Response Systems Division) and the North Region Accountable Communities of Health.

Medically-Based Leadership Model

The region's medical partners provide oversight and research to the Whatcom EMS system. Dr. Ralph Weiche is Whatcom County's Medical Program Director. Dr. Weiche coordinates policies and procedures along with the Supervising Physicians for the two Advanced Life Support (Paramedics) programs. (Dr. Brian McNeely, BFD and Dr. Michael Sullivan, FD7 and Dr. Emily Welch Supervising Physician for Basic Life Support Operations and Medical Program Director for Paramedic Training through the Bellingham Technical College)

The local hospital system is integral to creating a patient care continuum that provides positive patient outcomes when working with the Emergency Medical Service system. The relationships with PeaceHealth St. Joseph Medical Center and the Emergency Medical community allow advanced therapies to begin in the field that can be supported by the hospital. Comprehensive emergency stroke care, post cardiac arrest care, Acute Myocardial Infarction (AMI) treatment, Medication Overuse Disorder (MOUD) treatments and emergent trauma care are some of the integrated treatment modalities that decrease mortality and morbidity for the patients we serve.

The Whatcom County Trauma and EMS council (WCTEMSC) serves the EMS community with Quality Assurance programs as well as training directed towards reducing the morbidity and mortality associated with trauma and acute illness. The council provides educational outreach to providers and also connects residents with trauma prevention programs in the region. The WCTEMSC works closely with the local EMS and Trauma Care Council.

The North Region EMS and Trauma Care Council is one of eight separate EMS and Trauma System Regions that are made up of local and regional councils. The regions are supported by grants from the state office and are charged with developing the regional trauma plan, regional patient care procedures, prevention and public education programs to address regional injury problems and patterns. The North Region EMS and Trauma Care Council have representatives from EMS agencies in Whatcom, Island, San Juan, Skagit and Snohomish Counties where the EMS Manager is the current Chair of the North Region Trauma Council.

Tiered Out of Hospital Response System

The tiered out of hospital response system is designed to operate with coordinated partnerships across the region while providing high quality prehospital medical care. The tiered system allows for a consistent and standardized approach that pushes the system to excel while ensuring the most appropriate provider is dispatched on the initial response to any EMS call. The tiered response system has five major components. Each component has multiple skill sets that are required to gain the most efficiency out of the system as well as to improve the chances of patient survival. These components include:

-EMS System Access: A patient or bystander can access the system by calling 9-1-1 for medical assistance. The early recognition of sudden cardiac arrest and major medical emergencies are measured by the reactions, rapid response, and the ability to access the EMS system. Citizens must know CPR, be prepared to react and call 9-1-1 as well as know how to attend to the patient while rescuers respond. Community responders can provide lifesaving actions such as CPR, Airway and Bleeding Control if properly trained and empowered to be part of the system.

-Dispatch/Call Receiving: There are two dispatch centers in Whatcom County. The What-Comm 9-1-1 call center known as the Public Safety Answering Point (PSAP) answers all 9-1-1 calls placed within Whatcom County to determine the type of help needed. What-Comm dispatches law enforcement agencies in the county while calls for EMS and Fire are transferred to the Fire Dispatch Center (Prospect Communications) located at the Bellingham Fire Department. The two dispatch centers work closely with each other and can give pre-arrival instructions for most medical emergencies as well as guiding the caller through lifesaving therapies such as Telephone Cardio-Pulmonary Resuscitation (T-CPR) and how to use an Automatic External Defibrillator (AED). Dispatchers can also refer callers to other, more appropriate resources for help.

-Tier One Response: (Alpha/Bravo Calls) Basic Life Support (BLS) Services: Emergency Medical Technicians (EMT's) respond to all emergency medical calls and are usually the first to arrive on scene. Whatcom County's EMT's are the front line of the EMS system, especially within the rural areas of the county. While Bellingham, Ferndale, Lynden and cities of the county employ full-time EMT's and Firefighters, many of the county's EMT's are volunteers or who work on a part-time basis for their fire districts or departments. BLS provides Advanced First Aid, CPR/AED, Narcan, Epinephrine, Nitrous Oxide for pain and the ability to transport low acuity patients to the hospital. EMT's are certified by the State of Washington and are required to complete initial and ongoing continuing education and training to maintain certification.

-Tier Two Response-(Charlie/Delta/Echo Calls) Advanced Life Support (ALS) Services: Advanced Life Support Services are provided by highly trained Paramedics who primarily respond to critical or life-threatening injuries and complicated medical conditions. Paramedics respond to about 40% of the total EMS call volume and usually arrive second on scene. EMT's provide basic life supporting skills until Paramedics arrive adding critical care skills to the EMS team. Paramedic services are provided by two agencies in Whatcom County. The City of Bellingham Fire Department operates four Paramedic Units and Fire District 7 (City of Ferndale and surrounding areas) operates one Paramedic Unit which is integrated into the county-wide system for a seamless ALS response. The Paramedics are Washington State certified and are required to complete intensive education and ongoing training to maintain certification.

-Additional Medical Care-Transport to Hospitals: The hospital plays a critical role for the prehospital medical community. Once a patient is treated and stabilized, EMS personnel determine whether transport is necessary to the hospitals or clinics. Transport is provided by either the ALS or BLS agency depending on the level of medical care needed. The hospital integrates with the EMS system so patients receive appropriate emergency care once the patient enters the hospital.

Whatcom County Emergency Medical Systems Division (WCEMS)

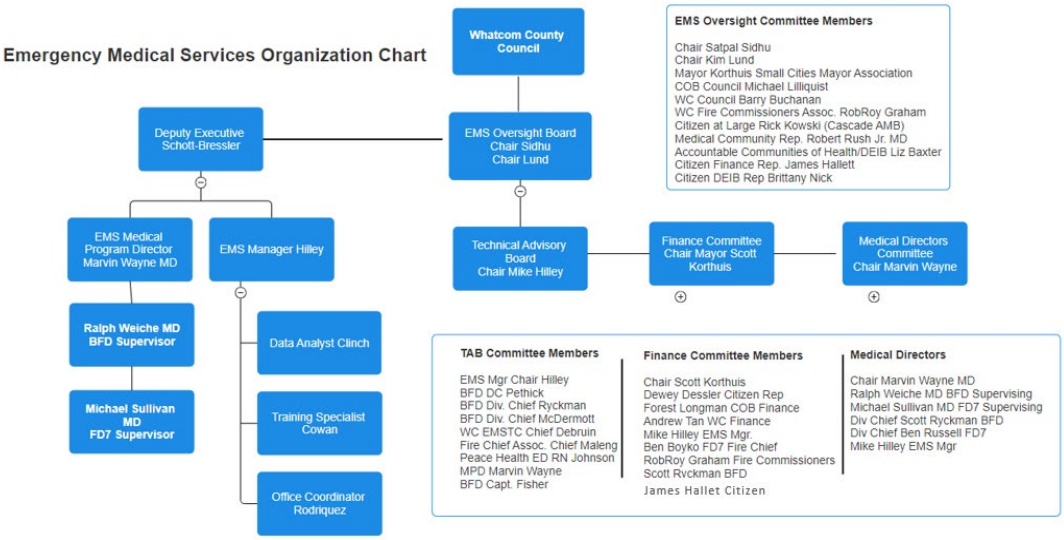
WCEMS has developed an organizational design that encourages and empowers teams to provide input and direction for supporting and operationalizing programs. These initiatives are processed through the various sub-committees that include a review and recommendation by the Finance and Technical Advisory Committees. These working committees evaluate the efficacy of projects as related to providing a high level of support to the EMS system while providing these system improvement recommendations to the EMS Oversight Board.

The County Medical Program Director (MPD) provides medical oversight in the areas of EMT and Paramedic Medical Practice, Protocols, Training and medical program development and for the credentialing of EMS providers. Dr. Ralph Weiche leads the group of supervising physicians as the County Medical Program Director and also provides medical oversight to the Mt. Baker Ski area. Dr. Michael Sullivan is the Supervisor for Fire District 7, Dr. Emily Welch is the BLS Supervising Physician and Dr. Brian McNeely is the Supervising Physician for the Bellingham FD.

Dr. Ralph Weiche Whatcom Co. MPD

For all counties, the Medical Program Director is appointed by the State Department of Health Secretary with duties and responsibilities required by statute in RCW 18.71.212 and described in WAC 246-976-920. These responsibilities at the County level include "on-line" and "off-line" medical control, developing written protocols and directing patient care, and being a conduit of information from local EMS and Trauma Care Systems to State staff for purposes of training, certification audit and discipline of EMS providers.

The Whatcom County Fire Chiefs Association, EMS/Trauma Council, Commissioners Association and the Hospital each have multiple workgroups and committees that navigate EMS related tasks and initiatives through processes that eventually reach the TAB. The TAB evaluates the legal, financial, operational, administrative and community implications when developing policy or capital purchase recommendations to the EOB. This design has been very successful for moving the many projects and initiatives.



The Technical Advisory Committee (TAB) is the working group of the EMS system. TAB members include representatives from the Fire Chiefs Association, Whatcom County EMS and Trauma Council, Bellingham Fire Department, Fire District 7, Peace Health Emergency Department, Paramedic Training and the Prospect Dispatch Center. The TAB board serves as advisors and makes recommendations to the EOB and the Emergency Medical Service Providers in Whatcom County regarding operational, educational, and logistical components of basic through advanced life support services.

TAB Members

Fire Chief Hank Maleng	Whatcom Fire Chiefs Association
Susie Johnson RN	Peace Health Hospital
Asst. Chief David Pethick	Bellingham Fire Department
Div. Chief Scott Ryckman	Bellingham Fire Department
Div. Chief Scott Painter	Fire Protection District 7
Div. Chief McDermott	Bellingham Fire Department (Prospect Dispatch Center)
Fire Chief Jerry DeBruin	Whatcom Co. EMS and Trauma Council Chair
Asst. Fire Chief Ben Russell	Fire Protection District 7

The Finance Committee provides the review and recommendations of the EMS Levy Budget. This is a joint advisory Emergency Medical Service Finance Committee. Members shall consist of the EMS Manager and representatives from County and ALS provider agency administrations, finance personnel from County and ALS provider agencies, a BLS provider agency, a small cities mayor, and a citizen representative as appointed by the EOB.

Finance Committee Members

James Hallet	Citizen Finance Representative
Dewey Desler	Citizen Finance Representative
Scott Korthuis	Small Cities Mayor (Chair)
Andrew Tan	Whatcom County Finance
Forest Longman	City of Bellingham Finance
Fire Chief Ben Boyko	Fire Protection District 7
Mike Hilley	WCEMS Manager

The EMS Oversight Board (EOB) makes recommendations to the Whatcom County Council and the cities and fire districts of Whatcom County regarding administration, operations, levels of service and EMS budgets.

EOB Members

Michael Lilliquist	Bellingham City Council
Ben Elenbaas	Whatcom County Council
RobRoy Graham	Whatcom County Fire Commissioners Association
Scott Korthuis	City of Lynden Mayor (Small Cities Association)
Rick Kowski	Cascade Ambulance, Citizen At Large
Kim Lund	City of Bellingham Mayor (Joint Chair)
Satpal Sidhu	Whatcom County Executive (Joint Chair)
Robert Rush Jr. MD	Medical Community Citizen Representative
Liz Baxter	North Sound ACH, DEI Organizational Representative
James Hallet	Citizen Finance Representative
Brittany Nick	Citizen DEI Representative

WCEMS Review of 2024 Programs

Electronic Patient Care Records System (EPCR) –

The Image Trend Electronic Patient Care Record (EPCR) system continues to provide integrated records management for the EMS system. This robust collection of data contains information that helps determine system level performance and to develop future strategies for response and medical practice. Image Trend also provides for the mandatory reporting to the State Department of Health (EMS Section), Washington Emergency Medical Services Information System (WEMSIS). WEMSIS data is reported from all EMS agencies in the State which is useful for responding to emerging trends in the EMS system.

Diana Clinch is the Image Trend Systems Administrator providing a high level of analysis of the system as well as supporting the Fire Districts and Departments with local analysis and system support. In addition, the Systems Administrator works with State Department of Health; Emergency Medical Services to understand and coordinate State data analysis activities in the areas of epidemiology, continuous quality improvement (CQI) and data completeness.

The EMS Data section has created public facing dashboards that follow the current Opioid/Overdose trends as well as generalized EMS data related to call volume, response times and the types of calls. Many of these dashboards both internal and external are demonstrated later in the report.

In 2024 a long-time project was completed where patient care records created by EMS providers are automatically integrated into that patient's personal health care records at the hospital. This important health information can now be viewed by the patient's primary care or emergency physicians that provides a continuum of care. This important upgrade helps physicians understand the emergency care provided by EMS for informed treatment decisions during the continuum of care. The second phase of this project is to automate the patient outcomes back to the EMS providers as part of the continuous quality improvement programs. This valuable information is important to understand where the treatments provided produce positive or negative outcomes as well as to support the continuous quality improvement programs. In addition, in 2024 there were multiple rule changes as determined by the Washington Department of Health (EMS/WEMSIS) that increased validation requirements along with a nation/system-wide update to the new version of National EMS Information Systems to the 3.5 standard.

Mobile Integrated Health/Community Paramedic–

This innovative program continues to serve greater Whatcom County by deploying two Paramedics from Bellingham Fire and one Paramedic from Fire District 7 who are teamed with Social Workers dedicated to navigating patients to the right care at the right time. The focus of the program is to reduce frequent use of EMS and Emergency Department services by engaging and navigating those patients to more appropriate services.

For the City of Bellingham, much of this work has been oriented to opioid and mental health responses in the Bellingham downtown areas where the density of the responses has overwhelmed the 911 system. Both the county and the city are concentrating on these priority responses with the two Bellingham Community Paramedics.

The Fire District 7 Community Paramedic responds to all areas of the county working also with mental health and opioid outreach however in the farther reaches of the rural areas, the community health needs are more diverse where the Community Medic works with those "aging in place", those who are a high risk for falls and injury and are frequent users of EMS and typically are challenged to access primary health care services.

The Community Paramedic Mobile Integrated Health program for both agencies is supported by the Whatcom County Health and Community Services; Ground Response and Coordinated Engagement (GRACE) program which is part of the "Response Systems Division". The Division employ's Social Workers, Behavioral Health Specialist an Advanced

Registered Nurse Practitioner (ARNP) along with case managers. This team is led by Malora Christensen, Program Manager for the Division. Teams carry a caseload of about 80 patients who are case managed by the GRACE teams.

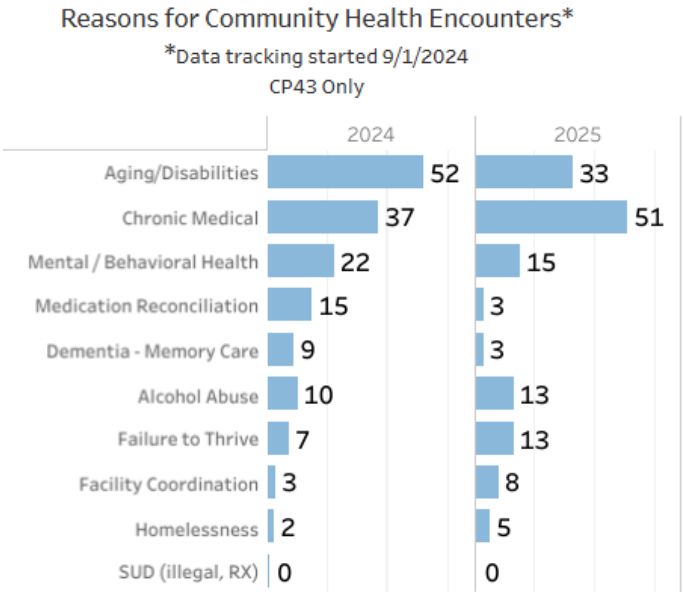
First Responders frequently see patients who are un-housed, vulnerable and have complicated medical problems. For the Community Paramedic and GRACE teams, this represents 41% of their enrolled patients. WCEMS is partnered with advocates and committees to work to end homelessness and to provide access to medical care outside of the 911 system.

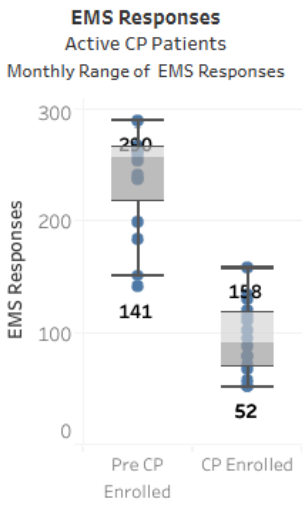
Patients are most commonly referred to the program when EMS providers observe patients struggling to survive whether housed or un-housed. The most common referrals are related to aging and disability, Chronic and co-occurring medical issues along with mental health concerns, inadequate social support and those who are at a high risk of falling.

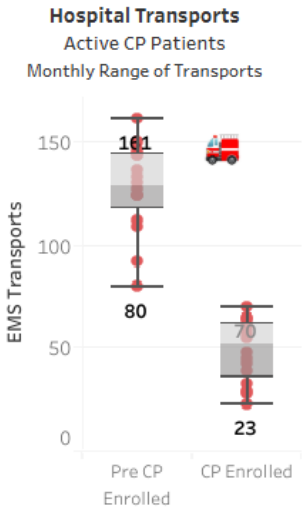
Patient Referral Data

County vs City Volume/Data

The Community Paramedics and GRACE teams serve the county where patients located in the City of Bellingham account for about 45% of the case load. The remaining 55% of the patients are from the smaller communities and cities of the county.



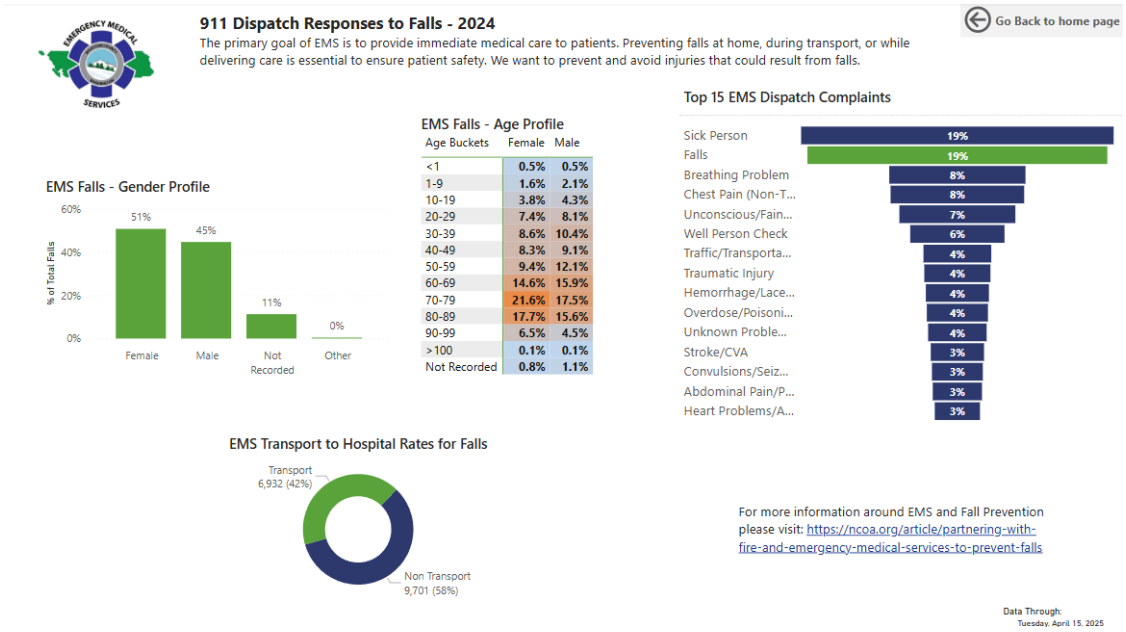


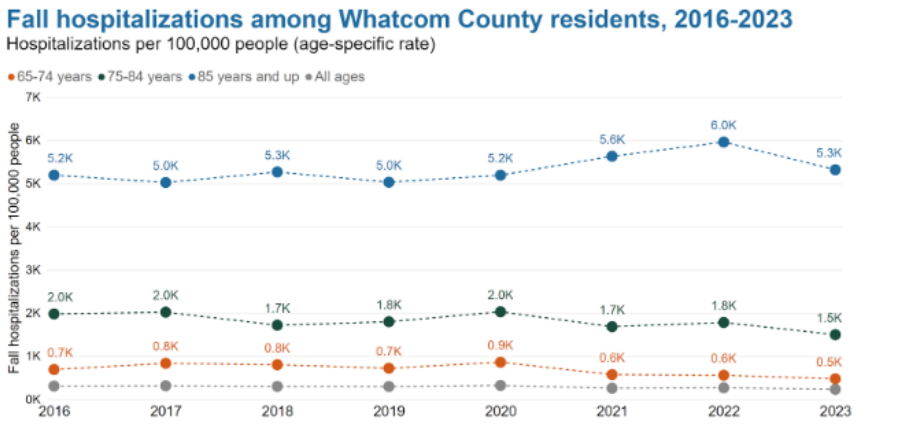


Falls Emphasis

Falls in particular are problematic as one significant incident can have a deleterious affect on other medical conditions. EMS providers report conditions that contributed to the fall as well as reporting those who have fallen multiple times in an effort to direct prevention resource to that patient. When reporting Aging and Disability concerns, most of the time that report was related to a fall incident. Falls are the most frequent request for EMS through the 911 system.

Fall prevention efforts in Whatcom County are expanding where there is planning and momentum to organize the pre-pandemic Falls Prevention Coalition in the County. Whatcom County Health and Community Services Health Planning Specialist has produced the Healthy Aging Report 2025 that reports general falls data along with hospitalization rates among Whatcom County residents. This guiding data will help define those efforts.





Why this Matters: Falls are a preventable threat to the health of older adults and can reduce their ability to remain independent. They can result in bone breaks, such as hip fractures and head injuries, leaving a person with lost mobility. Falls can often lead to more complex health issues and even a reduction in life expectancy. Staying physically active, improving home safety, and removing fall hazards can reduce the likelihood of falls for older adults.

Medical Reserve Corps. (MRC)

The EMS Manager supports the local Medical Reserve Corps. as the Unit Coordinator. The Medical Reserve Corps is a national network of more than 300,000 volunteers, organized locally to respond and strengthen public health, reduce vulnerability, build resilience and improve preparedness, response, and recover y capabilities.

The local MRC unit current roster is 68 Medical Providers with about 20 active members supporting local response and outreach. Formed in 2019 during the Pandemic, the unit had rostered 130 medical providers that included physicians, dentists, registered nurses, physician assistants, paramedics and EMTs and veterinarians organized to support COVID testing, surveillance and vaccinations.

The MRC was organized in the first years of the Pandemic to assist EMS and the Health Department with vaccinations, COVID testing and surveillance where over 110 medical professionals volunteered to help with the COVID emergency. MRC members also helped during the 2023 floods in the North East section of the county as well as supporting local events such as the Ski to Sea and MS 150 Bike Ride.

Current outreach and response for the MRC has been directed towards vulnerable populations where medical teams provide low acuity wound care for those experiencing challenges with access to preventative and ongoing healthcare. The Whatcom County MRC Street Teams work closely with the Response Systems Division where team work two days a week, in the afternoon patrolling areas where outreach can be offered. The Street Teams have become familiar to the un-house populations where trusting relationships are developed for those who are reluctant to seek medical help.

The MRC became a 501c3 in 2024 which opened up the opportunities for grants and fundraising. In the Fall of 2024, the MRC was awarded an operational grant of $10,000 along with donations from Peace Health Hospital and local businesses.

MRC members stepped up during the winter supporting the Emergency Winter Shelters this past winter. Members worked **24** separate shifts days, provided over **132** volunteer hours serving more than **85** clients by supplementing the Health Department volunteer staff and providing wound care.

Future work includes increased training for disaster medicine, increased integration with the Department of Emergency Management as well as the Health Department.

WCEMS Response to the Opioid Epidemic:

Whatcom County EMS continues to see a significant amount of EMS responses and deaths related to narcotic overdoses as compared to previous years. Complicating the overdose epidemic are the various analogs that are unpredictable and extremely addictive. The Whatcom County Fire Departments and Districts are at the front line, responding to an average of 3.4 overdoses a day and an average of 2 to 4 deaths per month. (Down from 4.6 in 2023) Many times, these are poly drug overdoses that are difficult to treat. The increase of Fentanyl, Carfentanil (100 more potent than fentanyl) mixed with other drugs further challenges responders when working to resuscitate poly drug overdose patients. In addition, Methamphetamine is seeing an escalated recurrence of use as which represents about 45% of the overdoses.

WCEMS is a member of the Whatcom County Opioid Task force oriented to providing education and to develop strategies for responding to this epidemic. WCEMS is partnered with the Health and Community Systems, Health Information Team to analyze data from various agencies that can direct efforts to those areas of opportunity for outreach and prevention.

Narcan Leave Behind Program

Whatcom County Fire Departments/Districts participate in the Narcan "Leave Behind" program where WCEMS continues to receive the Narcan Opioid Reversal kits from the State Department of Health.

The kits are stored on response units and at the fire station and are intended to be left at homes where there is a risk of overdose or with patients who refuse to be transported to the hospital. Many of the patients revived with by responders will refuse transport against medical advice. First Responders offer to "Leave Behind" the kit along with education about the dangers of overdose and how to access services for treatment for those at risk.

This program was further expanded in early 2023 where the Department of Health encouraged EMS agencies to provide Narcan and education to the general public that includes awareness level training for Hands Only CPR and the use of an AED.

WCEMS provides training and Narcan to organizations and business that are concerned about overdose in their neighborhoods, storefronts and other public locations. In 2024, WCEMS provided training sessions where 349 citizens were trained at one of the 23 training events. In addition, over 1,450 doses of Narcan were disturbed to the community. WCEMS also provided instructional videos for the community through social networks as well as talking with local media outlets about the ongoing epidemic.

This outreach has been successful and most notable is the community response for the education. Outreach sessions are well attended with up to 50 people per session. More than 450 people were trained on the use of Narcan along with learning Hands Only CPR. This outreach provides the platform for the community conversation while Paramedics and EMT's teach the class. Community members hear the experiences of the providers which gives real sense of this growing problem. The instructors talk about harm reduction principles and provide up to date information related to the latest overdose trends in our county.

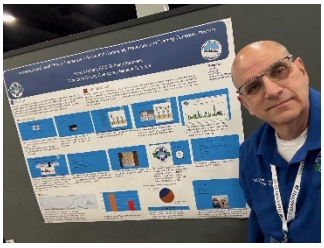
Narcan may be given prior to EMS arrival by Law Enforcement, Family, Friends, Bystander or any non-EMS Provider.

Narcan Leave Behind Program | Whatcom County, WA - Official Website

For more information regarding Opioids and Narcan please visit the Whatcom County Department of Health:
Whatcom Overdose Prevention (wpengine.com)

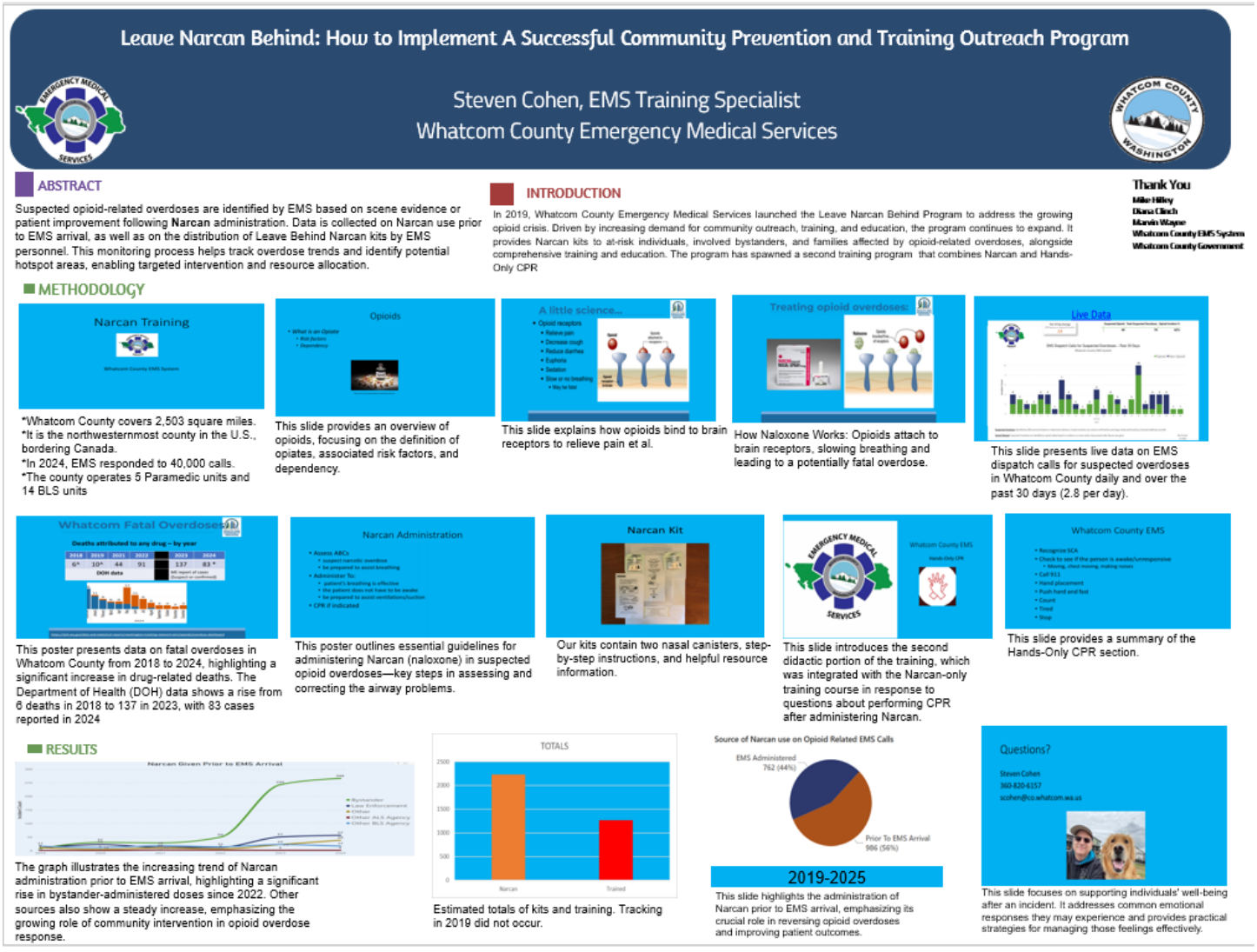
Data Through:
4/30/2025

Narcan Saves Lives

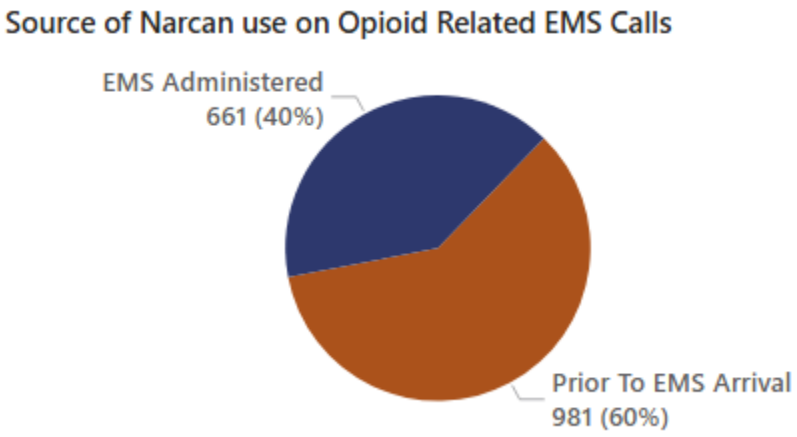


The Whatcom County Narcan Leave at Home program has become a “model” that other communities can easily replicate. Whatcom County EMS is proud to have presented this program at the Rx and Illicit Drug Summit held in Nashville, Tenn this past April. The Rx Summit is where those committed to change come together-from federal leaders to grassroots advocates, research to clinicians, first responders to families with a shared mission**: “To save lives. Restore hope. And keep pushing forward together.”**

Whatcom County EMS was inviited to share the Narcan “Leave Begind” program with the nation at the 15th Annual Conference where EMS Training Specialist Steve Cohen presented his work during the conference poster sessions. The poster sessions represent an opportunity to explore real-world solutions, emerging data, and practical strategies designed to advance the field. Attendees can engage with presenters to discuss findings, share experiences, and gain valuable knowledge to implement in their own work.



Opioid Response Data



Year	Total Suspected Opioid Calls	Calls with Narcan Used	Narcan Given PTA*	PTA %
2020	513	160	70	44%
2021	541	162	77	48%
2022	588	192	85	44%
2023	960	512	331	65%
2024	721	481	320	67%
Total	**3323**	**1507**	**883**	**59%**

Multi-Agency Coordination Group

In the Fall of 2023, the Whatcom County Executive Office/Health and Community Systems chartered the Multi-Agency Coordination (MAC) group with the goal of creating a coordinated response to the Opioid Crisis. This collection of government agencies, response organizations, behavioral health organizations, law enforcement and elected officials formed the MAC group with several sub-committees. WCEMS chaired the Intervention sub-committee where the focus is to provide strategies to reduce and prevent the high rate of overdoses in the county. Recommendations from the Intervention Group included EMS specific input aimed at diversion, treatment and ways to build pathways to recovery. Strategies include:

- Explore options for use of Medication Over Use Disorder (MOUD) in the field
- Create diversion centers to reduce ED pressure
- Implement an Opioid Response Team
- Develop SUD navigators to recovery

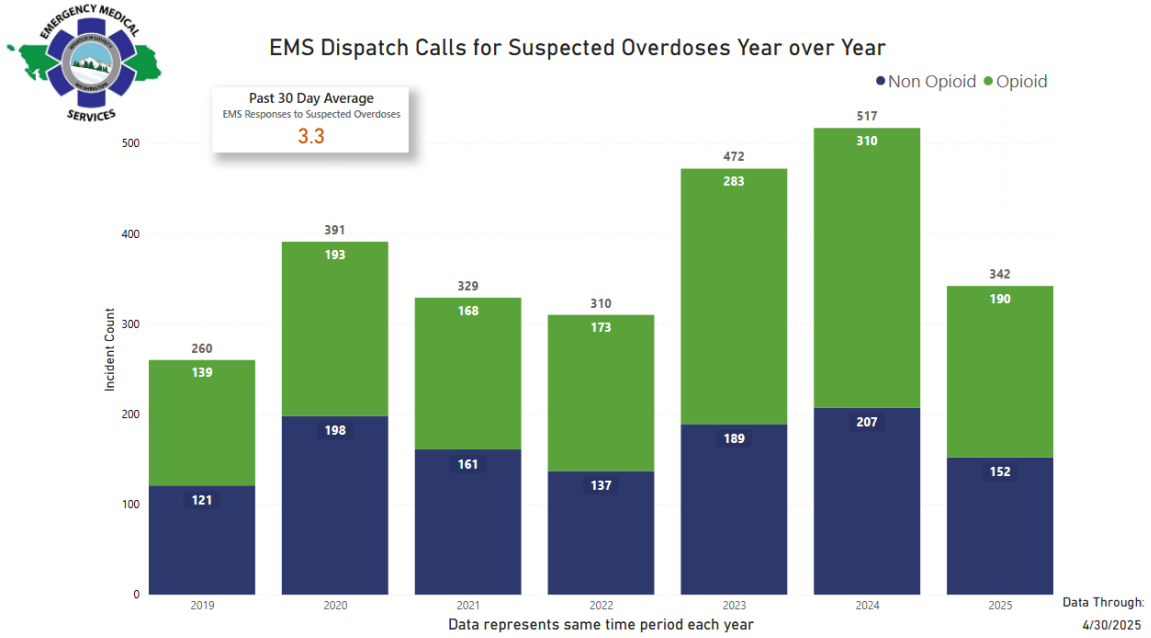
In April of 2024, the Whatcom County Executive issued an Executive Order intended to increase efforts related to prevention, intervention, treatment and aftercare as related to the Opioid crisis. Elements of this effort were realized from the work of the MAC group. For EMS, this included the expansions of Narcan Leave Behind Programs as well as public education on how to use Narcan and to be trained in CPR and AED use. In addition, the priorities include the use of Medication Overuse Disorder Treatments (MOUD) to be delivered by Paramedics (Buprenorphine Induction Programs) at time of call. Opening the door for this treatment was also accelerated when the Peace Health Hospital Emergency Department began offering MOUD treatment in October of 2024. Paramedics and EMT's are now able to offer an option for emergency treatment through the Emergency Department MOUD program.

The Community Paramedics play a large role in this outreach where patients can be referred to a Substance Use Disorder (SUD) Navigator who can provide access to MOUD and Mental Health treatments from the field. EMS providers around the county can also refer patients to the SUD Navigator for those looking for treatment options. The SUD Navigator program is a critical component to the MOUD treatments for follow-up and for successful outcomes.

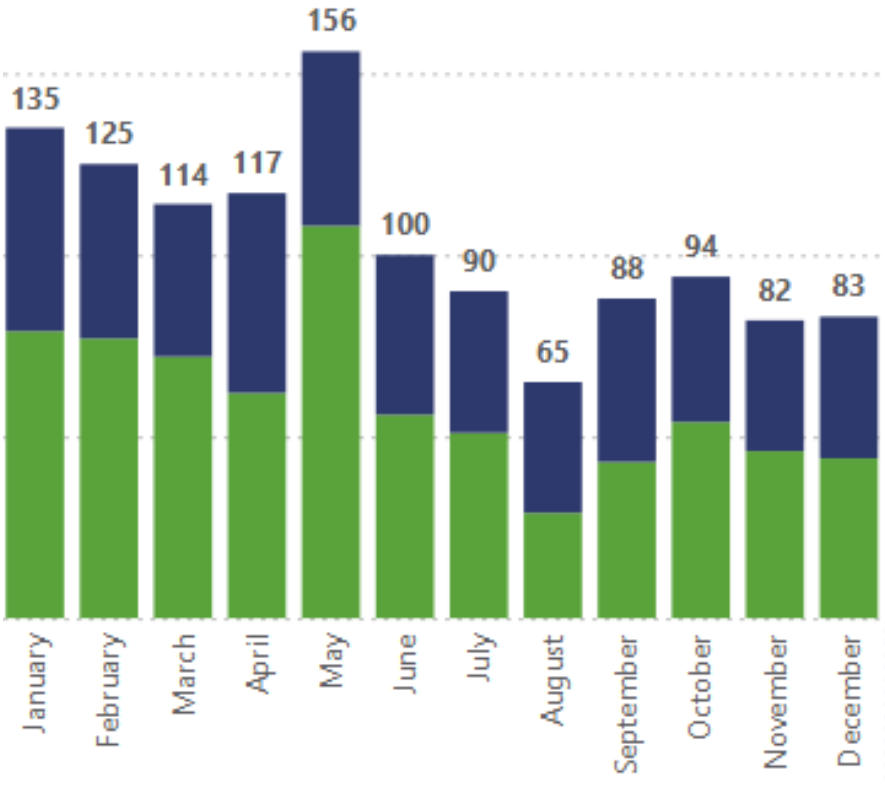
The Executive Order also included the mandatory reporting of non-fatal overdoses to the Health Department where patients who experience an overdose will be referred to the SUD Specialist or any of the local MOUD providers that offer long-term treatments for addiction. In response to the Executive Order, WCEMS has created a referral pathway where EMS providers in the field can refer overdose patients to the Opioid Response team for follow-up and navigation to recovery services.

Below is an overview of Substance Use Disorder (SUD) calls.

2019 through 2025 (April)



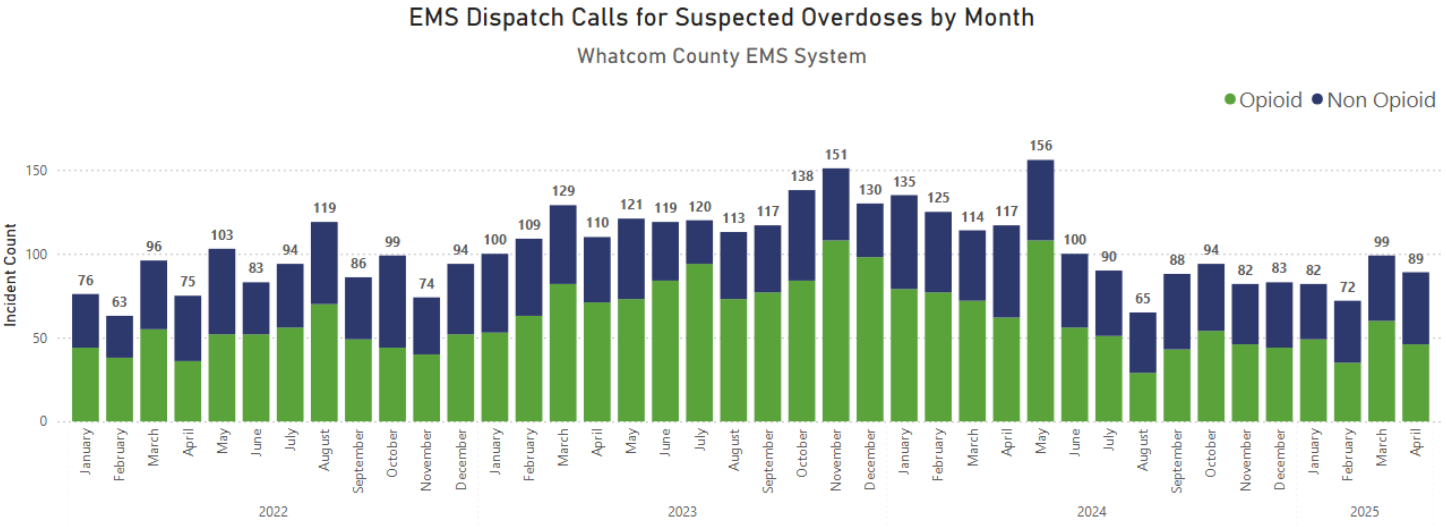
2024 Monthly Overdose Response



2024 Total Overdose Responses = 1249

Year	Suspected Opioid	Total Suspected Overdoses	Opioid Incident %
2022	588	1062	55%
2023	960	1457	66%
2024	721	1249	58%

2022 to 2025 Monthly

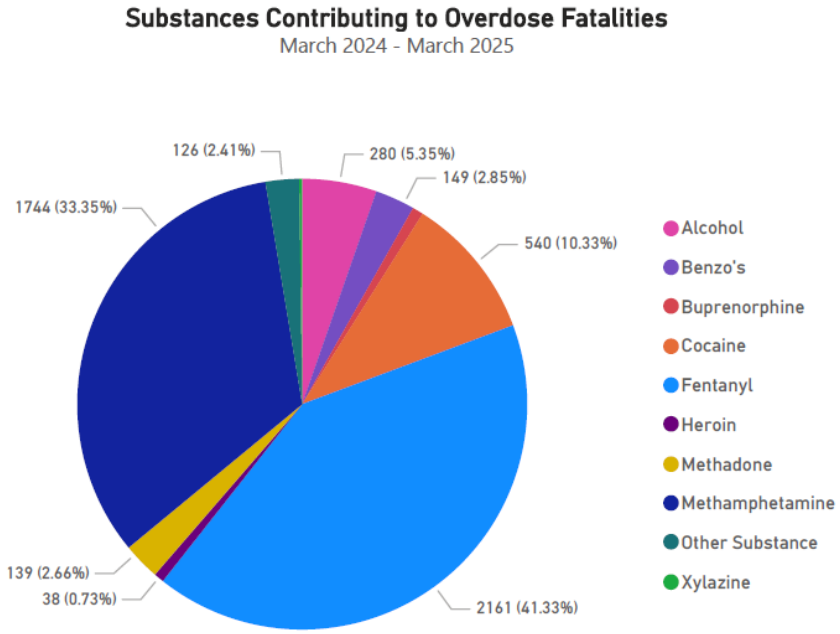


Suspected Overdose: Identified by EMS personnel based on vitals/scene indicators. Actual overdoses can only be confirmed by toxicology results performed by a licensed healthcare provider.

Opioid Related: Suspected Overdoses are identified as opioid related based on evidence on scene and/or improvement after Narcan was given.

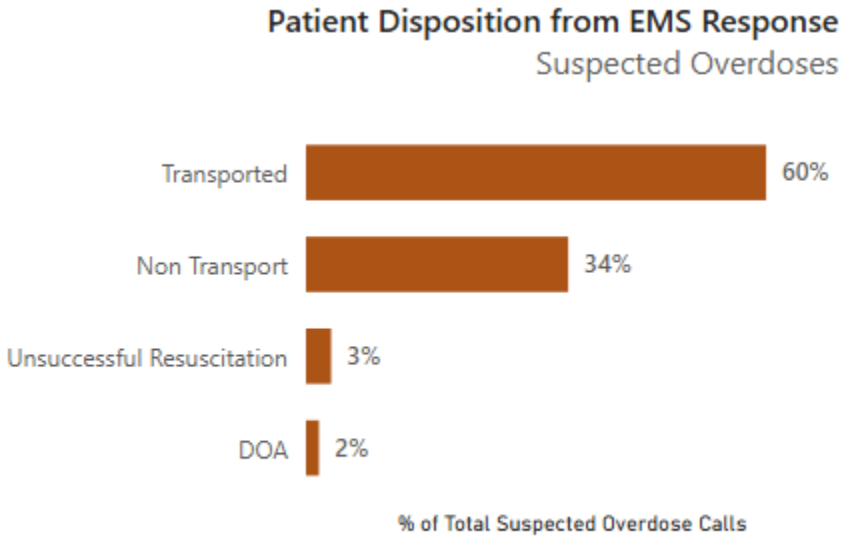
Data Through: 4/30/2025

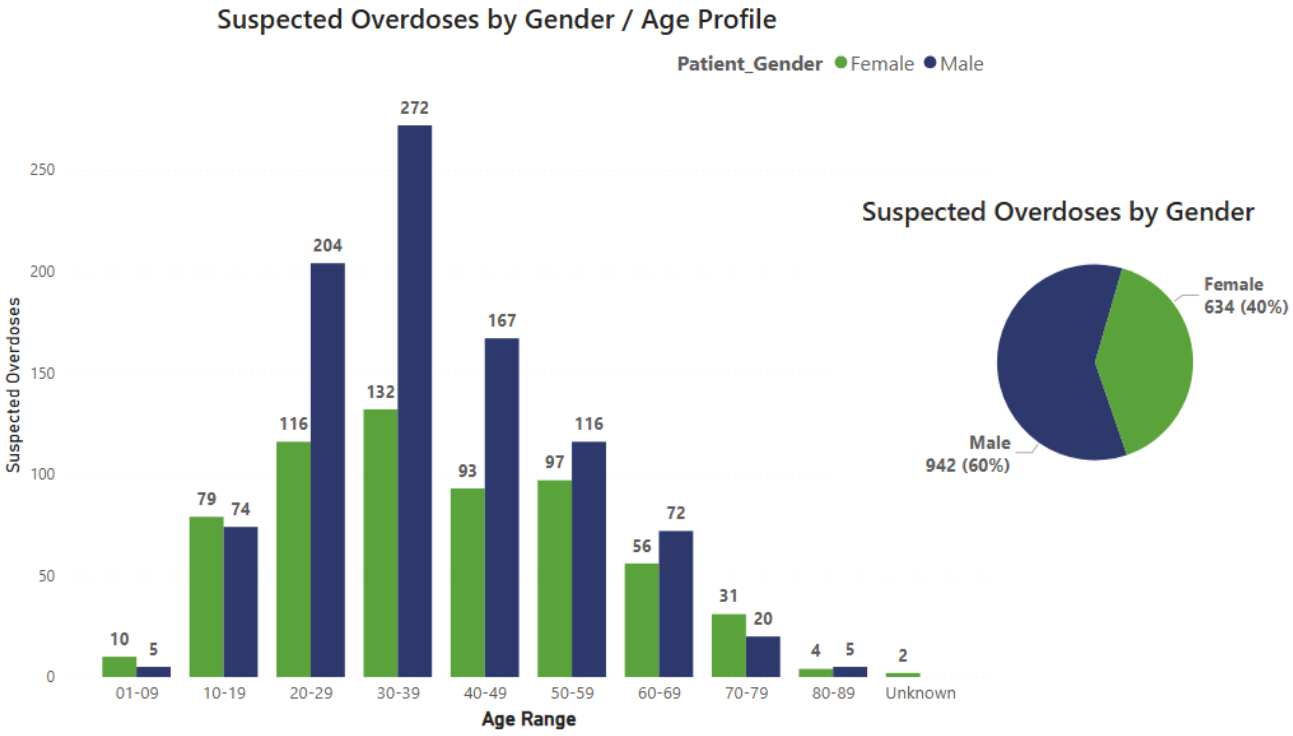
One overdose may include multiple substances. Fentanyl (2161) and methamphetamine (1744) are the primary contributors to fatal overdoses. This trend is consistent across all Washington counties.



This graphic illustrates the types of substances that contributes to Overdose Fatalities. Poly Drug Overdoses are quite common where this data looks at Overdose "cause of deaths" around the State for those participating jurisdictions. This information is generally consistent with local Overdose "cause of deaths" primarily determined by toxicology.

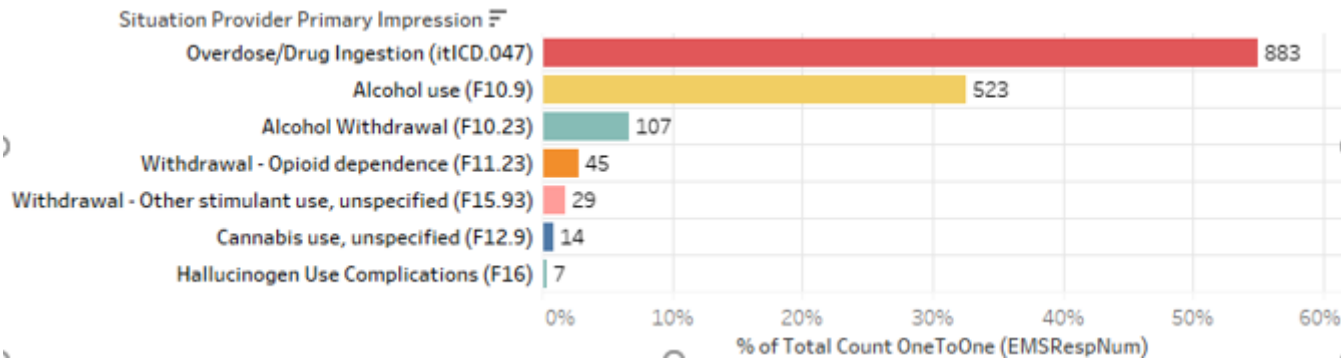
Source: Washington State Overdose Surveillance Network Bulletin


Patient Disposition from EMS Response
Suspected Overdoses
Transported
60%
Non Transport
34%
Unsuccessful Resuscitation
3%
DOA
2%
% of Total Suspected Overdose Calls


Suspected Overdoses by Gender / Age Profile
Patient_Gender Female Male
Suspected Overdoses
250
200
150
100
50
0
10 5
79 74
116 204
132 272
93 167
97 116
56 72
31 20
4 5
2
01-09
10-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
Unknown
Age Range
Suspected Overdoses by Gender
Female
634 (40%)
Male
942 (60%)

Substance Use Disorder (SUD) Calls by Type

Whatcom County sees an average of 3 to 4 Overdose calls per day however increases to as much as 11 Overdose calls per day occur with some frequency.



Community Education and Outreach

Stop the Bleed is a course designed to teach basic bleeding control techniques to the public. This short class includes education around the use of tourniquets, direct pressure and recognition of true bleeding emergencies. The Stop the Bleed program was pioneered after the Boston Marathon explosions where it was determined that many of the victims' lives could have been saved with basic bleeding control techniques. WCMES offered seven (7) Stop the Bleed classes in 2024 along with instructor development courses. 153 citizens were trained using the Stop the Bleed curriculum.

Public CPR and AED Courses – WCEMS has offered quarterly public CPR and AED courses over the last year. Approximately 274 citizens attending one of the 48 classes were trained and certified with this outreach which directly impacts the high survival rate from Sudden Cardiac Arrest in this community.

Rider Alert Program – The WCEMS Training Specialist developed the Rider Alert Program for recreational activities that generally require a helmet or protective gear such as bike riding, snowboard/skiing, skateboard where a Rider Alert Sticker is placed on the helmet indicating there is additional personal and medical information to be obtained. This basic bit of information provides vital information incase the patient is unable to speak for themselves.

Autism Awareness Program – Similar to the Rider Alert Program, the Autism Awareness program is partly a response to the State of Washington Travis Alert Act House Bill 1258 designed to improve the Enhanced 911 program so first responders become aware of an individual's special need or disability when responding. The sticker is designed to be placed on the front door or window alerting first responders to the special needs of the patient.

WCEMS Paramedic Training Program – The Bellingham Fire Department and Bellingham Technical College (BTC) continues to graduate highly trained Paramedics from the Paramedic Training Program. This partnership between the Bellingham Fire Department, Fire District 7, Bellingham Technical College (BTC) and WCEMS has created a centralized Paramedic training program for the region that provides a rich educational experience for students.

This education includes **656** classroom hours and an average of **1,315** clinical hours working with Paramedic preceptors, physicians and nurses at the hospital and at learning and simulation labs. Students provided care to more than **500** patients under the watchful eye of experienced Paramedics and Physicians where each student started an average of **150 IV's** and provided **22 intubations.** In addition, Paramedic Students and Experienced Paramedics attend an Advanced Airway Laboratory designed to provide an immersive learning activity that leads attendees to mastery of the Advanced Airway skills. The physical classroom is based at the North Whatcom Fire Training Center (Fire Station 12) where Paramedic Training has established a home base for learning.

Final testing and certification are lengthy and stressful processes where students take a cumulative set of final exams for the National Registry of Emergency Technician (NREMT). Students must demonstrate mastery of certain practical scenarios which are evaluated by proctors from the National Registry of Emergency Technicians (NREMT). Once the student passes the written and practical exam the State of Washington Department of Health issues the certification credentials to the new Paramedic.

Paramedic Training is a fully accredited program through the Commission on Accreditation of Allied Health Education Programs (CAHEEP) organization. The accreditation process is an arduous activity that requires site inspections, queries about educational content, instructor qualifications and a day of interviews with the Paramedic Oversight Committee and past/current students. In early 2023, CAHEEP completed the site visit work with minimal changes to the training plan and early accolades for the quality of the program. Academic and Clinical oversight is provided by the Paramedic Training Program Director Dr. Emily Welch

The BFD/BTC program is slowly growing to meet the regional training needs for Paramedic education. This increased labor pool and integration of training resources is a result of much work by both Fire agencies, IAFF Local 106 and the Fire District 7 Firefighters Guild. Once graduated, the students return to their home agencies for local indoctrination and training by their county Medical Program Director. The 2024 class included Paramedic trainees from Marysville, Camano Island and North County (Snohomish Co.) Fire & Rescue along with four trainees from the Bellingham Fire Department. The 2025 class begins in January with students from Bellingham, Fire District 7, Camano Island and the Marysville Fire District.

Basic Life Support Training and Coordination-The Whatcom County EMS and Trauma Council along with the Whatcom County Medical Program Director and Supervising Physicians provide the framework for training and education standards for Whatcom County. Beginning 2025, Supervising Physician Dr. Emily Welch was selected to lead Basic Life Support training, CQI, protocol development programs as well as to provide direct oversight of Basic Life Support programs. EMT's and Basic Life Support are the foundational programs that provide the "first response" to EMS calls. The desire to increase training, to understand patient outcomes and to elevate the level of care that can be provided by EMT's are the goals of a high-performance EMS system.

Whatcom County Training Plan - Whatcom County EMS is responsible for developing, implementing, and monitoring the Washington State Department of Health Ongoing Training Evaluation Program (OTEP). The OTEP Plan is the program of EMS education requirements for EMS personnel during their certification period for education and skills proficiency. WCEMS develops the three-year plan that includes topics related to EMT education, scenarios, and practical skills to be performed each quarter. The OTEP Plan is a collaboration with the fire departments and districts along with the Trauma Council Education Sub-Committee. Work for the next three-year plan began in March of 2024 where the new plan obtains the Medical Program Director approval as well as the State office of EMS (Department of Health)

Medical Practice Protocols and Procedures

Paramedics and Emergency Medical Technician medical practice is determined by the Medical Program Director. Protocols and procedures are known to change as medical treatment and technology are dynamic and responsive to research and best practices in the larger medical community. WCEMS leads this work with protocol development, revisions and implementation for both Advanced Life Support (ALS) and Basic Life Support (BLS) providers. To reinforce understanding and compliance with protocols, EMT's attend quarterly sessions with BLS focus training topics while Paramedics attend monthly four-hour sessions with scheduled ALS continuing education topics and continuous quality improvement reviews. The WCEMS Training Specialist is also part of the State Department of Health EMS Section Protocol development committee.

EMT's must also demonstrate proficiency with practical skills such as managing airways, splinting, resuscitation management and other critical skills needed in the field. This proficiency is monitored by EMS Evaluators within the departments EMS training systems. WCEMS hosts EMS Evaluator courses quarterly as a peer-to-peer process that trains new evaluators as well as providing the annual update to current evaluators.

Online Learning Platform EMS Connect

The Spokane based physician lead company called EMS Connect provides online State Approved OTEP training modules that supports ongoing and verifiable training for EMT's and Paramedics in the county. This is a web-based learning platform where video learning content and testing are performed online either as an individual or group. Practical evaluation forms and guidance are provided for local records retention. The learning platform offers flexibility for learning and up to date, physician lead pre-hospital medical education content. EMS Connect is funded by the individual departments.

In addition, Rescue Hub provides a platform and data base for tracking training and compliance for the EMT's and Paramedics to support recertifications and continuing education requirements. Recurring cost are about $3,000 per year for approximately 600 EMTs and Paramedics.

Online Learning Hours - In 2024 over 100 hours of online education were offered and completed. Each quarter, EMTs dedicate themselves to online education offerings in the areas of trauma care management, medical emergencies, overdose, and cardiac arrest management. In 2024, Whatcom County EMS sponsored:

- EMS Evaluator Courses (7 ESE) (Over 60 new evaluators)
- CPR Instructor Courses
- BLS (6) Focus Training Programs (Average 14 per session)
- Whatcom County EMS developed and implemented a Hands-Only Virtual CPR Program that trained over 200 citizens. The program continued into 2024.
- Produced multiple Training Videos
- Coordinated 2 rural/tribal EMT courses at the Lummi Health Center through a SAMSHA grant. (Graduated 20 Tribal Members EMT-Basic)
- Implemented a You Tube Channel for ongoing training.

High Performance CPR Training. - WCEMS is supportive of developing programs that build high performance teams in response to increased call volumes, population growth and increasing pressures on the rural EMS system for delivery of EMS services. Strong and consistent training systems are the core for building high performance teams. This is especially true for the Basic Life Support teams who are generally first on scene to provide lifesaving maneuvers until transferred to Advanced Life Support Care. In the rural areas where ALS response times can be as long as 20 to 30 minutes. Wilderness responses are measured by hours, until ALS care can be rendered. A strong BLS system is the foundation for system success.

WCEMS enjoys a close relationship with the Seattle based Resuscitation Academy, "Working to Create a World where no one dies from Cardiac Arrest" The Academy works with EMS providers and leaders, as well as community and elected officials to help communities worldwide strengthen their cardiac arrest survival rates.

The Academy has created programs that develop "Best Practices" for improving out of hospital cardiac arrest survival rates. Whatcom County survival rates are demonstrated later in the document however, Whatcom County average survival rates from sudden cardiac arrest at 46.2% (Utstein 1) in 2024. The five-year average rate is 45%. While these are great survival rates, we can always do better which is the mission of the Resuscitation Academy. Continuous Quality Improvement with feedback to the EMS crews and the community are a critical part of understanding how to improve.

Both Dr. Bryan McNeely and Dr. Emily Welch are partners with the Academy and bring many of the concepts and training to the county. Both have a unique interest in increasing survival rates from cardiac arrest and are providing on-site training for many of our Basic Life Support teams at the county fire departments. Future development of regular HP training and further development of feedback reports on crew performance during resuscitations are part of the 2025 training plan.

While Whatcom County compares above the national average, the goal is to always improve. Whatcom County reports and is part of the Washington Cardiac Arrest Registry to Enhance Survival. (CARES). CARES help communities measure performance and identify how to improve cardiac arrest survival rates.

Improvement Strategies For Increasing Survival Rates From Cardiac Arrest

Each year, approximately 350,000 persons in the United States experience an out-of-hospital cardiac arrest (OHCA) or sudden death; approximately 90% of persons who experience an OHCA die. Despite decades of research, median reported rates of survival to hospital discharge are poor (10.4%). Whatcom County reports to the Cardiac Arrest Registry to Enhance Survival. (CARES). This reporting provides a feedback loop to understand how Whatcom County compares against other regions survival from Sudden Cardiac Arrest. **(State of Washington and Nationally Compared CARES Data)**

CARES helps local EMS administrators and community leaders determine:

- Who is affected in my community?
- When and where are cardiac events happening?
- What parts of the system are working well?
- What parts of the system could work better?
- How can we improve emergency cardiac treatment?

2020 Utstein Survival Report	BFD	FD7	All
Non-Trumatic Etiology Survival Rates			
Overall	10.3% (78)	8.9% (45)	9.8% (123)
Bystander Wit'd	9.7% (31)	13.6% (22)	11.3% (53)
Unwitnessed	7.7% (39)	0.0% (18)	5.3% (57)
Utstein 1	42.9% (7)	0.0% (4)	23.1% (22)
Utsten Bystander 2	50.0% (4)	0.0% (8)	26.0% (8)
Bystander Intervention Rates 3			
CPR	54.7% (64)	55.3% (38)	54.9% (102)
Public AED Use	0.0% (12)	25.0% (8)	10.0% (20)
2021 Utstein Survival Report			
Non-Traumatic Etiology Survival Rates			
Overall	7.9% (89)	22.9% (35)	12.1% (124)
Bystander Wit'd	15.8% (38)	27.8% (18)	19.6% (56)
Unwitnessed	0.0% (41)	7.1% (14)	1.8% (55)
Utstein 1	20.0% (15)	57.1% (7)	31.8% (22)
Utstein Bystander 2	33.3% (9)	50.0% (6)	40.0% (15)
Bystander Intervention Rates 3			
CPR	56.3% (71)	56.7% (30)	56.4% (101)
Public AED Use	0.0% (22)	66.7% (6)	14.3% (28)
2022 Utstein Survival Report			
Non-Traumatic Etiology Survival Rates			
Overall	10.9% (119)	9.4% (32)	10.6% (151)
Bystander Wit'd	20.0% (40)	21.4% (14)	20.4% (54)
Unwitnessed	2.8% (72)	0.0% (12)	2.4% (84)
Utstein 1	45.5% (11)	33.3% (6)	41.2% (17)
Utstein Bystander 2	50% (10)	25.0% (4)	42.9% (14)
Bystander Intervention Rates			
CPR	61.3% (106)	65.4% (26)	62.1% (132)
Public AED Use	4.8% (21)	0.0% (4)	4.0% (25)
2023 Utstein Survival Report			
Non-Traumatic Etiooilgy Survival Rates			
Overall	13.5% (104)	13.2% (53)	10.6% (151)
Bystander Wit'd	16.7% (36)	16.7 % (18)	20.4% (54)
Unwitnessed	5.2% (58)	3.4% (29)	2.4% (84)
Utstein 1	15.4% (13)	42.9% (7)	41.2% (17)
Utstein Bystander 2	9.1% (11)	50.0 % (6)	42.9% (14)
Bystander Intervention Rates			
CPR	51.7% (87)	48.9% (47)	62.1% (132)
Public AED Use	3.8% (26)	0.0% (6)	4.0% (25)
2024 Utsten Survival Report			
Non-Traumatic Etiology Survival Rates			
Overall	16.5% (121)	15.8% (57)	16.3% (178)
Bystander Wit'd	15.8% (57)	27.3% (22)	19.0% (79)
Unwitnessed	13.8% (58)	0.0% (28)	9.3% (86)
Utstein 1	50.0% (18)	37.5% (8)	46.2% (26)
Utstein Bystander 2	58.3% (12)	50.0% (6)	55.6% (18)
Bystander CPR Rates			
CPR	54.5% (110)	58.0% (50)	55.6% (160)
Public AED Use	16.7% (30)	11.1% (9)	15.4% (39)

This Chart is a look back at Cardiac Survival Rates

2020 to 2024 (CARES Data)

Overall represents all presenting cardiac rhythms including PEA and Asystole

Bystander Wit'd are cardiac arrests where a bystander witnessed the event.

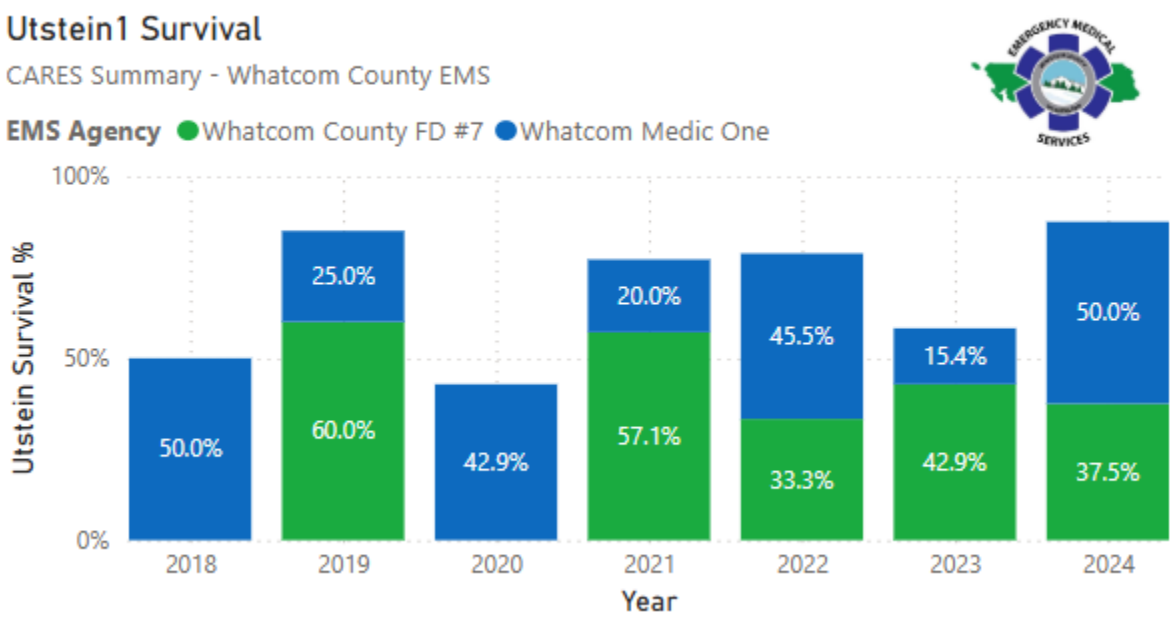
Unwitnessed are cardiac arrest where a patient was found unconscious and unresponsive.

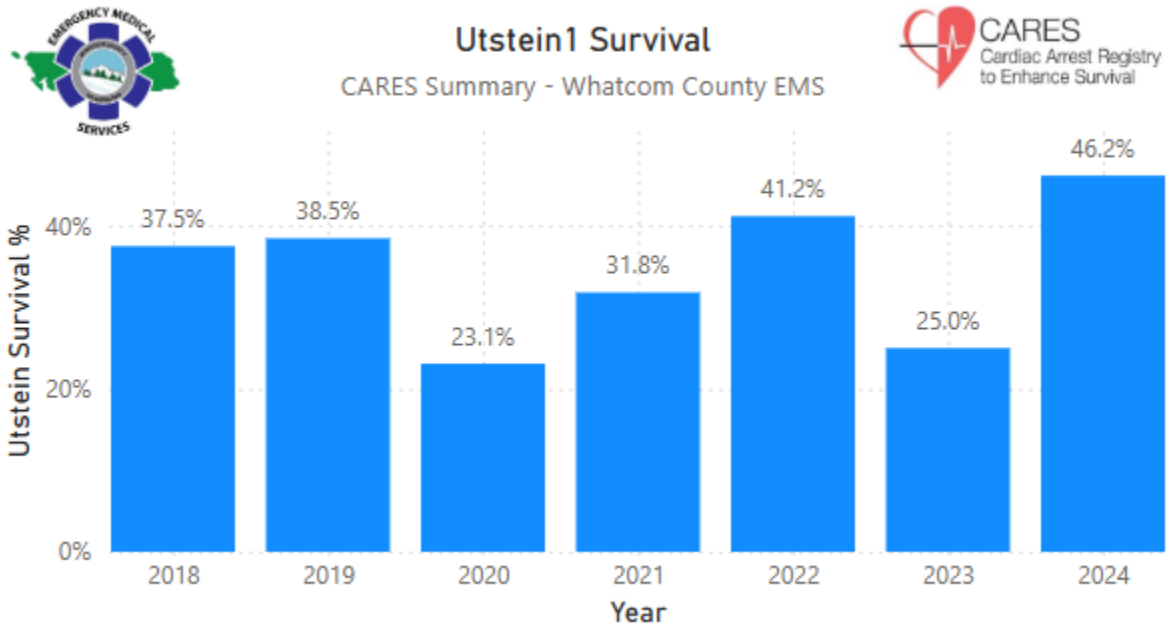
Utstein1 are those patients who present in cardiac arrest with VF of VT (shockable rhythm) witnessed by a bystander.

Utstein Bystander 2 Witnessed by bystander, found in shockable rhythm and received bystander intervention (CPR/AED)

CPR Numbers/Percentage of Patients who received bystander CPR.

Public AED Use: Numbers/Percentages of patients that received an AED intervention.


Utstein1 Survival
CARES Summary - Whatcom County EMS
EMS Agency
Whatcom County FD #7
Whatcom Medic One
100%
50%
0%
Utstein Survival %
50.0%
25.0%
60.0%
42.9%
20.0%
57.1%
45.5%
33.3%
15.4%
42.9%
50.0%
37.5%
2018
2019
2020
2021
2022
2023
2024
Year


Utstein1 Survival
CARES Summary - Whatcom County EMS
CARES
Cardiac Arrest Registry
to Enhance Survival
40%
20%
0%
Utstein Survival %
37.5%
38.5%
23.1%
31.8%
41.2%
25.0%
46.2%
2018
2019
2020
2021
2022
2023
2024
Year

Utstein1 Survival

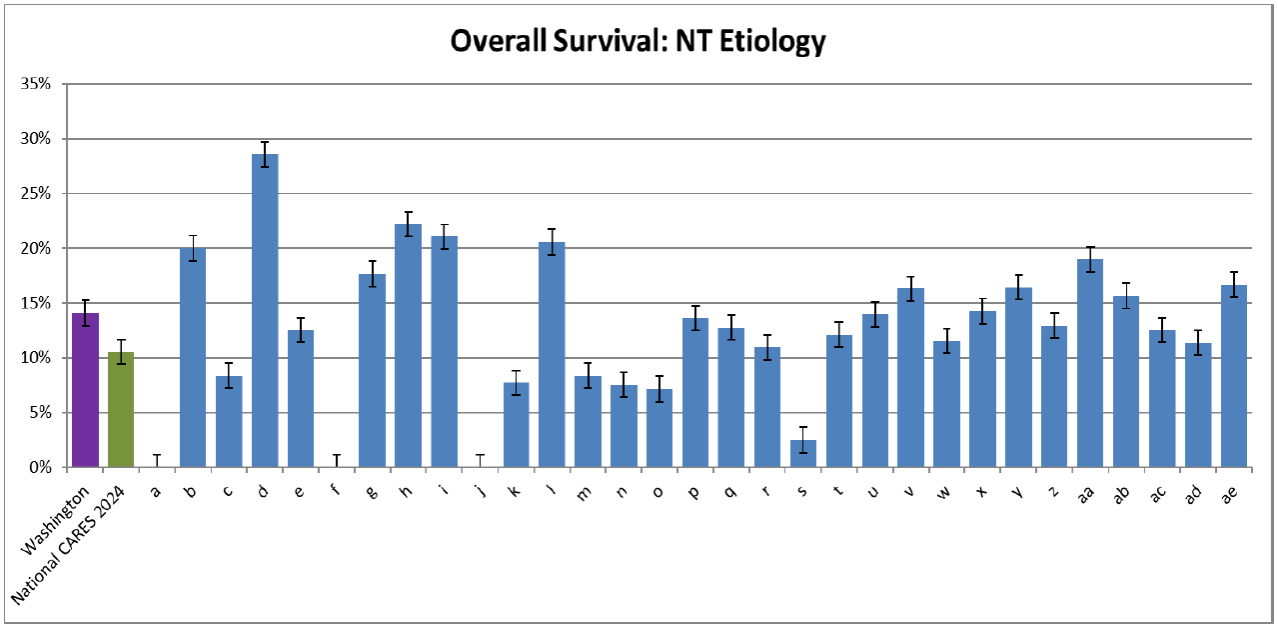
CARES Summary - Whatcom County EMS

Year	Utstein Survival Numerator	Utstein Survival Denominator	Utstein Survival %	WA State	National
2018	6	16	37.5%		
2019	5	13	38.5%		
2020	3	13	23.1%		
2021	7	22	31.8%		
2022	7	17	41.2%	35.8%	30.7%
2023	5	20	25.0%	44.3%	32.8%
2024	12	26	46.2%	40.8%	33.4%

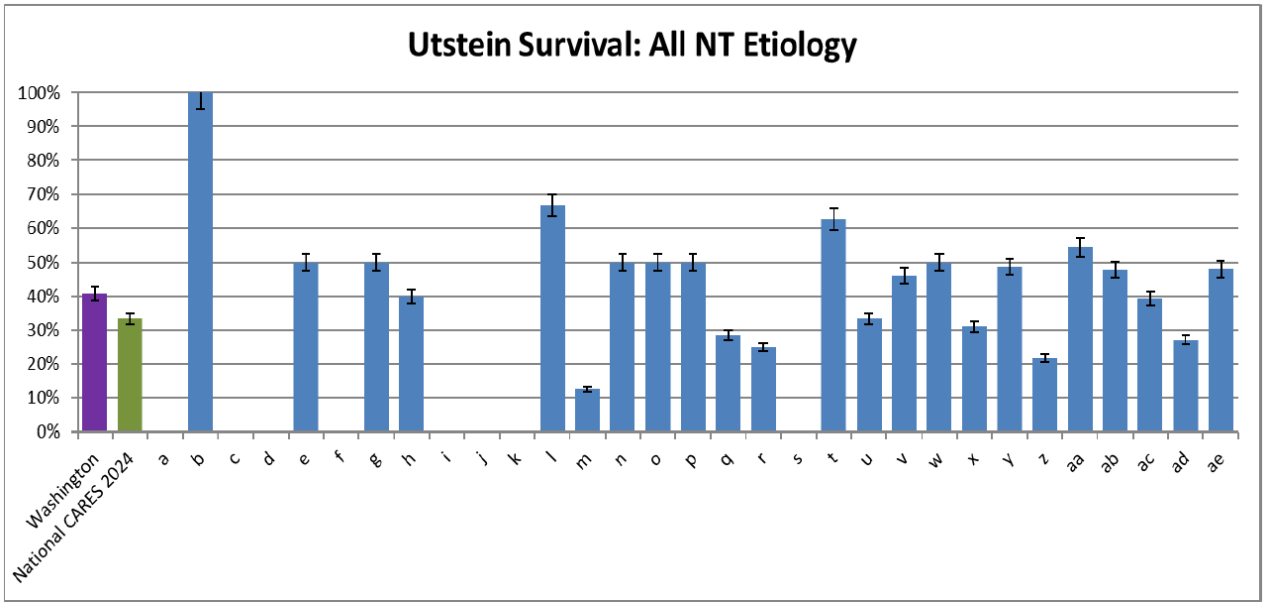
How Do We Compare?

The Charts Below Demonstrates How Whatcom County Compares to other Counties Survival Rates from Sudden Cardiac Arrest in 2024. Whatcom County is represented as "V" against other de-identified counties. (NT means Non-Trauma)

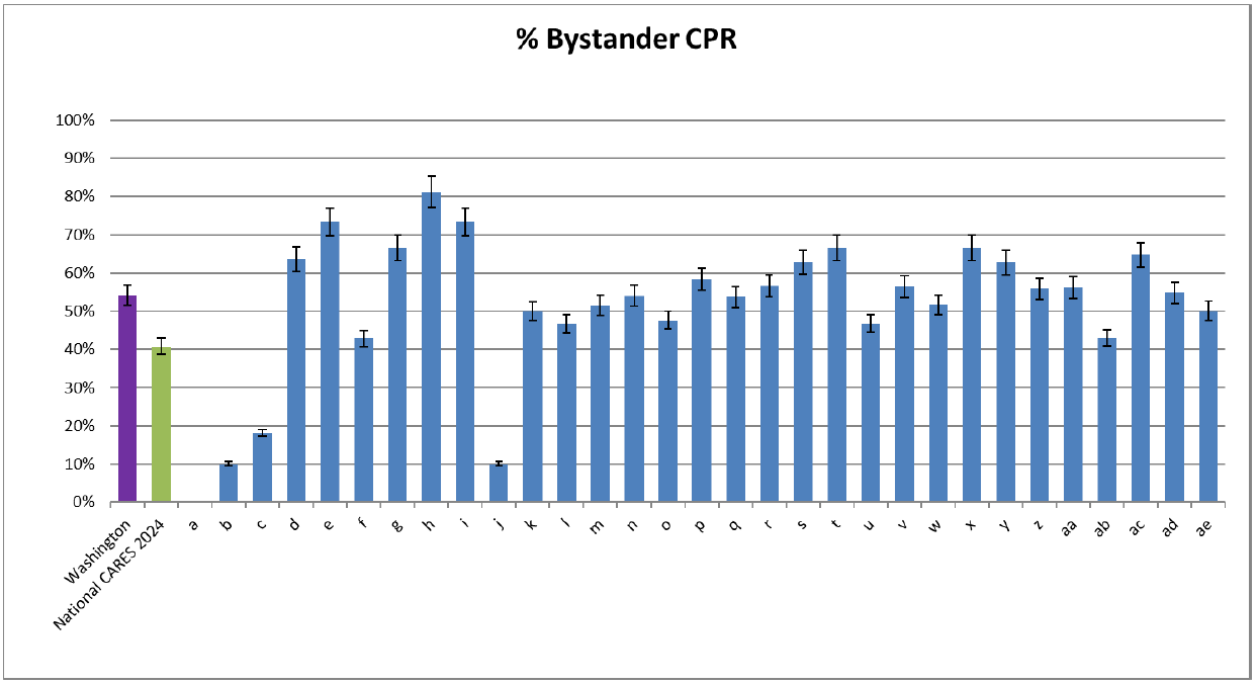
- **NT Etiology** represents all presenting arrythmias on EMS arrival where the patient survived leaving the hospital neurologically intact. (VF/VT/Asystole/PEA) (12%)



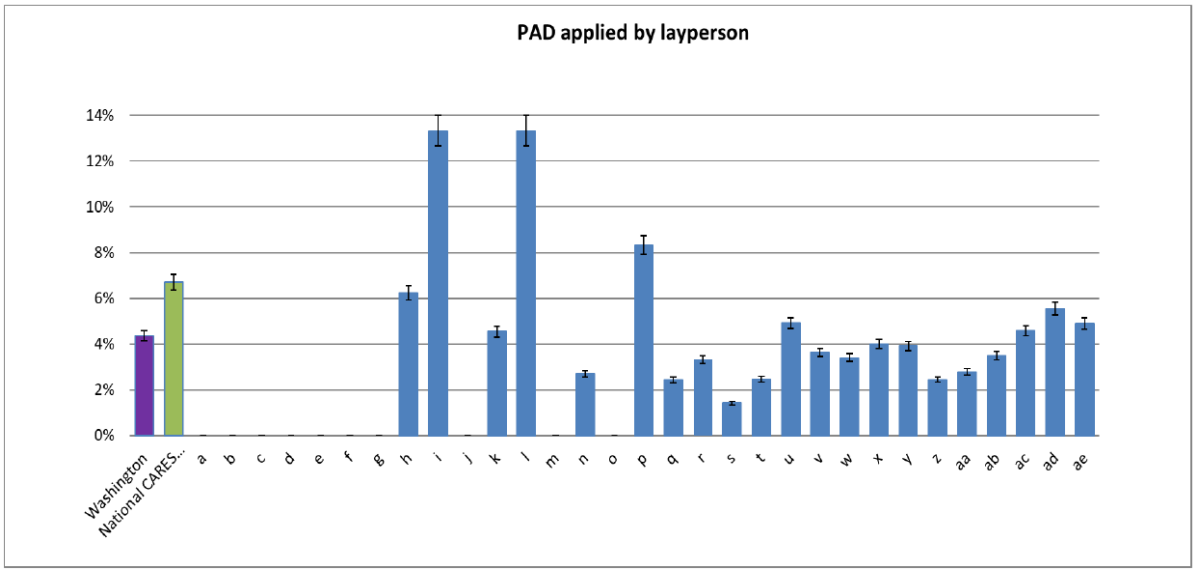
- **Utstein 1 Survival** represents those patients who present with Ventricular Fibrillation (VF). (45%) and were resuscitated leaving the hospital neurologically intact.



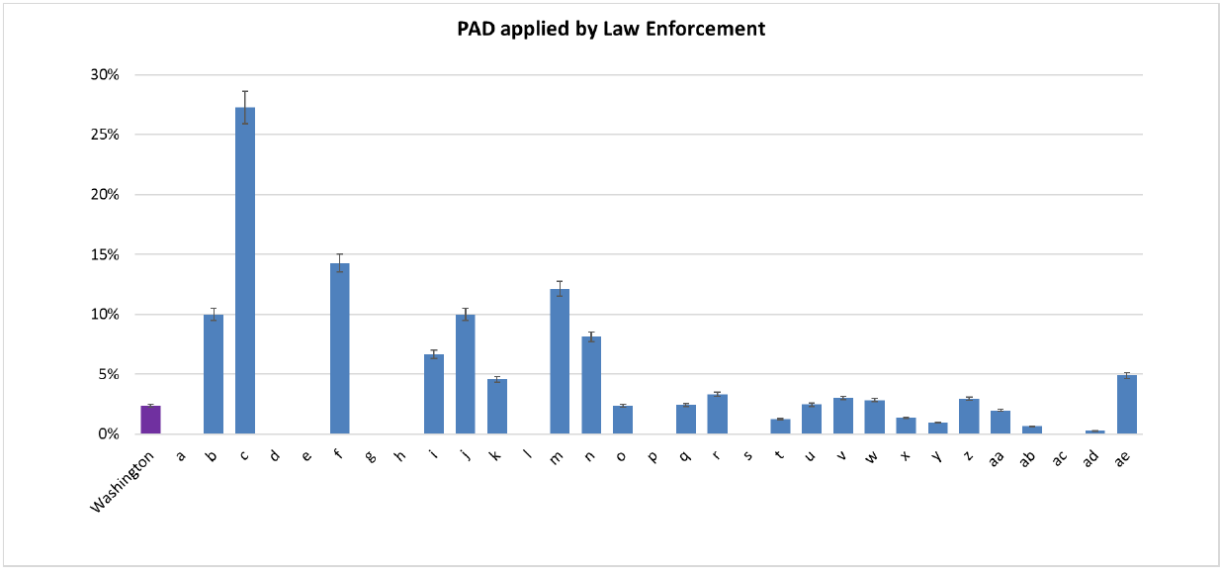
- Of all Cardiac Arrest in Whatcom County, 58% of those patients received CPR from a Bystander.



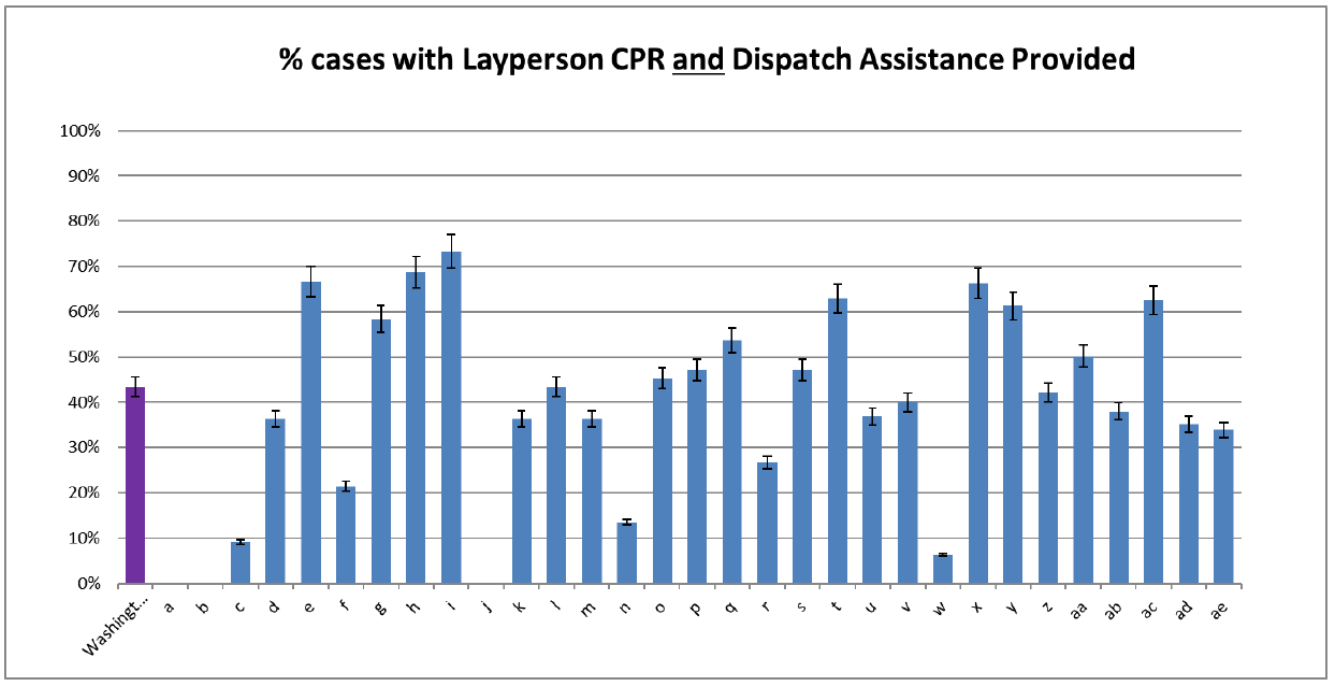
- Public Access Defibrillator (PAD) Applied by layperson. (3.8%)



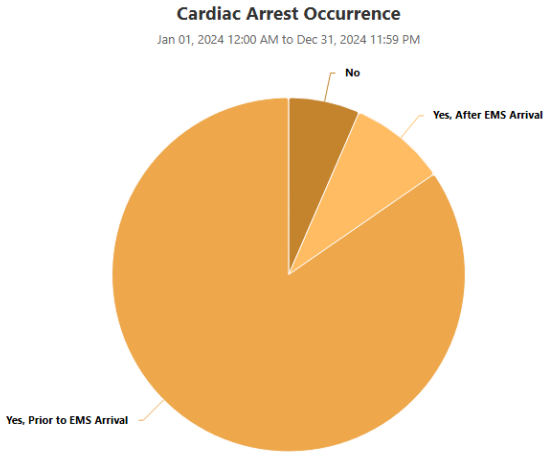
- Automatic External Defibrillator (AED) Applied by Law Enforcement (3.5%) in Whatcom County.

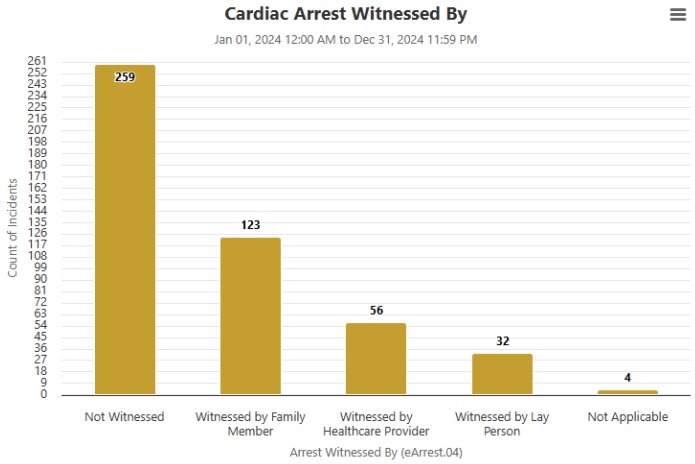


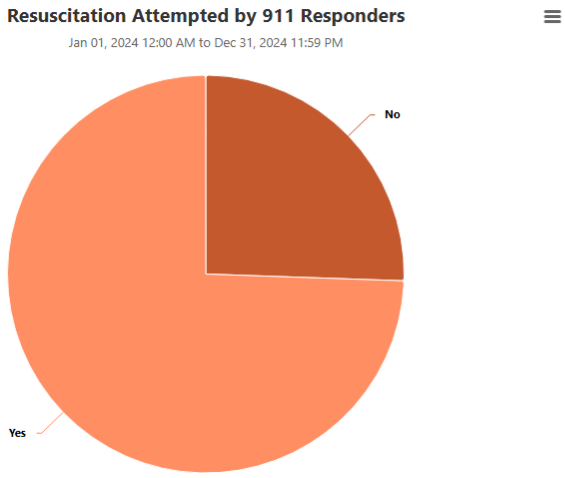
- Dispatch CPR Assistance Provided to Layperson. (911 CPR assisted) (40%) in Whatcom County.

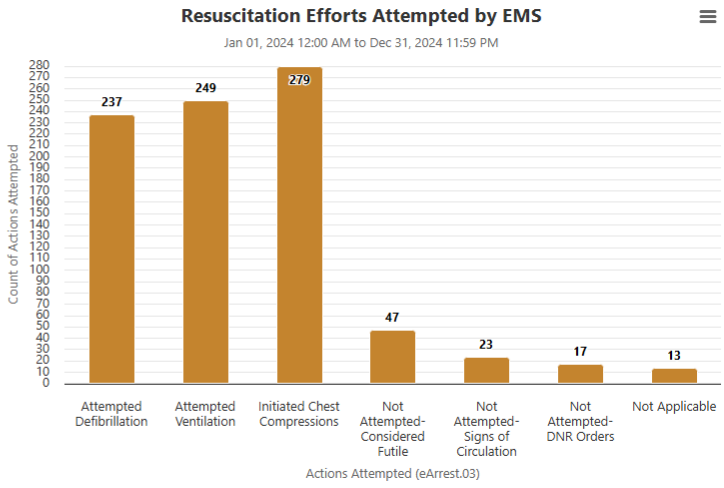


2024 Characteristic of Sudden Cardiac Arrest Whatcom County









Cardiac Arrest Etiology

Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM

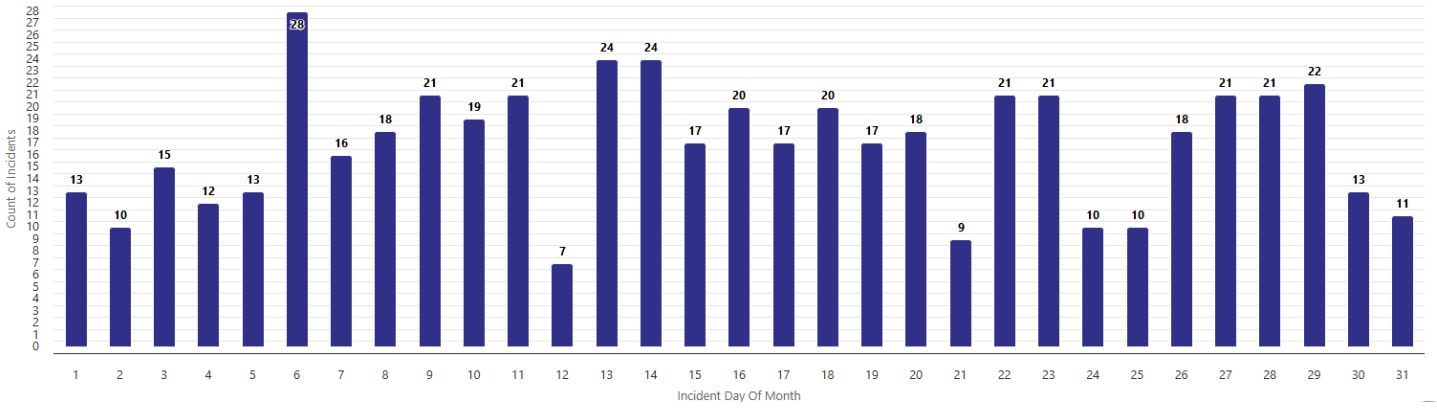
Cardiac Arrest Etiology (eArrest.02)	2024-January	2024-February	2024-March	2024-April	2024-May	2024-June	2024-July	2024-August	2024-September	2024-October	2024-November	2024-December
Cardiac (Presumed)	33	26	17	26	17	18	29			19	17	14
Drowning/Submersion	0	0	0	1	0	0	0			0	0	0
Drug Overdose	10	5	6	2	9	1	4	3	1	3	2	1
Exsanguination	0	1	0	0	0	0	1	0	0	0	0	0
Not Applicable	3	3	0	3	2	2	4	2	3	4	3	3
Not Recorded	0	0	0	0	0	0	0	1	0	0	1	0
Other	2	3	2	0	3	3	4	3	2	3	3	3
Respiratory/Asphyxia	4	0	0	4	6	7	6	1	4	3	3	5
Trauma	2	0	0	1	0	4	0	3	0	2	1	1

Year-Month

Cardiac Arrest Etiology: **Not Applicable**
Year-Month: **2024-June**
Incidents: **2**

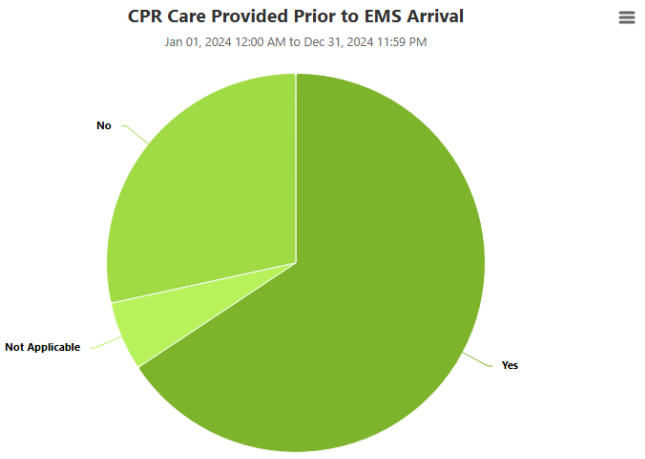
Incidents by Day of Month

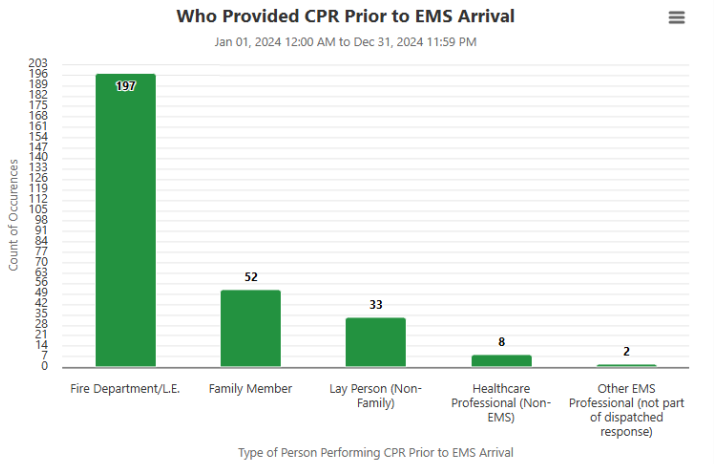
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM

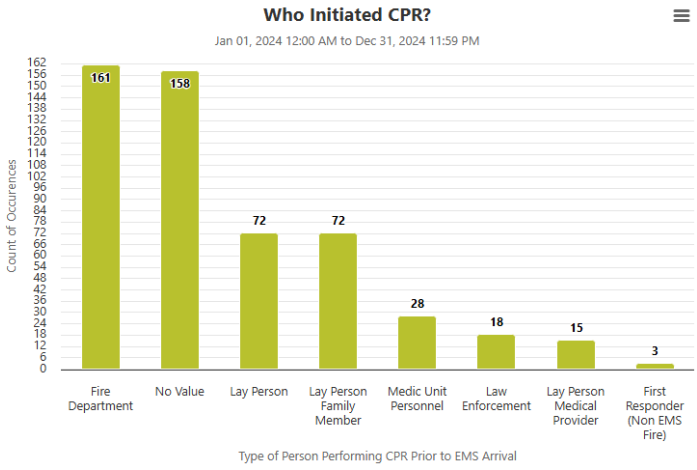


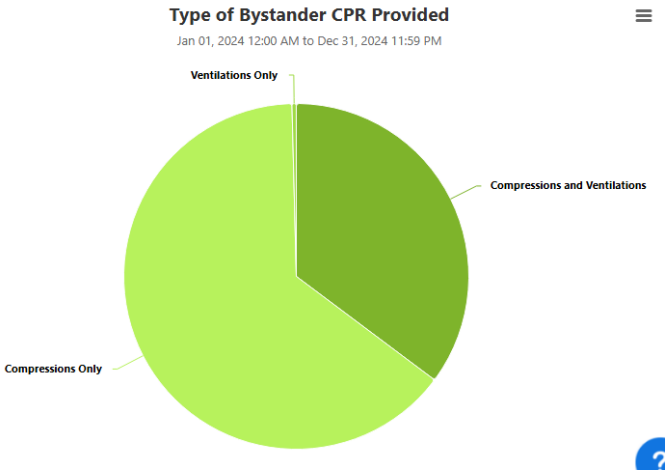
Immediate Cardio Pulmonary Resuscitation (CPR) along with the use of an Automatic External Defibrillator offers the best chance of survival from a Cardiac Arrest. Whatcom County emphasizes CPR and AED training along with the idea that citizen rescuers are the most important first step at saving a life.

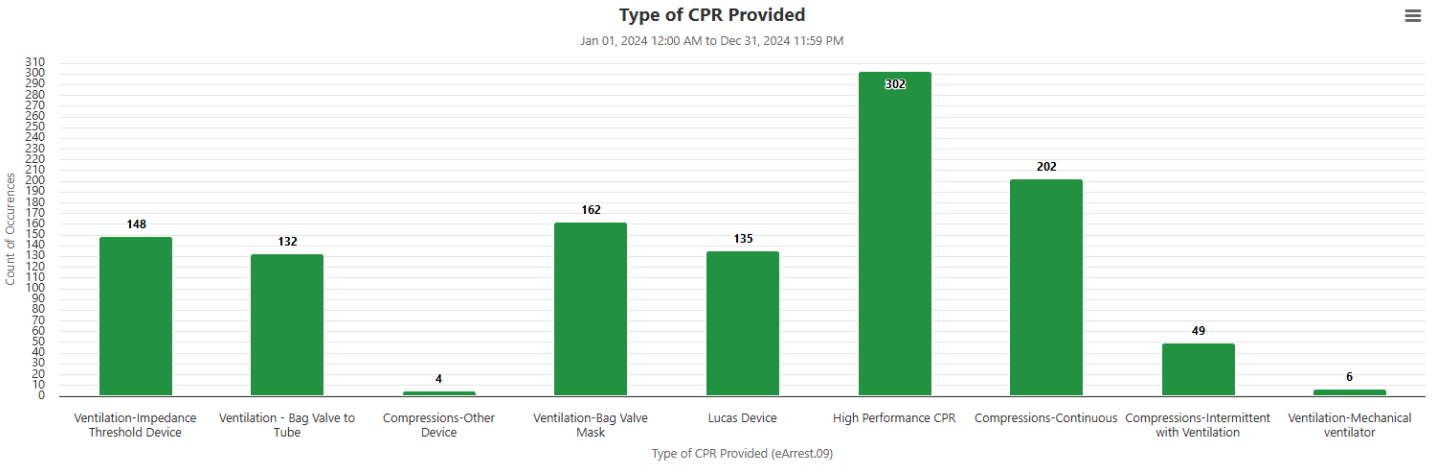
CPR

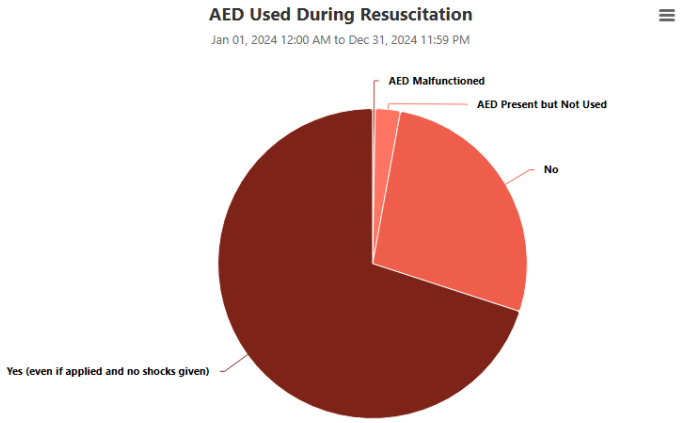


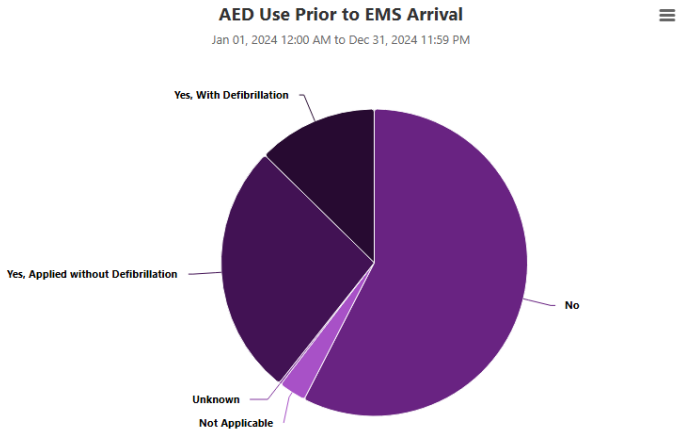


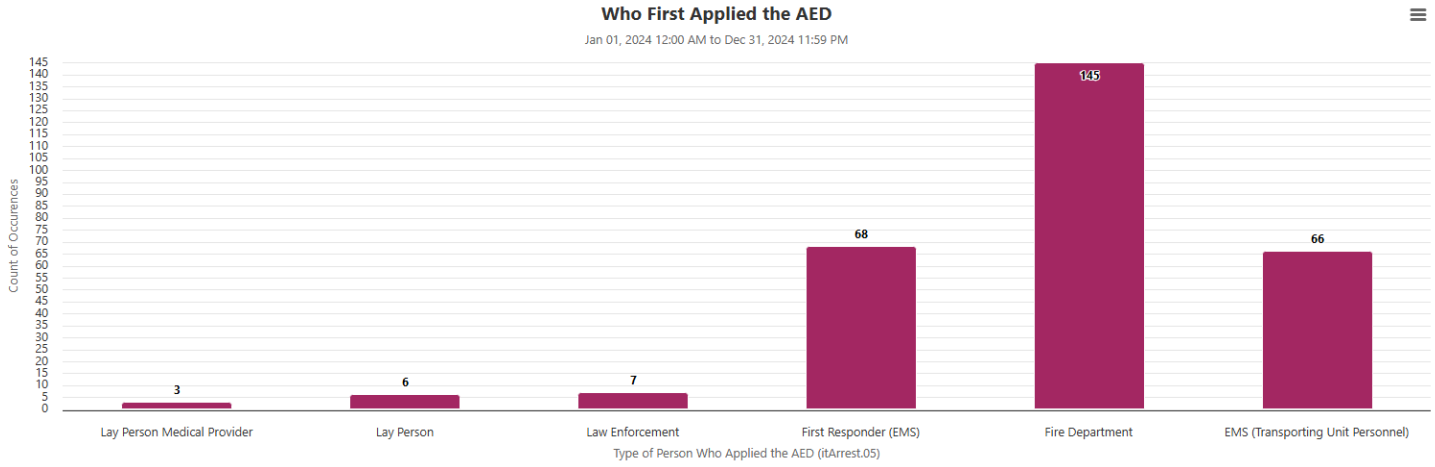


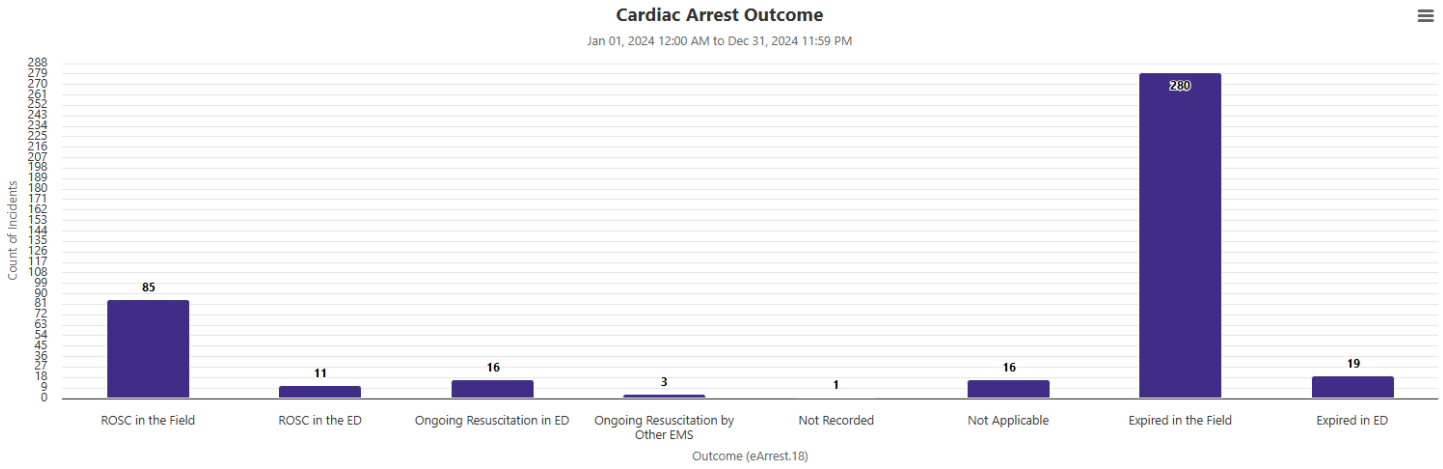


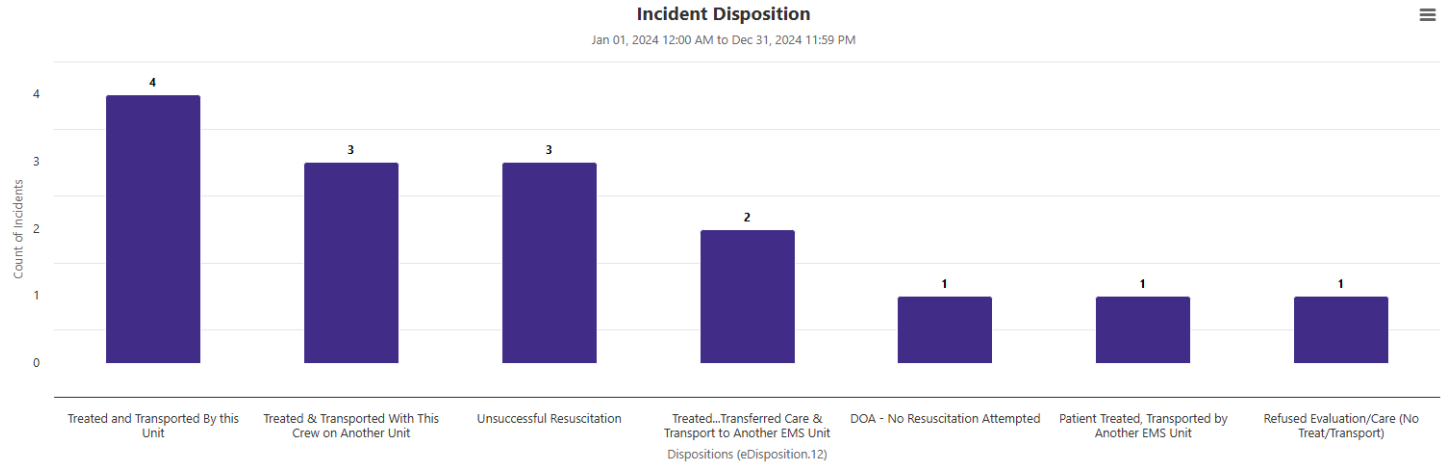

Type of CPR Provided
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
Count of Occurences
148
132
4
162
135
302
202
49
6
Ventilation-Impedance Threshold Device
Ventilation - Bag Valve to Tube
Compressions-Other Device
Ventilation-Bag Valve Mask
Lucas Device
High Performance CPR
Compressions-Continuous
Compressions-Intermittent with Ventilation
Ventilation-Mechanical ventilator
Type of CPR Provided (eArrest.09)


AED Used During Resuscitation
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
AED Malfunctioned
AED Present but Not Used
No
Yes (even if applied and no shocks given)


AED Use Prior to EMS Arrival
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
Yes, With Defibrillation
Yes, Applied without Defibrillation
No
Unknown
Not Applicable


Who First Applied the AED
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
Count of Occurences
3
6
7
68
145
66
Lay Person Medical Provider
Lay Person
Law Enforcement
First Responder (EMS)
Fire Department
EMS (Transporting Unit Personnel)
Type of Person Who Applied the AED (itArrest.05)

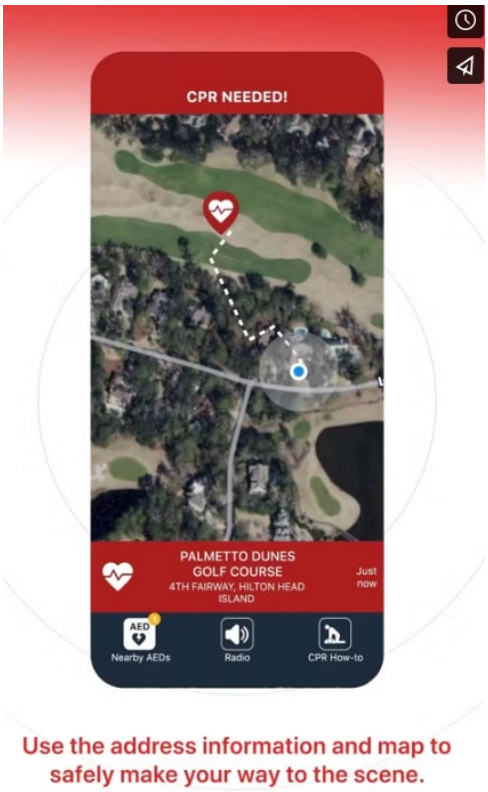

Cardiac Arrest Outcome
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
Count of Incidents
85
11
16
3
1
16
280
19
ROSC in the Field
ROSC in the ED
Ongoing Resuscitation in ED
Ongoing Resuscitation by Other EMS
Not Recorded
Not Applicable
Expired in the Field
Expired in ED
Outcome (eArrest.18)


Incident Disposition
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM
Count of Incidents
4
3
3
2
1
1
1
Treated and Transported By this Unit
Treated & Transported With This Crew on Another Unit
Unsuccessful Resuscitation
Treated...Transferred Care & Transport to Another EMS Unit
DOA - No Resuscitation Attempted
Patient Treated, Transported by Another EMS Unit
Refused Evaluation/Care (No Treat/Transport)
Dispositions (eDisposition.12)

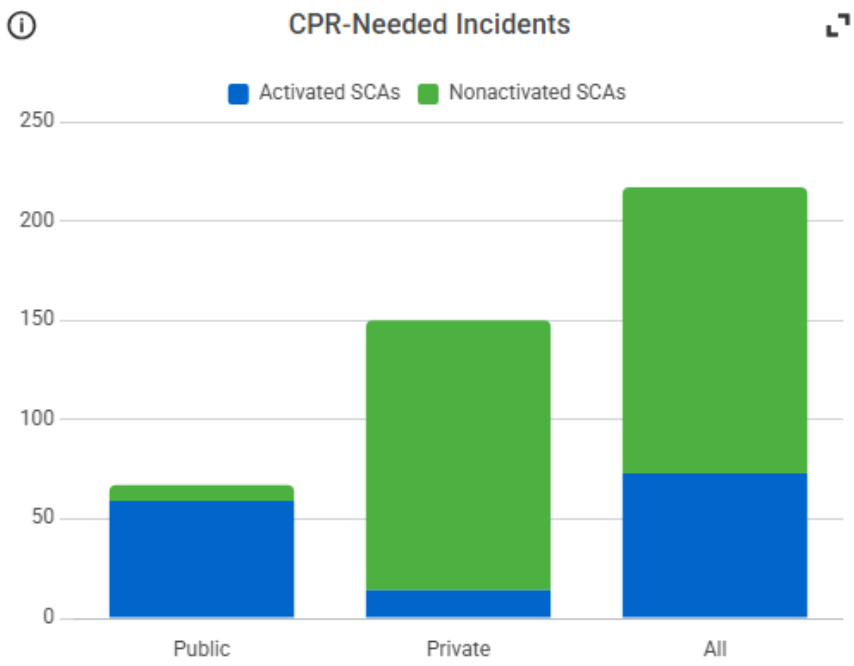
Pulse Point – The Pulse Point App is basically a way to "crowd source" a response for sudden cardiac arrest. Whatcom County has deployed Pulse Point since 2017. Efforts to expand the use of Pulse Point have shown positive results where there are **6749** active users in the county.

PulsePoint Respond empowers everyday citizens to provide life-saving assistance to victims of Sudden Cardiac Arrest. App users who indicated they are trained in Cardiopulmonary Resuscitation (CPR) and willing to assist in case of an emergency and may require CPR.

If the cardiac emergency is in a public place, the location-aware application will alert users in the vicinity of the need for CPR simultaneous with the dispatch of advanced medical care. The application also directs potential rescuers to the exact location of the closest Automated External Defibrillator. (AED)

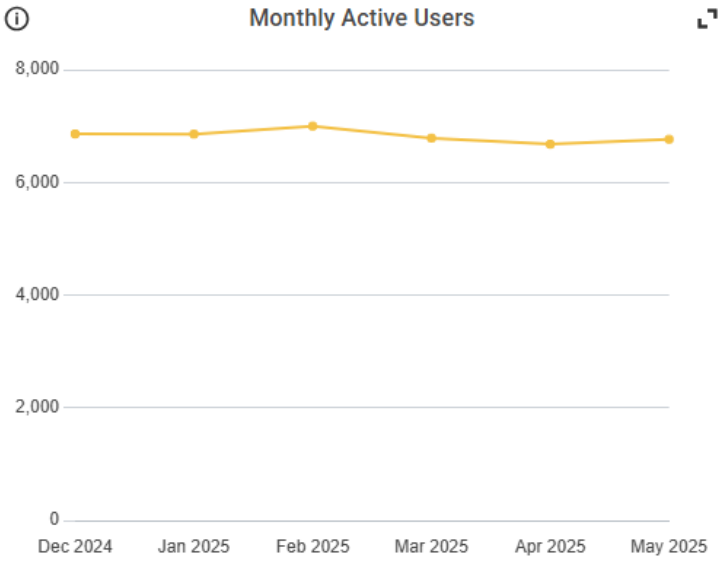


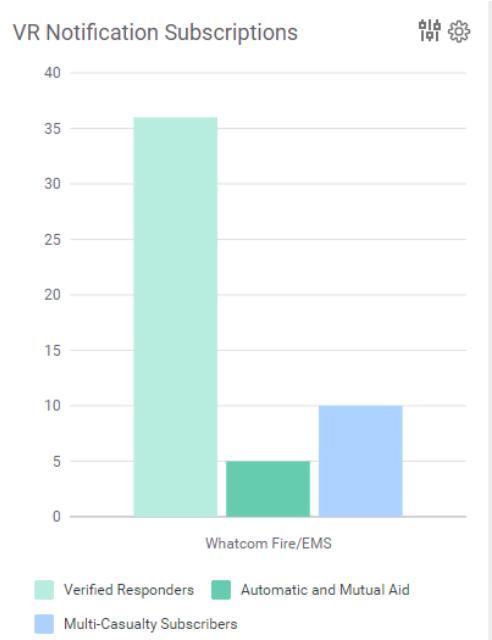
Use the address information and map to safely make your way to the scene.



The Pulse Point **"Professional Responder"** program was deployed in early 2019. Off-duty responders in the region can now be notified if someone within a half mile has suffered a cardiac arrest. Law Enforcement, Fire Fighters and Paramedics are also your neighbors and can help in an emergency. If your neighbor happens to be a "professional responder", they might have the opportunity to save a life before EMS arrival. Closing the gap between cardiac arrest and early defibrillation are the goals.

If alerted, a responder in your area may make a difference between life and death. Agencies manage enrollment in their Professional Responder program and invite employees and community members to participate. Verified responders can be equipped with an AED, PPE or any other equipment deemed valuable for patient care prior to the arrival of on duty personnel.



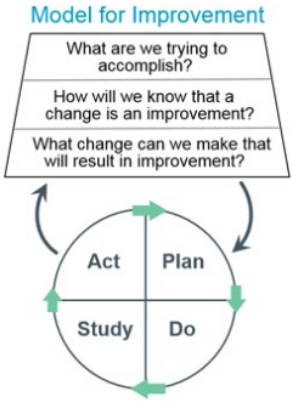


Agency	Total		
	Verified Responders	Automatic and Mutual Aid	Multi-Casualty Subscribers
Whatcom Fire/EMS	36	5	10
Total	36	5	10

Most recently, the Professional Responder program has been extended to the law enforcement agencies in the county. The Bellingham Fire Department and the Lynden Fire Department upgraded the app on the officer's phone to alert those first responders of a cardiac arrest. Most all law enforcement officers in the county carry AED's and First Aid kits in their cars and over the years, the officers have arrived on-scene before EMS where they provided the first defibrillation

Continuous Quality Improvement (CQI) programs are guided by the EMSTC sub-committee and the Medical Program Directors who look at system performance indicators for system enhancements and to evaluate the quality of care delivered by EMS providers.

-BLS CQI is conducted during quarterly meetings evaluating significant calls that are flagged for review. Response times, provider treatment decisions and selected performance measures are part of the discussions. Opportunities for system improvement, identification of training opportunities for increased safety and skill enhancement are the outcome goals for the CQI process.



-ALS CQI is primarily discussed through processes built within the two ALS agencies. Chart Review and skills evaluations are conducted during closed sessions lead by the supervising physician of each organization. Particular attention is paid to Stroke, Cardiac Arrest, Trauma, ST Elevation MI's, Sepsis and Overdose responses.

-Dispatch CQI is provided by the Prospect Dispatch Center that evaluates dispatcher performance for not only the proper dispatching of resources but for the quick identification of certain immediate threats to life situations that includes Sudden Cardiac Arrest.

Key Performance Indicators or "KPI's" are used to gauge the various performance measures in the EMS system. WCEMS monitors many KPI' S that are standardized in the Washington Emergency Medical Services Information Systems known as "WEMSIS". Whatcom County contributes to WEMSIS with 100% reporting of these KPI's. The chart below displays a summary of those KPI's captured both locally and at the State office.

Summary of Washington State EMS Key Performance Indicators	
Critical Trauma Patient Management	
1.1	Percent of Step 1 & Step 2 trauma patients with an EMS scene time <10 minutes (arrival-to-departure of ambulance)
1.2	Percent of Step 1 & Step 2 trauma patients transported to a designated trauma center.
Heart Failure Patient Management	
2.1	Percent of suspected heart failure patients who received CPAP or had the CPAP protocol documented.
2.2	Percent of suspected heart failure patients who received nitroglycerine (NTG) or had NTG protocol documented.
Asthma Patient Management	
3.1	Percent of bronchospasm patients with respiratory distress, indicative of wheezing or known history of asthma or reactive airways disease, who received a beta-agonist or had the beta-agonist administration protocol documented by the first EMS crew able to provide such treatment.
Seizure Patient Management	
4.1	Percent of still seizing (upon EMS arrival) and post-seizure patients who received a blood glucose (BG) check.
4.2	Percent of still-seizing (upon EMS arrival) or recurrent seizure patients treated with benzodiazepines by EMS.
ACS/Chest Pain Patient Management	
5.1	Percent of patients ≥ 35 years old with suspected cardiac chest pain/discomfort or other ACS symptoms who received aspirin from EMS or had the aspirin protocol documented.
5.2	Percent of patients ≥ 35 years old with suspected cardiac chest pain/discomfort or other ACS symptoms with 12-Lead ECG acquired by EMS.
5.3	Percent of patients ≥ 35 years old with suspected cardiac chest pain/discomfort or other ACS symptoms who received a 12-lead ECG in <10 minutes from arrival on scene of 1st 12-lead ECG equipped unit.
5.4	Percent of patients ≥ 35 years old with suspected cardiac chest pain/discomfort or other ACS symptoms with an EMS scene time (arrival-to-departure of ambulance) <20 minutes.
5.5	Percent of suspected STEMI patients in which a Code STEMI alert is activated prior to hospital arrival.
5.6	Percent of suspected STEMI patients transported to a designated cardiac receiving center.
Stroke/TIA Patient Management	
6.1	Percent of suspected CVA/TIA patients with a FAST exam performed and all elements documented or documentation of why an exam could not be completed.
6.2	Percent of suspected CVA/TIA patients who received a blood glucose check.
6.3	Percent of suspected CVA/TIA patients with an EMS scene time <20 minutes.
6.4	Percent of suspected CVA/TIA patients with Last Known Well Time <6 hours to hospital arrival, in which a Code Stroke alert is activated prior to hospital arrival.
6.5	Percent of patients transported to a designated stroke receiving center.
6.6	Percent of suspected CVA/TIA patients who have a FAST exam score who have a LAMS Stroke Scale Assessment completed and documented or documentation of why an assessment could not be completed
Cardiac Arrest Patient Management	
7.1	Percent of non-traumatic cardiac arrest patients who received bystander CPR.
7.2	Percent of patients (in cardiac arrest before EMS arrival) in an initially "shockable" rhythm who were defibrillated in < 8 minutes, from time the 911 call was received at fire/EMS dispatch.
7.3	Percent of patients (in cardiac arrest before EMS arrival) with a witnessed collapse, in an initially "shockable" rhythm, with survival to discharge from an acute care hospital.
7.4	Percent of overall non-traumatic cardiac arrest patients with survival to discharge from an acute care hospital.
Advanced Airway Patient Management	
8.1	Percent of patients intubated with "first-pass" success.
8.2	Overall percent of patients who are successfully intubated with an ET tube.
8.3	Overall percent of patients with successful placement of a supraglottic (SGA) airway.
8.4	Overall percent of patients who are successfully intubated or who have a SGA successfully placed.
8.5	Percent of ET intubated patients and patients with SGAs with documentation of continuous wave-form ETCO2.

Current KPI's Monitored: **Update this…**

- **Glucose Checks** (CVA Patients) Documented CVA's where Glucose is required to check.
- ALS 7455 Cases 603 Missing BGL's
  BLS 382 Cases 107 Missing BGL's
- **Nitrous Use Cases:** 129 Total (97 Patients Decreased Pain) (25 Patients "No change") (2 Patients "Pain Increase")
- Use Cases: Falls 34 Cases and Traumatic Injuries 43.
- **BLS ASA Administration**: 148 Documented Cases (Average Administration Time 9.5 Minutes.
- **Advanced Airway/Intubations**: 290 Attempts (254 Documented Successful)
- **Vital Signs Documentation Completeness**

Characteristics of System Performance

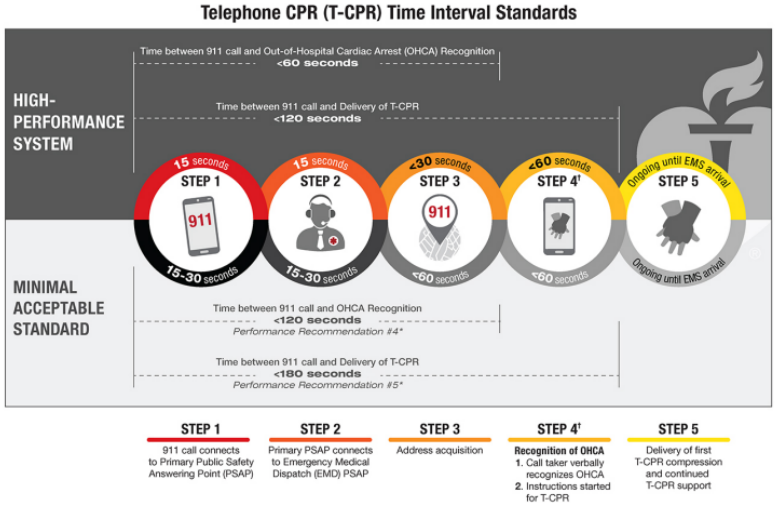
The Summary of Statistics section provides a snapshot of system performance, descriptions of the types of responses including call volumes and location of calls. Image Trend employs a powerful analytics module called "Continuum". Continuum is integrated with a centralized repository of data with many types of data sets and templates for analyzation of system performance.

All WCEMS agencies report data to the National Emergency Medical Services Information System (NEMSIS) and the Washington Emergency Medical Services Information System (WEMSIS). NEMSIS is the national database used to store EMS data from the United States and Territories and is described as a collaborative system to improve patient care through standardization, aggregation, and utilization of point of care EMS data at the local, state, and national level. For Washington State, WEMSIS is the state's prehospital repository for electronic patient care records with a similar mission. Image Trend provides WCEMS with 100% reporting to both NEMSIS and WEMSIS. Participation with WEMSIS supports:

- Description of statewide incidents and injury emergencies.
- Identification of quality improvement measures.
- Evaluation of measures for process and policy improvement.
- Internal and external benchmarking.
- Local and regional leadership through data competency and evidence-based decision making.

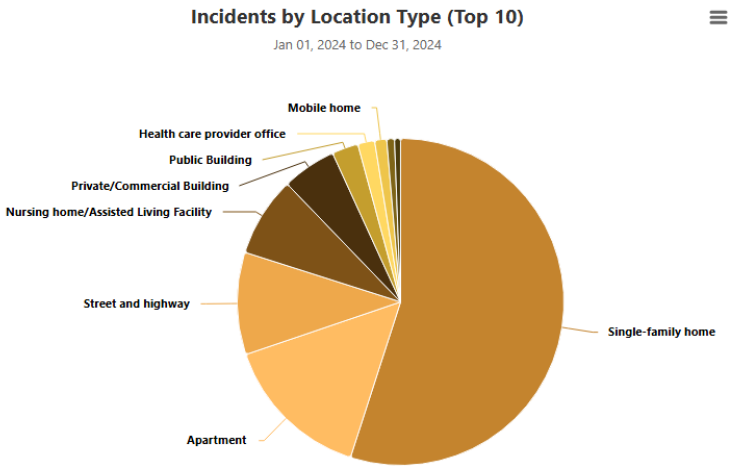
Dispatch

911 calls are received by the Public Safety Access Point (PSAP) called the WHATCOMM Communications Center. Calls are screened and transferred to the Prospect Dispatch Center for Fire and EMS responses. The Prospect Dispatch center is staffed by dispatchers certified in priority dispatching techniques with an emphasis on quickly determining Sudden Cardiac Arrest or major trauma. In the case of both conditions, call processing time is an important measure for getting units quickly to the scene. For Cardiac Arrest, the most important indicator is to monitor how quickly dispatchers recognized Cardiac Arrest and how fast they can coach Telephone CPR to the reporting party. **Telecommunicators** are the true, first responders and are a critical link in the cardiac arrest chain of survival. It is the telecommunicator, in partnership with the caller, who has the opportunity to identify a patient in cardiac arrest, providing the initial level of care by delivering telecommunicator CPR (T-CPR) instructions to the caller, and quickly dispatching the appropriate level of help. It is through these actions that the telecommunicator can make the difference between life and death. It is important to emphasize that the telecommunicator and the caller form a unique team in which the expertise of the telecommunicator and the willingness of the caller to provide T-CPR represents the best opportunity to improve survival from SCA.

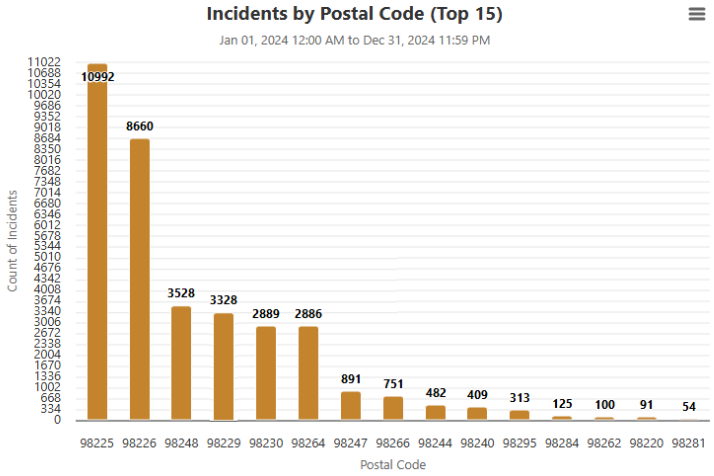


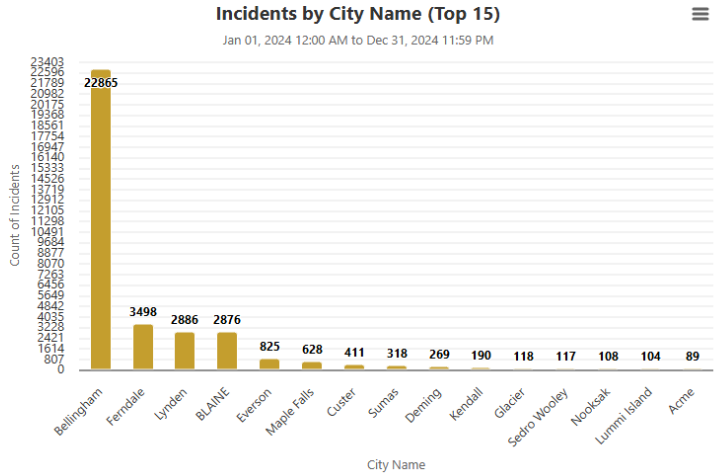
The benchmark median time between the 9-1-1 call connection and Out of Hospital Cardiac Arrest (OHCA) recognition should be less than 90 seconds, and the benchmark median amount of time between the 9-1-1 call connection and first CPR compression directed by telecommunicator should be less than 150 seconds

General Dispatch Data 2024 Total Incidents = 35131



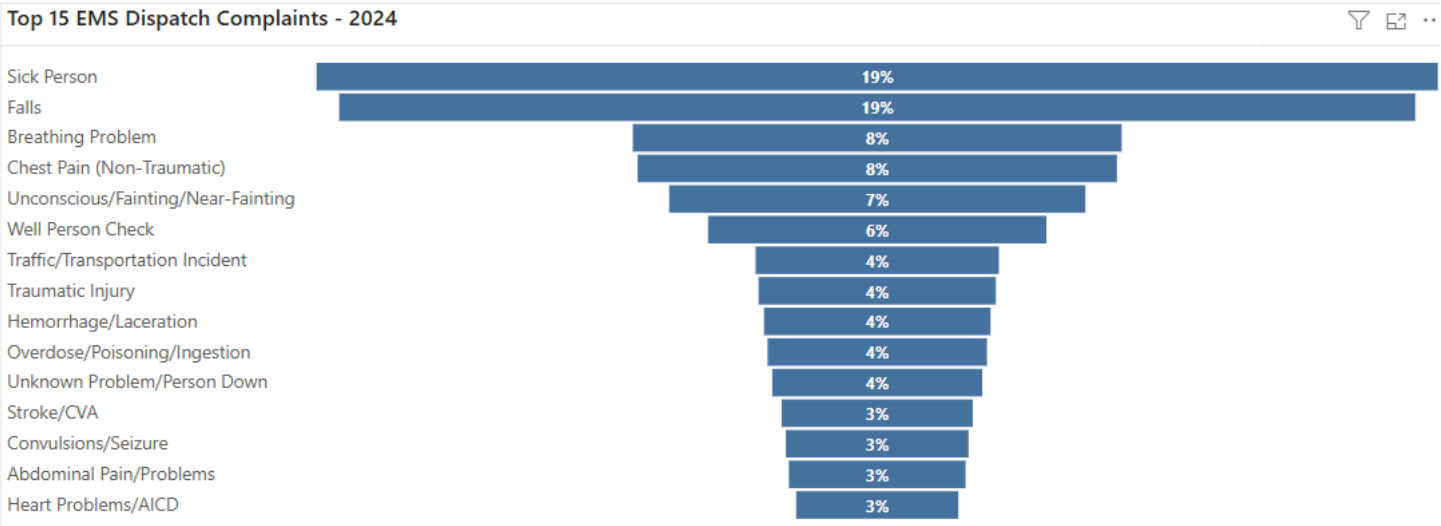
Dispatch





Patient Disposition - 2024

FULL TRANSPORT DISPOSITION	EMS Incident Count	% of Total
Transported	15,749	56.2%
Non Transport	9,370	33.4%
Disposition Not Identified	2,511	9.0%
DOA without Resuscitation Efforts	252	0.9%
DOA with Resuscitation Efforts	156	0.6%

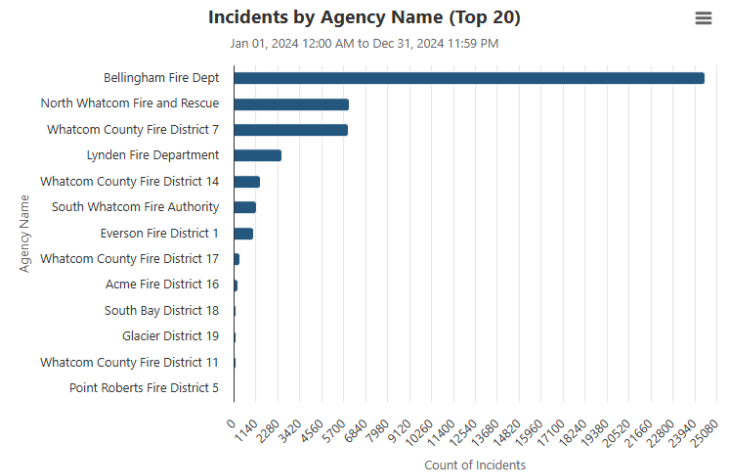


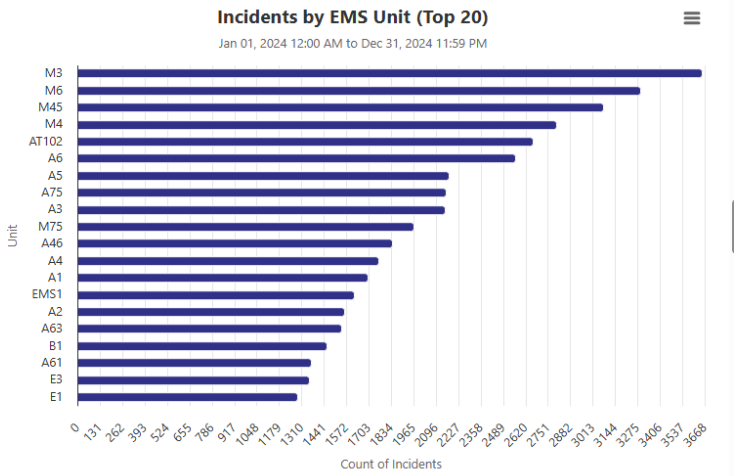
Top Provider Impressions Documented By Providers

Primary Impression - Top 15
Incident Count

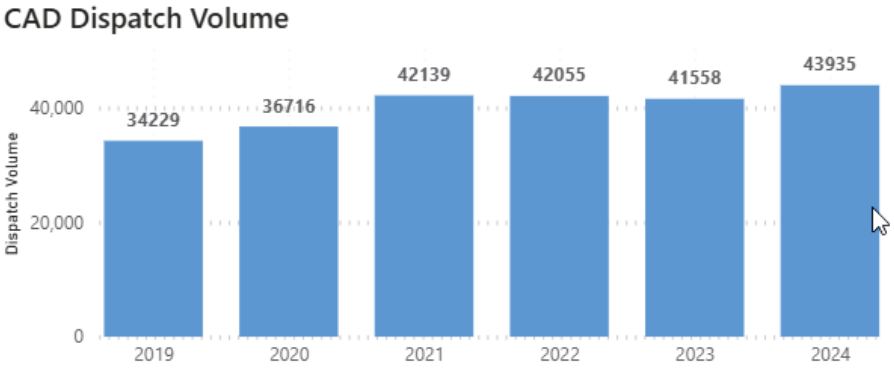
Situation Provider Primary Impression	2024
Weakness (R53.1)	1,842
No findings or complaints - Adult (Z00.00)	1,287
Pain - Chest pain (R07.9)	1,163
Injury - Head (S09.90)	979
Abdominal Pain (R10.84)	978
Syncope/ Near Syncope/ Collapse (R55)	977
Overdose/Drug Ingestion (itICD.047)	974
Altered/Decreased Mental Status (R41.82)	725
Psychiatric Disorder / Mental Health (F99)	669
Respiratory Distress, acute (J80)	625
Back Pain (M54.9)	594
Pain - Acute secondary to trauma (G89.11)	581
Nausea and vomiting (R11)	574
No Injury / No Illness	547
Seizure (G40.909)	529

Call Volume



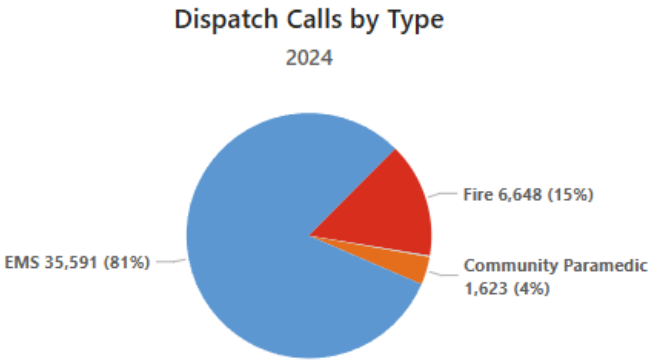


Comparison of 2019 to 2024 Basic Incident Counts
(Computer Aided Dispatch (CAD) Data)

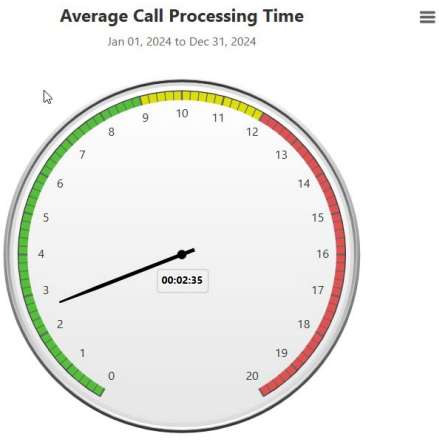


Year over Year Change

YEAR	Dispatch Volume	YOY Change %
2019	34229	41%
2020	36716	7%
2021	42139	13%
2022	42055	-0%
2023	41558	-1%
2024	43935	5%



Average Call Processing Time



90th Percentile Call Processing Time

Call Processing Times by Response Mode to Scene

Call Processing Times by Response Mode to Scene In Minutes

Jan 01, 2024 to Dec 31, 2024

Response Mode To Scene (eResponse.23)	Count of Incidents	Average PSAP to Unit Notified	90th Percentile PSAP to Unit Notified	Average Unit En Route to Arrived On Scene	90th Percentile Unit En Route to Arrived On Scene
Already on Scene	201	00:01:35	00:02:56	00:00:41	00:00:38
Code Red Downgraded to Code Yellow	236	00:02:52	00:03:59	00:13:39	00:25:20
Code Greened After Dispatch	121	00:04:09	00:04:08	00:08:36	00:18:04
Code Yellow	12,957	00:02:32	00:03:23	00:07:03	00:12:12
Code Red	18,357	00:02:36	00:03:35	00:06:42	00:13:16
Code Yellow Upgraded to Code Red	24	00:02:59	00:06:04	00:12:23	00:21:01

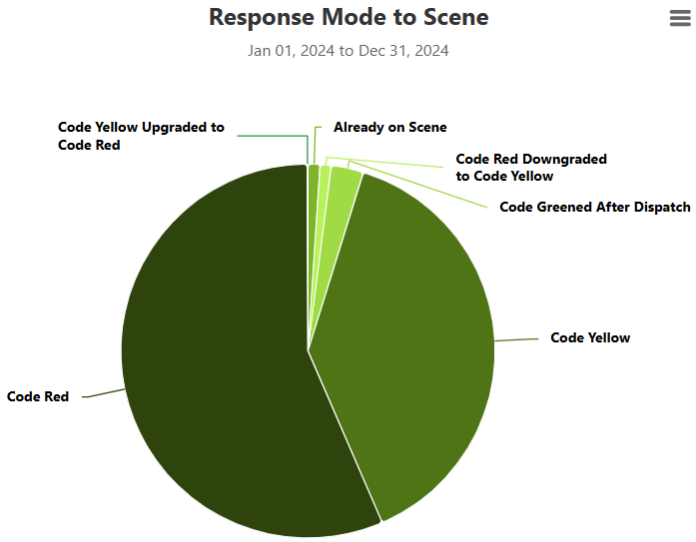
Response Performance Time by Agency

Response Performance by Agency – 90th Percentile

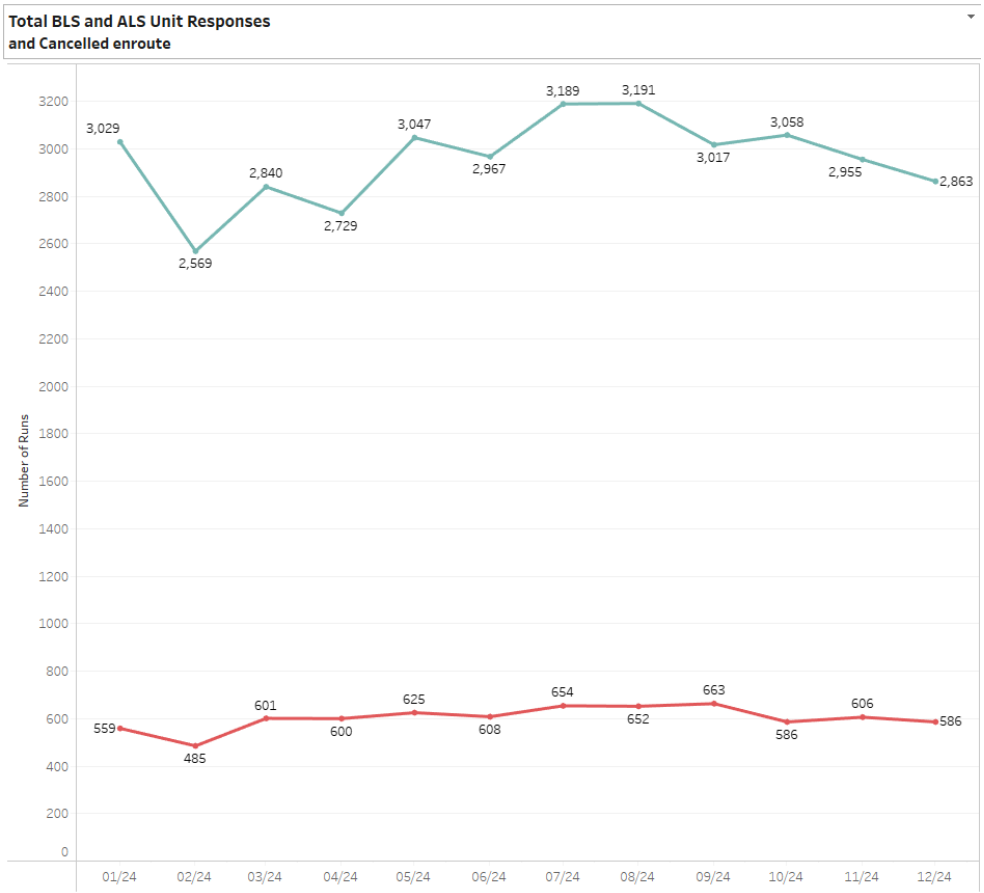
Jan 01, 2024 12:00 AM to Dec 31, 2024 11:59 PM

Agency Name	Count of Incidents	Turnout Time	Travel Time	Scene Time	Transport Time	Patient Offload Time	Time at Destination
Acme Fire District 16	442	00:13:18	00:12:47	00:50:14	00:39:33	00:00:00	00:14:26
Bellingham Fire Dept	40,671	00:02:40	00:11:47	00:27:34	00:22:09	00:00:00	00:13:19
Everson Fire District 1	2,279	00:03:39	00:15:43	00:42:22	00:32:48	00:00:00	00:31:27
Glacier District 19	149	00:16:30	00:31:45	02:05:09	00:00:00	00:00:00	00:17:03
Lynden Fire Department	4,481	00:03:14	00:09:42	00:31:16	00:31:51	00:00:00	00:25:41
North Whatcom Fire and Rescue	7,531	00:03:14	00:13:33	00:32:60	00:31:07	00:00:00	00:26:34
Point Roberts Fire District 5	1	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00
South Bay District 18	189	00:10:32	00:11:44	00:51:15	00:33:15	00:00:00	00:13:47
South Whatcom Fire Authority	2,978	00:02:46	00:18:31	00:49:58	00:28:43	00:00:00	00:14:56
Whatcom County Fire District 11	352	00:15:16	00:15:01	00:58:55	00:24:27	00:00:00	00:13:50
Whatcom County Fire District 14	2,867	00:08:03	00:13:06	00:43:59	00:40:24	00:00:00	00:21:12
Whatcom County Fire District 17	998	00:06:21	00:15:40	00:36:47	00:23:25	00:00:00	00:15:14
Whatcom County Fire District 7	9,464	00:02:51	00:15:38	00:37:39	00:26:39	00:00:00	00:15:32

Response Mode to Scene and Cancelled (Code Green) Calls (ALS/BLS)

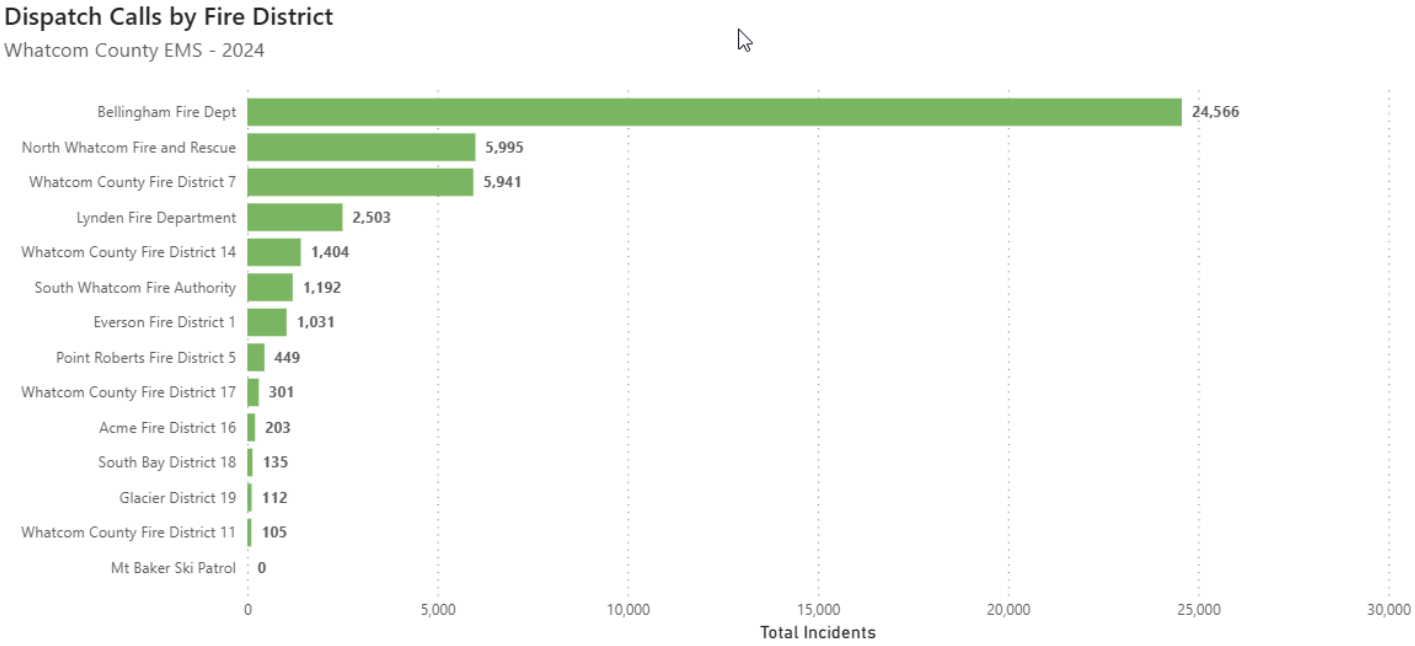


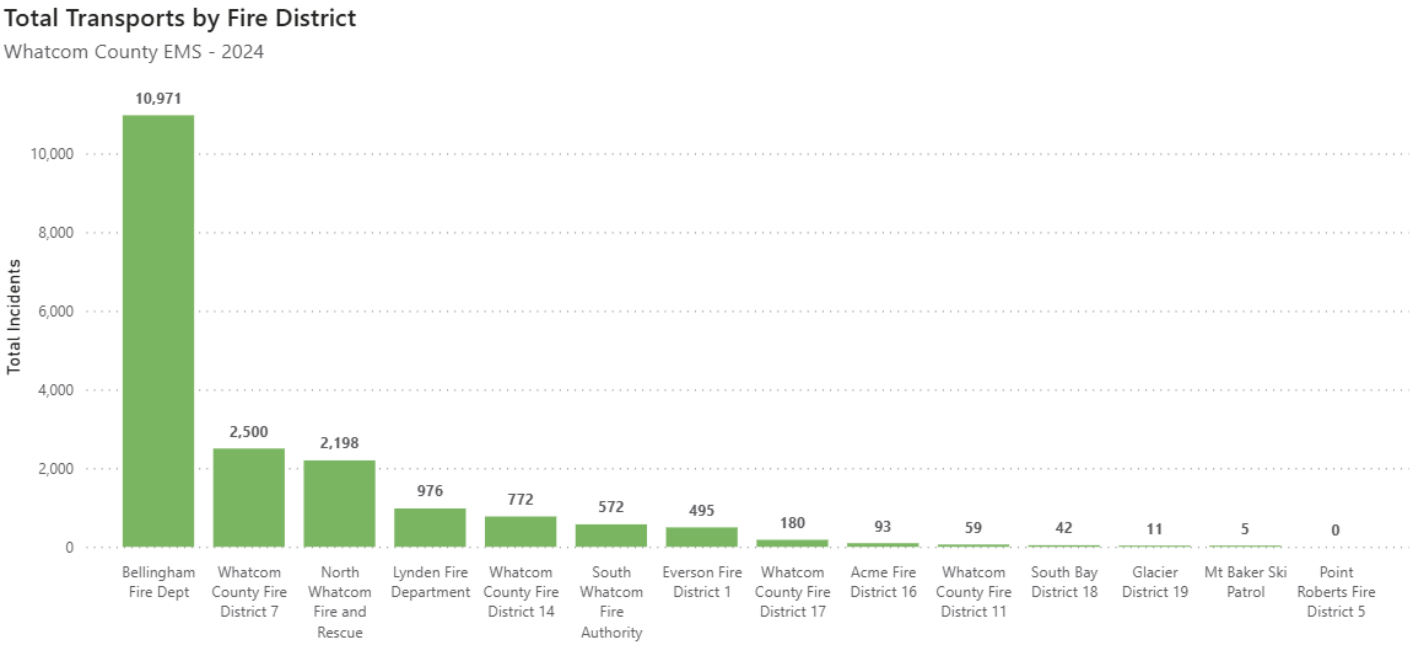
Code Red (Emergency Response)
Code Yellow (Non-Emergent Response)
Code Green (Cancelled enroute/onscene)



Call Volume Characteristics:

Dispatch Calls by District 2024 (BLS and ALS)



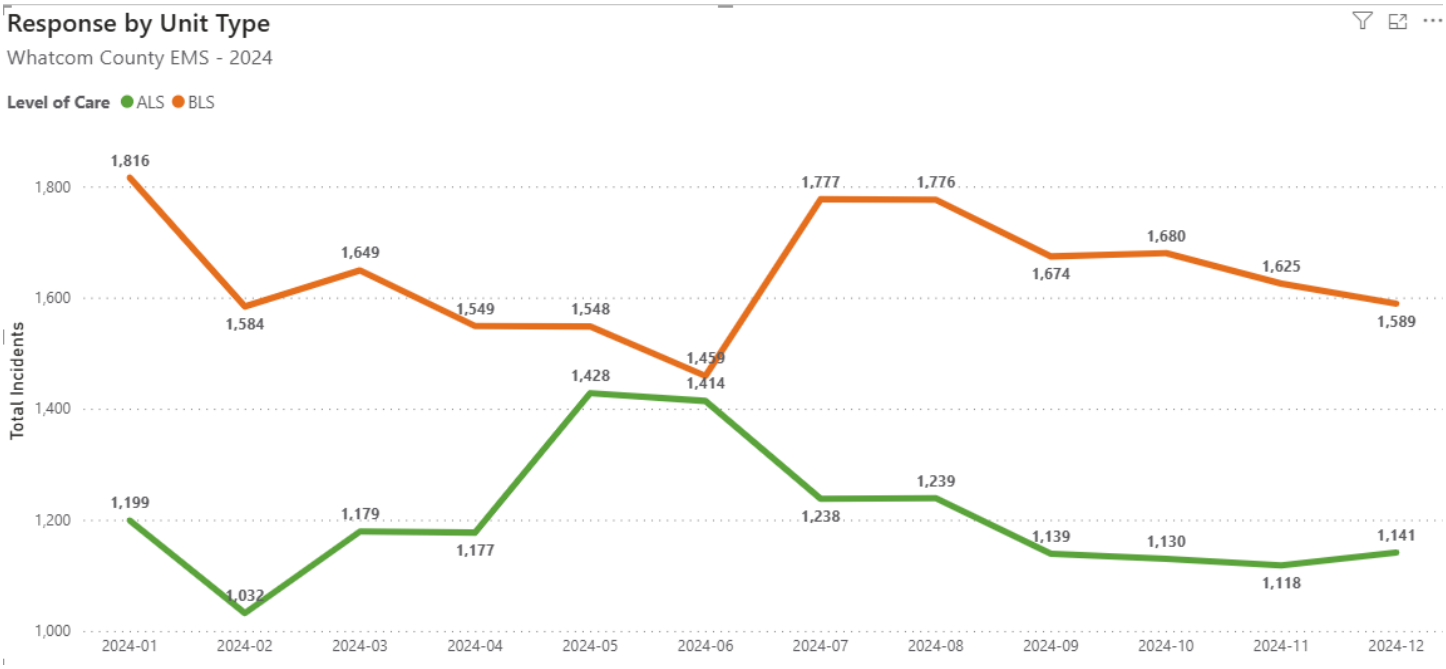


Transports by Agency and Average Transport Time

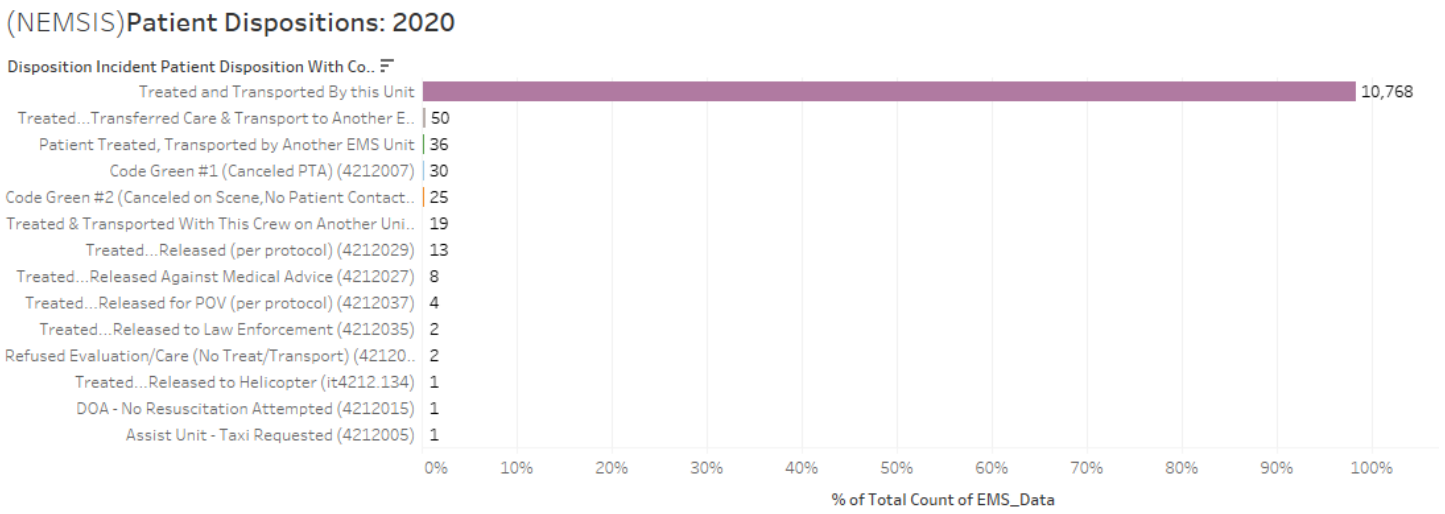
Transports by Agency

Agency Name	Total Transports	AVG Transport Time MM:SS
Acme Fire District 16	89	30.52
Bellingham Fire Dept	10,907	11.35
Everson Fire District 1	483	25.09
Glacier District 19	11	3.49
Lynden Fire Department	970	26.27
North Whatcom Fire and Rescue	2,191	21.32
South Bay District 18	42	24.72
South Whatcom Fire Authority	560	21.01
Whatcom County Fire District 7	2,464	18.16
Whatcom County Fire District 11	58	13.60
Whatcom County Fire District 14	756	33.98
Whatcom County Fire District 17	178	18.52

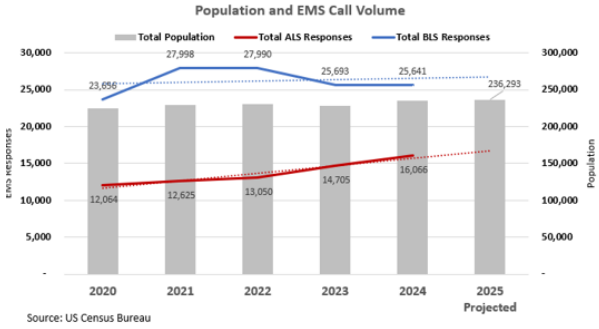
Response by Levels of Care and By Month (ALS/BLS 2024 Volume)

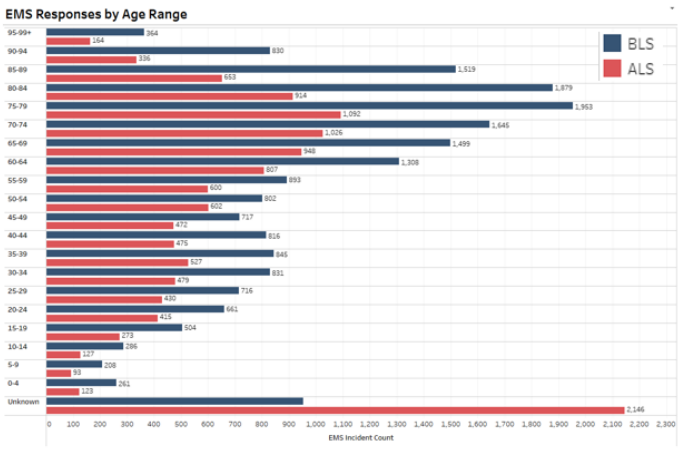


Top EMS Dispositions



MEASURING & IMPROVING





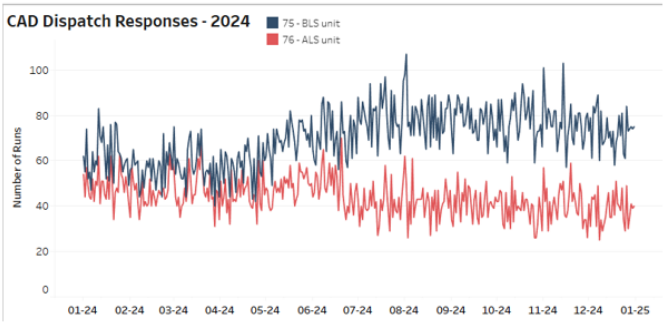
2024 STATS

41,707	25,641 (61%)	16,066 (39%)
Total EMS Responses	BLS-Only Responses	BLS & ALS Responses

Average# of Calls Per Month	Average# of Calls Per Day
2,137 BLS	**70** BLS
1,339 ALS	**44** ALS

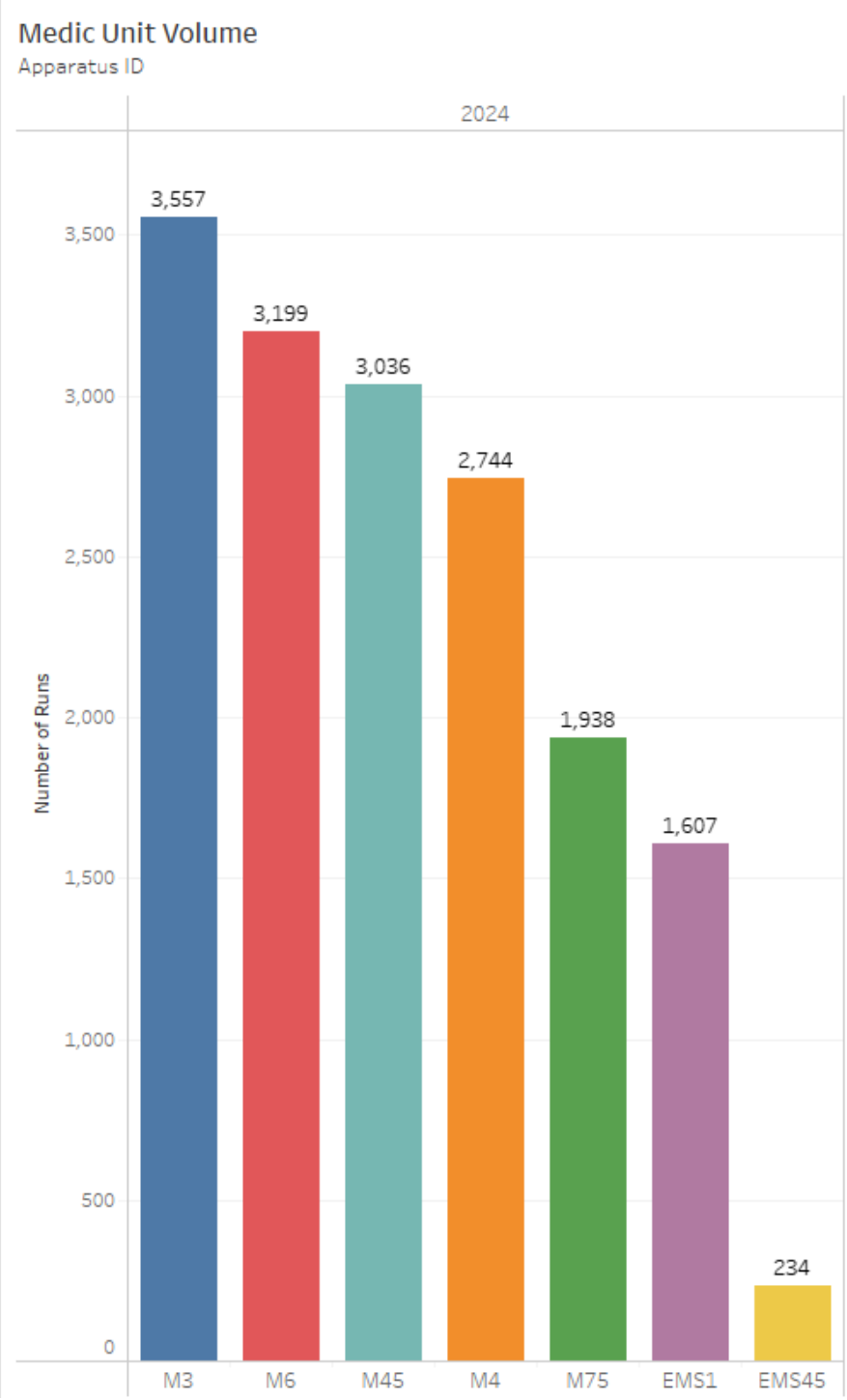
CAD Dispatch Responses

		2024
75 - BLS unit	Total Number of Runs	25,641
	Cancelled Enroute Runs	2,875
	Cancelled Rate	11%
76 - ALS unit	Total Number of Runs	16,066
	Cancelled Enroute Runs	3,721
	Cancelled Rate	23%



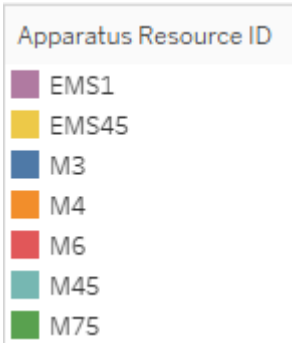
Advanced Life Support Responses

Total Responses By ALS Unit 2024 (EMS Calls Only)



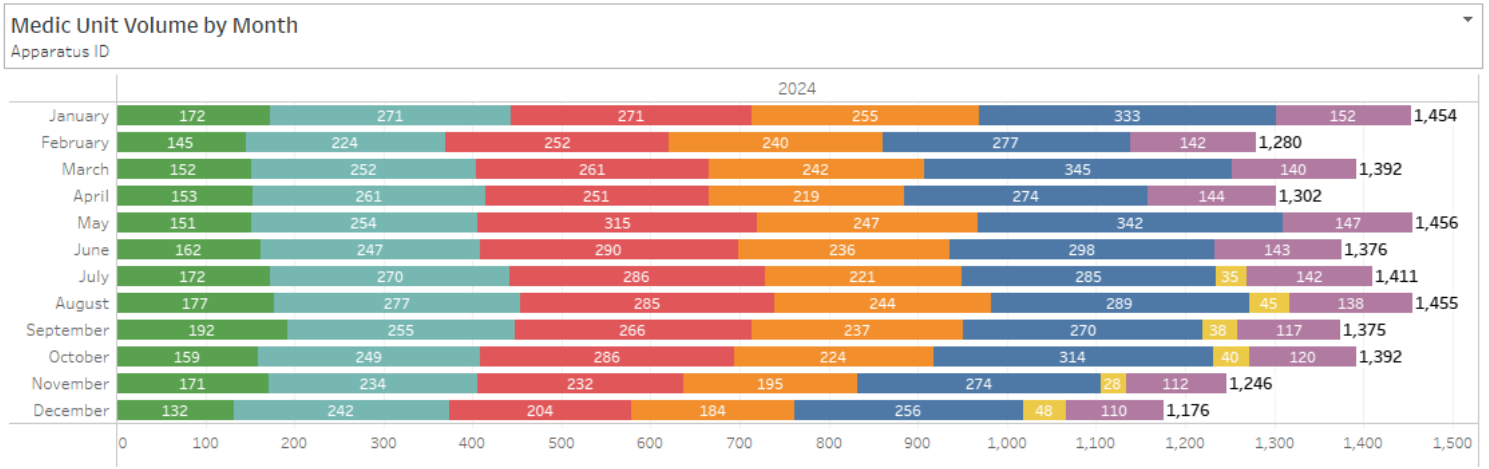
ALS Responses and Cancelled Enroute rates 2024

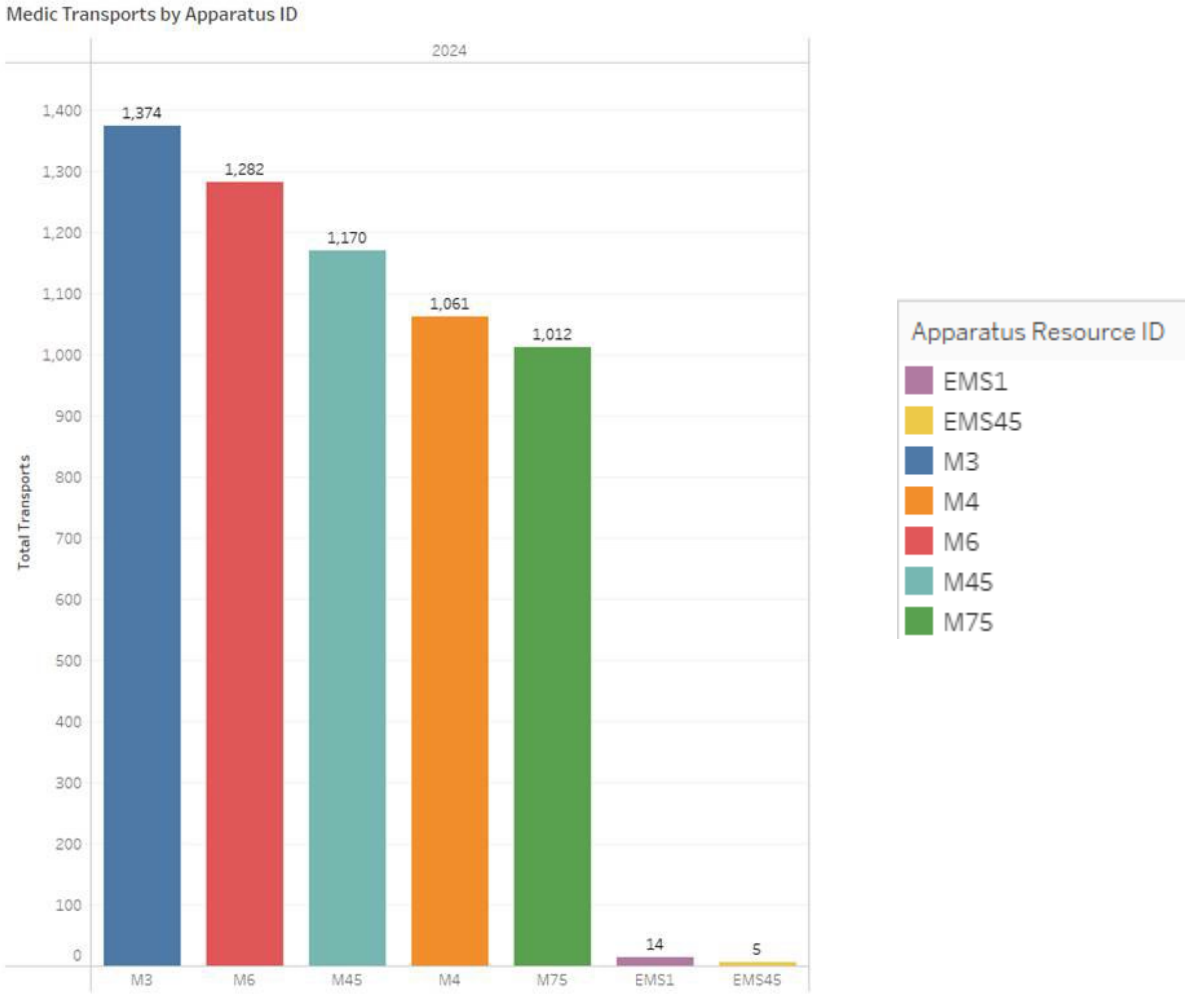
	Number of Runs	Cancelled Runs	Cancelled Rate
M3	3,849	681	18%
M4	3,103	829	27%
M6	3,338	714	21%
M45	4,049	1,247	31%
M75	1,980	432	22%



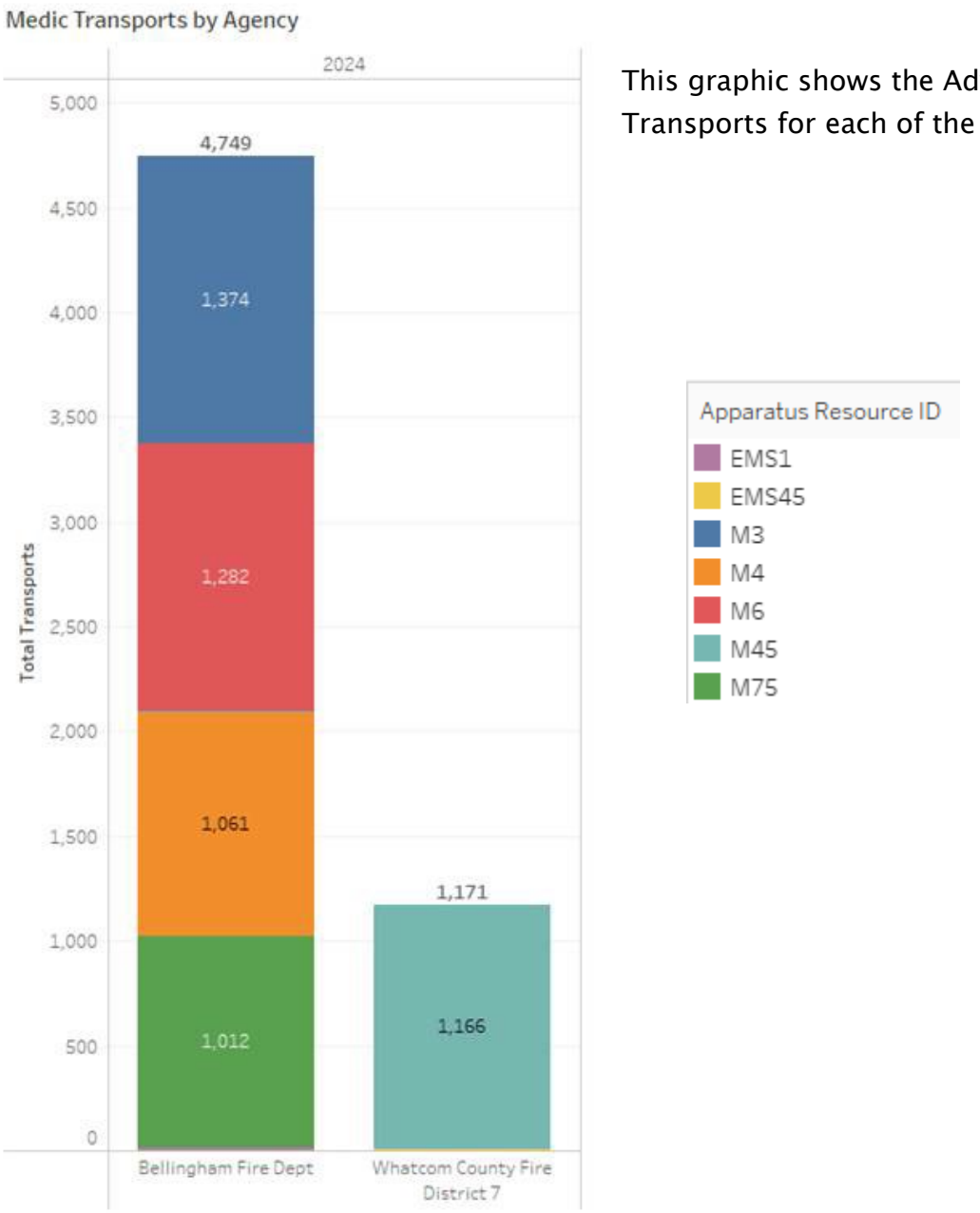
ALS Responses By Month 2024

Medic Unit Monthly Volumes



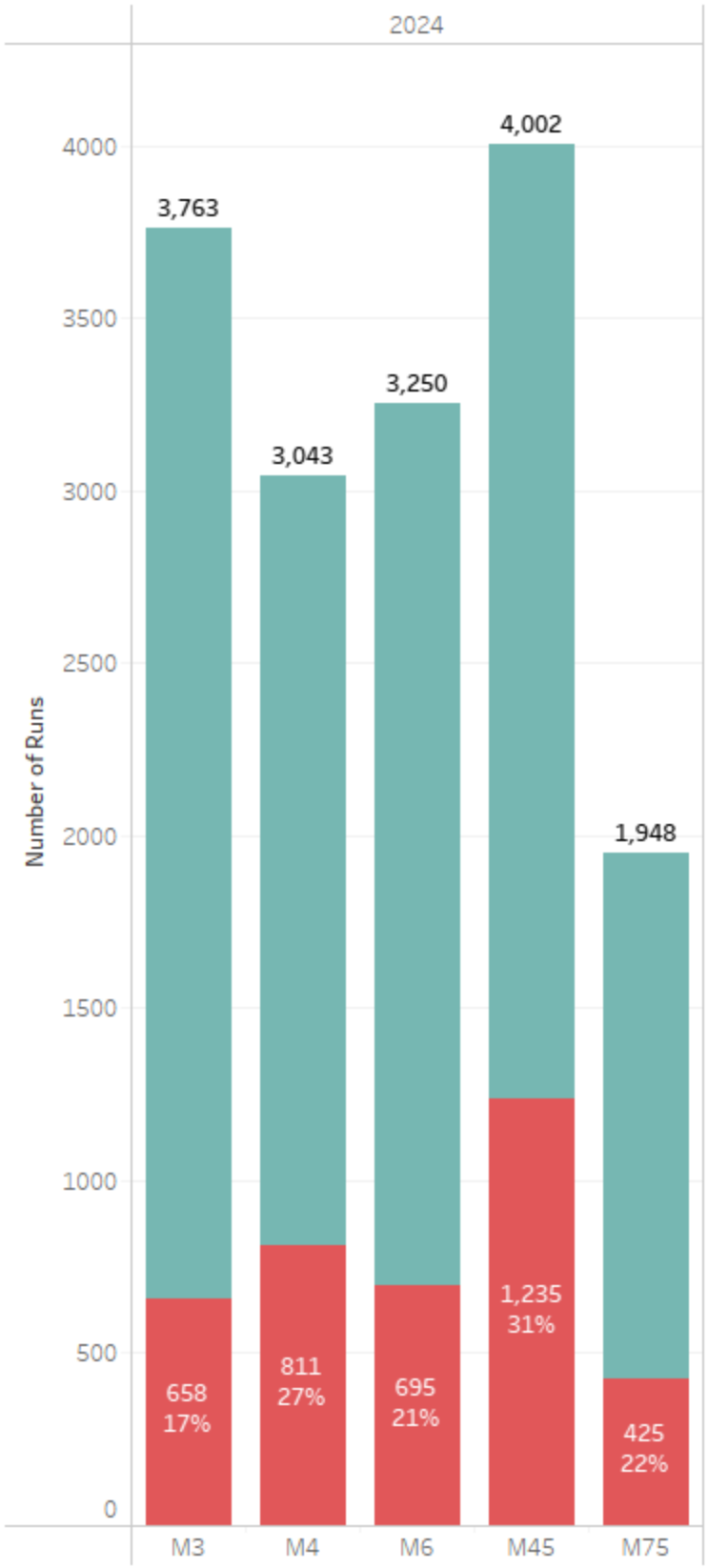


Medic Transports by Agency (Bellingham/Fire District 7)



This graphic shows the Advanced Life Support Transports for each of the Paramedic Units.

Medic Unit Responses and Cancelled enroute Rates



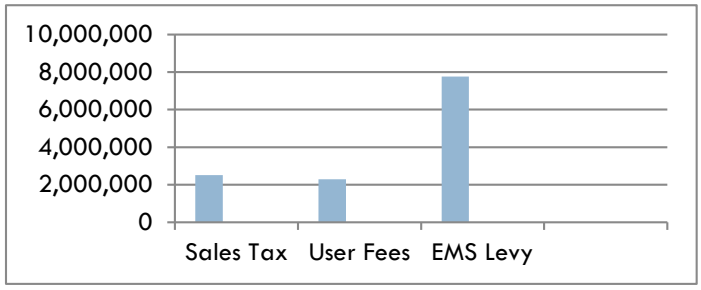
Cancelled responses are known as “Code Green’s” meaning the Medic Unit was cancelled while responding to the call either by the first arriving unit on scene or by dispatch where further information was received.

The “code green” rates are demonstrated for each of the medic units in this graphic. The Red Section shows the percentage of cancelled calls enroute.

Finance and Levy Performance

WCEMS is financed through a combination of user fees, sales tax revenues, interest income and the county-wide property tax levy. For 2025, the EMS levy is currently assessed at 22.5-cents per $1000 assessed value of the home. User fees bring in an average of $2.300.00 per year based the approved rate schedule. Sales Tax revenues calculated at .67% of .1% provides about $4.400,000 to the total fund. These revenues provide for highly trained medical personnel to arrive within minutes of an emergency, any time day or night, no matter where in Whatcom County.

Primary Revenues (Sales Tax, User Fees, Levy)



The WCEMS Levy is subject to the limitations contained in Chapter 84.55.010 Revised Code of Washington (RCW). Levy funds are restricted by RCW and can only be spent on EMS-related activities. The annual growth is limited to a 1% increase for existing properties, plus assessment on new construction. Paramedic units are funded at $2.7 million per medic unit which includes personnel, equipment/supplies and operating costs.

WCEMS Levy funds are collected throughout Whatcom County and managed regionally in accordance with RCW 84.52.069 Emergency Medical Care and Service levies, 2023 to 2028 WCEMS Work Group Funding Work Group Recommendations, policies and guidelines along with recommendations from the Technical Advisory Committee (TAB) and ultimately the EMS Oversight Board (EOB). Whatcom County EMS funds are spent on six primary areas: 1) Advanced Life Support (ALS) (2.7 mil/year 2) Basic Life Support (BLS) (1.5 mil/year Dispatching (Prospect/Emergency Medical Dispatch (EMD) $2.8 mil/year. 3) Regional Support Programs (Community Paramedics) $750,000 Annually 4) Data Development and Management (Quality Assurance) 5) Management and Administration of the EMS Department) 6) Paramedic Training at approximately $1.4 mil per year depending on the numbers of students.

Revenues

Revenues for the 2024 to 2029 Levy cycle are better understood with experience from the first levy. Two large contributors to the levy revenues are the property and sales tax as well as the Ground Emergency Medical Transport Medicaid Reimbursements (GEMT)and associated user fees (healthcare insurance) from the ALS units. The GEMT program provides supplemental payments to publicly owned or operated qualified GEMT providers. The supplemental payments cover the funding gap between the providers actual cost per GEMT transport and the allowable amount received from Washington Apple Health (Medicaid) an any other sources of reimbursements. GEMT revenues are approximately $2.0 mil per year for the five Paramedic Units.

The GEMT revenues are connected to Medicaid in that GEMT provides the “gap payment” for those patients qualify for Medicaid medical insurance coverage. This includes ambulance transports. There is concern about the future of this reimbursement program as there is uncertainty of the stability of the Medicaid program. Strategies to respond to this potential loss of revenues are being considered by the finance committee.

Additional pressures to the fund are related to flattened sales taxes, decreased new construction rates along with unpredictable inflation in past years. While the voters of Whatcom County approved a 29.5 cent levy in 2023, the County Council lowered the collection rate to 25.5 the first year of the Levy. Since then, assessed value rates have increased where in 2025, the EMS levy is collecting 22.5 per 1000 of the assessed property taxes.

Revenues

COUNTYWIDE EMERGENCY MEDICAL SERVICES FUND as of 5/8/25									
# of units	4	5	5	5			5		5
					Most Recent Month Close to Report				
	Actual 2022	Actual 2023	Actual 12/31/2024	Budget 2024	Progress as Percentage	Actual 3/31/2025	Budgeted 2025	Progress as Percentage	Budgeted 2026
Beginning Fund Balance	**22,471,945**	**15,158,524**	**14,463,349**	**14,463,349**		**15,959,368**	**15,959,368**		**13,822,005**
Property Tax	8,572,772	13,154,220	13,428,891	13,472,783	100%	263,703	13,472,462	2%	13,556,269
Sales Tax Revenue	4,052,561	4,433,598	4,224,435	4,510,456	94%	608,032	4,413,297	14%	4,589,829
Misc Income	(319,717)	1,256,828	736,404	280,000	263%	20,419	430,000	5%	330,000
Emergency Medical Service Fees	1,728,126	1,941,804	1,913,378	2,000,000	96%	373,736	2,300,000	16%	2,300,000
GEMT Payment	1,903,460	775,807	4,291,855	2,300,000	187%	235,030	1,900,000	12%	1,900,000
SAMHSA Grant	-	82,656	52,307	53,413	98%	-	-	0%	-
Total Revenues	**15,937,200**	**21,644,914**	**24,647,271**	**22,616,652**	**109%**	**1,500,919**	**22,515,759**	**7%**	22,676,098

The second largest contributor to the revenues are the EMS user fees paid by the Healthcare Insurance companies, Medicare and Medicaid. This revenue is connected to the amount of call volume for the five Paramedic Units. This revenue can be variable however, call volume does continue to rise where the EMS User Fees are approximately $2.3 mil per year. The table below demonstrates the annual increases of user fees by CPI each year back to 2016.

Annual CPI Increases EMS User Fees 2016 to 2025

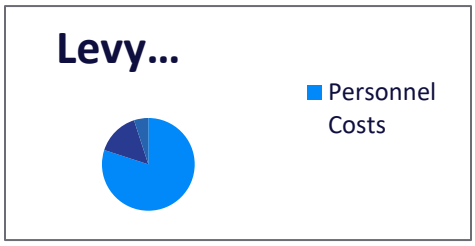
ALS Base Rate	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ALS Non-Emergency	$ 750	$ 766	$ 789	$ 813	$ 831	$ 849	$ 904	$ 984	$ 1,031	$1,063
ALS Mileage	$ 750	$ 766	$ 789	$ 813	$ 831	$ 849	$ 904	$ 984	$ 1,031	$1,063
ALS2 Base Rate	$ 15	$ 15	$ 15	$ 15	$ 16	$ 16	$ 17	$ 19	$ 20	$20
	$ 950	$ 970	$ 999	$ 1,030	$ 1,053	$ 1,075	$ 1,145	$ 1,247	$ 1,306	$1,347
BLS Base Rate										$0
BLS Non-Emergency Base Rate	$ 602	$ 615	$ 633	$ 653	$ 667	$ 681	$ 725	$ 790	$ 828	$853
BLS Mileage	$ 550	$ 562	$ 578	$ 596	$ 609	$ 622	$ 663	$ 722	$ 756	$780
Treat No Transport	$ 15	$ 15	$ 15	$ 15	$ 16	$ 16	$ 17	$ 19	$ 20	$20
	$ 250	$ 255	$ 263	$ 271	$ 277	$ 283	$ 301	$ 328	$ 344	$354
Annual CPI Adjustment		*8/2016 CPI 2.1*	*10/2017 CPI 3.0*	*10/2018 CPI 3.1*	*10/2019 CPI 2.2*	*10/2020 CPI 2.1*	*10/2021 CPI 6.5*	10/2022 CPI 8.9	*10/2023 CPI 4.8*	8/2024 CPI 3.1

Fee increases are determined year to year by the CPI rates for Seattle, Bellevue and Tacoma averaged from the previous year's 6-month average.

EMS Levy Actuals 2024 (Revenues) and EMS Levy Projected Funds 2023 to 2029 (Expenditures)

COUNTYWIDE EMERGENCY MEDICAL SERVICES FUND as of 5/8/25											
# of units	4	5	5	5			5		5	5	5
					Most Recent Month Close to Report						
	Actual 2022	Actual 2023	Actual 12/31/2024	Budget 2024	Progress as Percentage	Actual 3/31/2025	Budgeted 2025	Progress as Percentage	Budgeted 2026	Projected 2027	Projected 2028
Payments											
EMS Administration Services	(341,601)	(436,110)	(469,775)	(473,312)	99%	(82,314)	(518,915)	16%	(515,007)		
SW maintenance	(182,794)	(214,324)	(237,581)	(243,950)	97%	(203,734)	(260,900)	78%	(273,900)		
MPD & Pymnts for Other Services	(92,835)	(120,032)	(142,618)	(151,600)	94%	(18,589)	(215,000)	9%	(220,000)		
Payments to COB Units	(7,585,669)	(11,270,148)	#########	(10,855,136)	100%	(1,899,761)	#########	17%	#########		
Payments to COB EMS 1			(1,054,869)	(1,054,869)	100%	(184,954)	(1,109,722)	17%	(1,165,208)		
Payments to FD7 Units	(2,219,428)	(2,573,723)	(2,708,784)	(2,708,784)	100%	(237,470)	(2,864,641)	8%	(3,007,123)		
Payments to FD7 Captain	-	-	(296,654)	(263,717)	112%	(46,238)	(554,861)	8%	(582,604)		
What-Comm Dispatch	(2,155,075)	(2,635,146)	(2,775,734)	(2,769,728)	100%	-	(2,843,998)	0%	(2,986,198)		
Admin & Current Expense Allocations	(119,338)	(221,796)	(230,668)	(230,668)	100%	-	(458,972)	0%	(465,847)		
Other Costs:											
Training Coordinator & Costs	(186,228)	(180,165)	(162,943)	(187,703)	87%	(25,517)	(191,796)	13%	(192,057)		
Paramedic Class Training and Laterals - COB/FD7	(1,862,392)	(1,642,218)	(1,198,166)	(1,789,992)	67%	(135,962)	(1,212,174)	11%	(1,212,174)		
Community Paramedic - COB			(455,180)	(455,180)	100%	(164,986)	(478,849)	34%	(502,792)		
Community Paramedic - FD7	(514,435)	(624,235)	(217,253)	(217,253)	100%	(19,046)	(228,550)	8%	(239,978)		
Gurneys, Equipment 10 yr lease	(523,636)	(524,127)	(525,878)	(641,181)	82%	(110)	(646,181)	0%	(646,181)		
BLS Distribution	(4,969,129)	(1,537,875)	(1,478,131)	(1,500,000)	99%	-	(1,500,000)	0%	(1,500,000)		
Gurney Lift Kits	(932,060)	(265,314)	-	-	0%	-	-	0%	-		
5th Unit Implementation	(1,566,000)	(12,720)	(259,263)	(250,090)	104%	-	-	0%	-		
SAMHSA Grant	-	(82,156)	(52,281)	(53,413)	98%	-	-	0%	-		
PPE for COB/FD7	-	-	-	-	0%	-	(170,000)	0%	-		
Total Expenditures	**(23,250,621)**	**(22,340,089)**	#########	**(23,846,576)**	97%	**(3,018,681)**	#########		#########	-	-
Net Revenues/(Expenditures)	**(7,313,420)**	**(695,175)**	**1,496,020**	**(1,229,924)**		**(1,517,762)**	**(2,137,363)**		**(2,801,462)**	-	-
Ending Fund Balance (EMS)	**15,158,524**	**14,463,349**	**15,959,368**	**13,233,425**			**13,822,005**		**11,020,543**	**11,020,543**	**11,020,543**
Reserve Target - 70% of Expenditures:		15,638,062	16,205,876				17,257,185		17,834,292	-	-
Difference Between Ending FB and Target		**(1,174,714)**	**(246,507)**				**(3,435,180)**		**(6,813,749)**	**11,020,543**	**11,020,543**

EXPENDITURES REPORT



EMS Levy revenues support EMS activities related to direct service delivery or support programs: Personnel costs comprise about 80% of the "per unit" allocation. Medical equipment, consumables, administration, dispatch fees and training occupying about 15% of the expenditures while the remaining funds are oriented towards developing Reserves and Capital Equipment allowances.

Expenditures are primarily limited to Medic Unit operational and administrative costs at $2.8 million per medic unit in 2025. The Medical Program Director, EMS1 and What-Comm Dispatch fees Community Paramedics and Paramedic Training costs are also captured as costs for the Levy showing as actual expenditures in those line items

General Cost Distribution

1. ALS Services (Paramedics)
   - Uses a standard cost allocation for operations and equipment per Paramedic Unit.
   - Allocations may increase with considerations for inflators such as labor, pharmaceuticals, equipment upgrades and benefits.
   - EMS1 Captain (Regional EMS Response Captain/Paramedic)
   - Reserves eligible (Capital Expenses)
   - ALS 360 Capital Equipment Program
   - Three Community Paramedics
   - BTC/BFD Paramedic Training

2. BLS Services (EMT's)
    - Supports Training and Learning Platforms including Instructor Development
    - Dispatch Fees for All Agencies
    - Regional Support and Programs
    - Community Programs (Community Paramedic (MIH)
    - Local and Regional Medical Program Control (WCEMS MPD)
    - Equipment Exchange Program
    - Pulse Point
    - Peer Support Networks

3. Data Management and QA/QI Programs
    - Regional Electronic Patient Care Reporting (Image Trend (ePCR)
    - Regional Community Paramedic Patient Care Reporting (Julota)
    - Regional CQI (Trauma and Medical) Programs with active monitoring
    - Data mapping and standardized reporting
    - Data Dashboard Development (System and Department/Districts)
    - Washington EMS Information System (WEMSIS.NEMSIS) Pre-hospital data.
    - Cardiac Arrest Registry

2025 BLS Allocation for 2024 Service Year

Table A: Budget

Item		Amount	Ratio (Assigned %)
Assessed Value:	$	450,000.00	**30%**
BLS Response Load:	$	1,050,000.00	**70%**
Total:	**$**	**1,500,000.00**	100%

Table D: Amount Received

Agency Name		Amount $	% of Total
Acme Fire District 16	$	12,300.41	0.8%
Bellingham Fire Dept	$	558,279.55	37.2%
District 4	$	53,453.75	3.6%
District 8	$	57,701.58	3.8%
Everson Fire District 1	$	61,435.98	4.1%
Glacier District 19	$	6,130.48	0.4%
Lynden Fire Department	$	109,190.89	7.3%
North Whatcom Fire and Rescue	$	231,408.63	15.4%
Point Roberts Fire District 5			0.00%
South Bay District 18	$	10,100.92	0.7%
South Whatcom Fire Authority	$	84,916.55	5.7%
Whatcom County Fire District 11	$	8,996.02	0.6%
Whatcom County Fire District 14	$	93,160.67	6.2%
Whatcom County Fire District 17	$	17,622.51	1.2%
Whatcom County Fire District 7	$	195,302.05	13.0%
Total:	$	1,500,000.00	100%

Includes all 300 series and 611 Call Type only
Excludes All Apparatus except Aid Cars (example BAT, IA excluded)
Excludes all Mutual Aid Apparatus
Approved by the Fire Chief Committee March, 2025

BASIC LIFE SUPPORT ALLOCATION 2024

The 2024 Basic Life Support amounts for each agency are displayed in this chart. The allocation supports qualified EMS expenditures for agencies that helps offset costs related to EMS operations, training and equipment. The allocation provides an equitable distribution of $1.5 million each year.

RESERVE/ CAPITAL EXPENDITURES INITIATIVE

To support the finance recommendations from the EMS Levy Plan the Finance Sub-Committee was formed in October 2019. This group began meeting in an effort to gain a common understanding of the county-wide levy as related to expenditures and to establish reserve account policies. The finance sub-committee tracks parallel to the TAB to support understanding of the financial/budget impacts as well as to advise on budget impacts for those initiatives.

The group meets quarterly and during year 2021, the Finance sub-committee worked to provide a recommended framework for processing proposals for funding the various projects and programs through the county-wide EMS Levy. Much of this work was oriented toward developing a Charter Statement and Scope of Responsibilities for the sub-committee.

The original sub-committee expanded in February 2021 to support the Levy Renewal planning effort. This group met monthly to establish the proposed 2023/2028 Levy Budget.

Charter Statement Recognized by the EOB

This is a joint advisory Emergency Medical Service Finance Committee. Members shall consist of the EMS Manager and representatives from County and ALS provider agency administrations, finance personnel from County and ALS provider agencies, a BLS provider agency, a small cities mayor, and a citizen representative as appointed by the EOB.

The Finance Committee will assess the programmatic recommendations developed by other sub-committees and provide financial advice, viewing the proposals as a whole package, rather than independent program areas. In addition, the Committee will review economic forecasts, determine indices for inflating costs, and develop financial policies. Another role is to provide financial perspective to the TAB and EOB and to ensure the EMS system remains financially sound.

Scope of Responsibilities

The Finance Committee will provide recommendations and comments on the following financial matters to the TAB and EOB:

- EMS biennial budget and supplemental budget requests
- Long-term and short-term projections
- Financial impacts of proposed operational changes and capital projects
- Impacts of proposed EMS programs and asset acquisitions
- Proposed financial policies and reserve requirement
- EMS program contracts and interlocal agreements
- Strategic plan components

Mission

Develop a 6-year EMS financial plan, including economic forecasts, proposed expenditures and revenue, and service changes. Determine the EMS levy rate needed to support this EMS system.

In addition, to support the motion passed on May 25th, 2022 at the EOB final Levy Plan review meeting;

"***On an annual basis, the EOB will meet to discuss the EMS Standard Cost Model, with adjusted projected interest income, to review financial projections until the end of the Levy cycle. If financial changes need to happen, the TAB will provide recommendations for reductions in expenditures to retain a healthy ending fund balance of 70% of annual spending."***

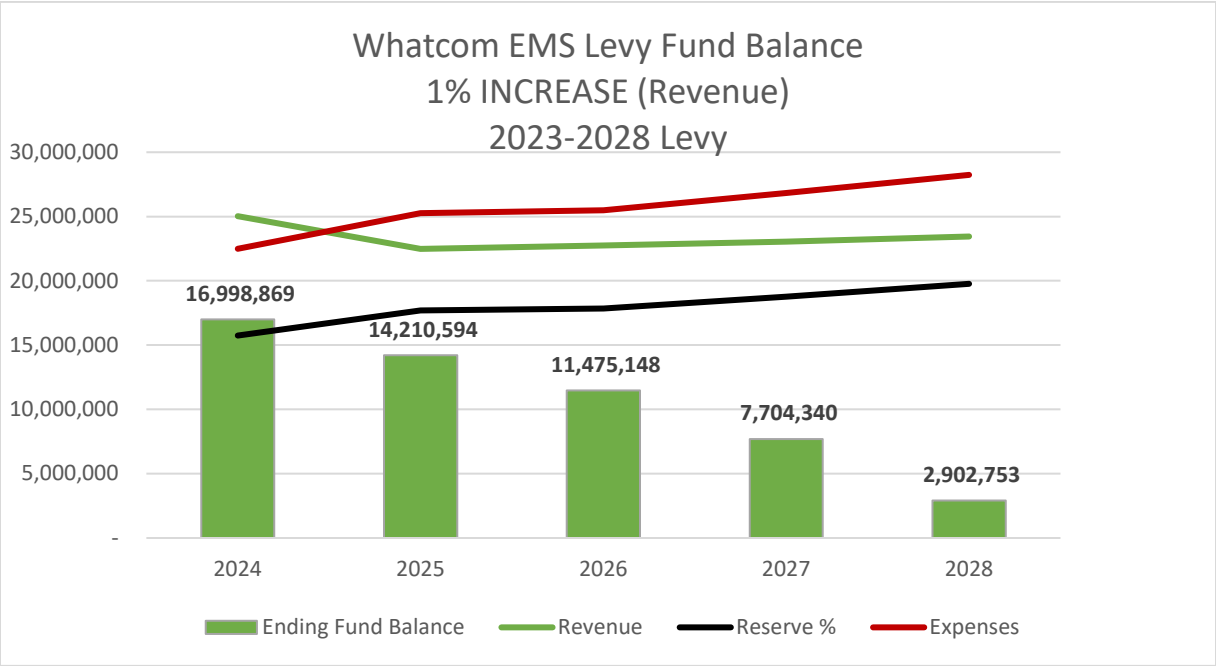
Tasks

- Examine system costs (both ALS and BLS)
- Create system financial model
- Project ALS unit cost (operating and capital)
- Project Countywide ALS cost (operating and capital)
- Identify possible efficiencies
- Develop projected levy rate/amount need to support EMS system

2025 to 2028 Financial Outlook

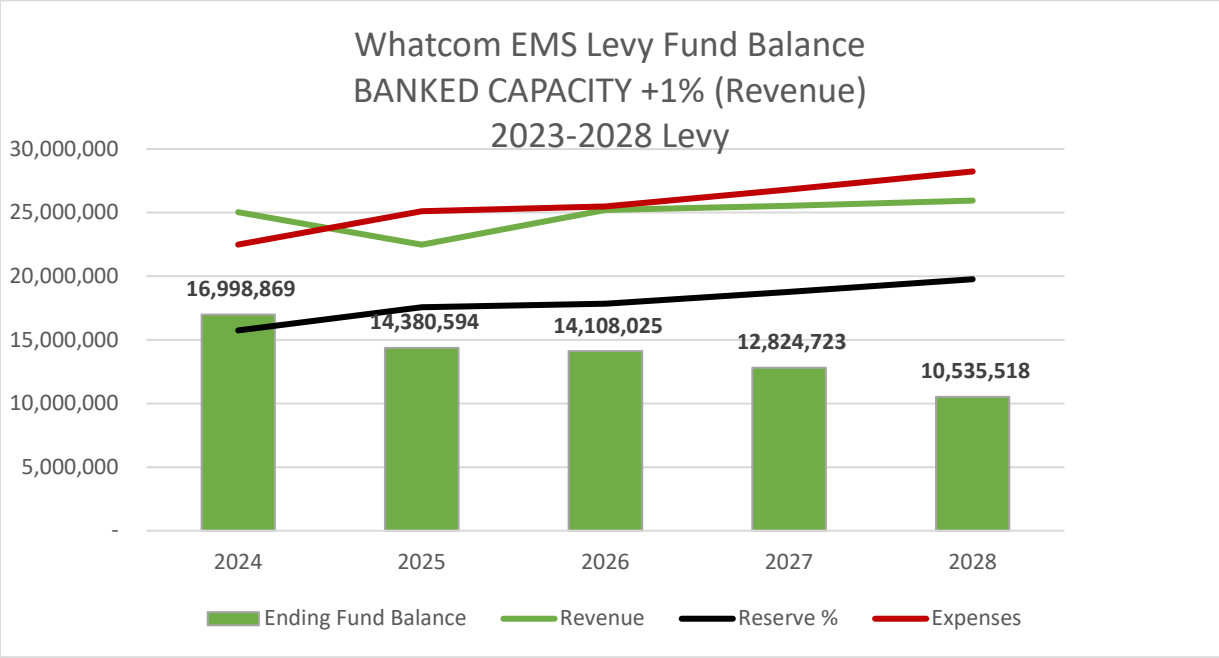
The scenarios below demonstrate the effects of a structurally imbalanced budget. To correct this imbalance the scenarios below aim to bring the end fund balance closer to the established reserve policy of 50% to 70 % of the operating budget.

This graphic shows the current budget using the 1% increase from year to year. The end fund balance would be approximately 2.9 mil in 2028. In 2024, the County Council approved the 2025 budget using the "plus 1% rule"



The next graphs describe strategies for responding to the reserve fund shortage using what is known as “Banked” or “Unused” Capacity as well as the ability to use the 1% increase of the base budget each year. While user fees and GEMT revenues are based on call volume and insurance capture, other factors such as sales tax and interest income affect the revenues.

The scenario below demonstrates a healthier end fund balance by using the “Banked Capacity” in 2026 along with the “plus 1% that increases the base budget year to year. The End Fund Balance in 2028 would increase to about 10,5 mil or close to 50% of the operating revenues reserve balance.



EMS Levy Reserve Policy
Approved by EOB September 9, 2021

Policy Overview	
Reserves are a proactive management tool to protect EMS's ability to provide emergency medical service when there are unexpected events or changes in revenue or expenditures. EMS reserves ensure the system can withstand revenue and economic disruptions, unanticipated expenditure demands including capital requirements, and meet other necessary non-recurring expenses. Reserves are a key factor in external agencies measurement of EMS's financial strength.	
Reserve Policy Principles	
Purpose	To ensure adequate resources for cash flow and mitigate short-term effects of unforeseen events. Reserve funds are necessary to enable the EMS system to deal with unforeseen emergencies, changes in economic conditions, or revenue loss.
Approval	The County Executive shall approve this policy and: • The creation or deletion of any reserve amounts • Changes in reserve amount funding formulas • Reserve balances, as part of the annual budget process • Reserve replenishment plans
Target Balance	The EMS fund balance should be approximately 70% of the current year's budgeted operating expenditures and shall be budgeted at no less than 50% of these expenditures. With other revenue sources, this would allow funding for one year if a levy fails to be renewed. The year needed to hold a new election for a levy would provide time to create a plan moving forward.
Reserve Minimum Target Balance	Should a reserve fall below its minimum target balance, The EMS Administrator, in consultation with the EMS Finance Advisory Committee shall create a plan to bring the Reserve to the balance described in this policy. The plan shall be approved by the TAB and EOB Committee before presenting to the County Executive and adopted for replenishing the reserve balance to the target.
Policy administered by the EMS Administrator	

EMS Administration and 2024 Initiatives and 2025 Work Plan

The EMS Administration continues to provide support and direction for the EMS system by advancing local and regional initiatives for system enhancement and positive patient outcomes. EMS Manager Mike Hilley has served on the State of Washington Department of Health EMS and Trauma Steering Committee representing the Washington Association of Counties in 2018. In addition, Mike Hilley was also named as Chair of the Injury and Violence Prevention Task Force for the Steering Committee and is also Chair of the North Region EMS and Trauma Council.

The manager is also participating with the North Region ACH in an effort to develop partnerships that advances EMS programs. These affiliations allow WCEMS to demonstrate successful programs and to influence policy and programs for State EMS systems. This includes input for rulemaking for training and certifications, agency licensure, provider certifications as well as trauma and medical systems design.

Contracts/Inter-local Agreements: 2024 was the beginning of the new contracts and inter-local agreements with the partner agencies which included the First Response contracts with the BLS agencies. In previous years, the BLS contracts were offset from the ALS contract cycles. There was a strong desire to negotiate and move those contracts into the same planning cycle. While existing contract templates were used, the maturity of the Levy required updated language and agreements for the six-year contracts. Consolidation of multiple budgets into the agreements were designed to reduce the month to month work associated with reimbursements and the processing of invoices. In addition, we hope to reduce the need for frequent budget supplementals and additional contracts over the six-year years with a more inclusive strategic plan supporting those budgets in the contracts. Careful monitoring of the contracts along with the end of year reporting from the agencies provides transparency related to cost associated with system performance

Levy Planning – While it seems like we just completed a successful Levy Planning process, it's time to begin this work again. In the Fall of 2025, Levy planning will begin with the selection of committee members, setting up the committees as well as a work plan for this upcoming two years of planning work.

Administrative Support: In early 2024, Office Coordinator Melissa Rodriquez came to EMS as an 18-year county employee with a deep experience related to county operating processes and procedures. This experience level has reduced the need for administrative support from the Executives and Finance offices that previously provided services related to legislative processes, contract management, monitoring the budget, reconciling and processing invoices for payment, and moving budget supplementals. Melissa continues to build and respond to these processes that has further provided efficiencies related to the administrative practices of the EMS office.

- Accounts Payables and Receivables
- Contract monitoring and movement
- Legistar Submissions and Monitoring
- Records retention management
- Office Coordination
- Medical Program Directors administrative support

Performance Dashboards and Communication: Data Analyst Diana Clinch has created automated internal and public facing data dashboards for understanding EMS key performance indicators for the system. This work support various committee's work for improving both system and provider performance as well as to identify trends that may shift response resources. These public facing dashboards will provide up-to-date EMS information in real-time. With established connections between Image Trend, Julota and other community partners future dashboards will be dynamic, informative and timely. Data visualization is an ongoing project with improvements to the systems.

Priority Data Monitoring includes:

- Opioid Response Data
- Key Performance indicators for Quality Improvement
- Levy/Financial Data and Projections
- Analyzation of System Response Performance

In addition to the training and educational outreach provided by Steven Cohen, the Training Program Specialist supports the local EMS & Trauma council through the Education Committee as well as project management related to grants received through the council. Steven prepared multiple grants for the council including:

- SAMSHA Grant that supported two EMT classes focused on the Tribal/Rural communities where 23 tribal members completed the EMT course in 2023 and 2024. $(140,000)
- Equipment Grants for the CO2 EMMA monitoring devices for BLS ($21,000)
- Equipment Grants for the purchase of Vacuum Mattress (Spinal Immobilization) ($15,000)
- Advanced Airway Mannequins for Training ($21,000)

Medical Directors After 50 years of service to Whatcom County, Dr. Marvin Wayne who was the first and only Medical Program Director retired at the end of 2024. Dr. Wayne brought a visionary approach to saving lives with an emphasis on survival from Sudden Cardiac Arrest and Trauma. Dr. Wayne pioneered a specific approach to the design of the EMS system in Whatcom County. Dr. Wayne leaves a long legacy of leadership and innovation and serves now in an Emeritus role supporting the Medical Program Director.

Thanks for 50 Years of Dedicated Service to Whatcom County Dr. Wayne

A new chapter of EMS history in Whatcom County begins with the leadership of Dr. Ralph Weiche who was appointed as the County Medical Program Director beginning January 1, 2025. Dr. Weiche is a long-time Emergency Department physician who has a vision for progressing EMS technologies, education/training and treatment therapies in the county. As the State appointed EMS Medical Director, Dr. Weiche represents Whatcom County at the State Department of Health EMS & Trauma Steering Committee and the state-wide Medical Program Directors committee. Dr. Weiche chairs the local Continuous Quality Improvement Committee and also serves on the North Region EMS & Trauma Council as one of the five county Medical Program Directors representing the region.

Dr. Ralph Weiche WC MPD

Dr. Bryan McNeely

Dr. Emily Welch

Dr. Michael Sullivan

"Working Together for The Future of EMS in Whatcom County"