



**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

July 1, 2023 – June 30, 2025

Table of Contents

Introduction.....	3
Goal 1: Maintain, Assess & Increase Emergency Care Resources.....	16
Goal 2: Support Emergency Preparedness Activities.....	21
Goal 3: Plan, Implement, Monitor & Report Outcomes of Programs to Reduce the Incidence & Impact of Injuries, Violence & Illness in the Region.....	23
Goal 4: Assess Weakness & Strengths of Quality Improvement Programs in the Region	29
Goal 5: Promote Regional System Sustainability.....	36
Goal 6: Sustain a Region-Wide System of Designated Trauma Rehabilitation Services to Provide Adequate Capacity & Distribution of Resources to Support High Quality Trauma Rehabilitation	40
Appendix 1	42
Adult and Pediatric TRAUMA designated hospitals and Rehab facilities	
Appendix 2	44
Approved min/max numbers of TRAUMA designated hospitals	
Appendix 3	47
Approved Minimum/Maximum Numbers of Designated Trauma Rehabilitation Care Services	
Appendix 4	49
Washington State Emergency Care Categorized Cardiac and Stroke System Hospitals	
Appendix 5	51
5-A - EMS Resources, Prehospital Verified Service	
5-B – Verified and non-verified Services by County	
5-C – Paid and Volunteer by County	
Appendix 6	56

Approved Minimum/Maximum Numbers of Verified Prehospital Trauma Services by Level and Type by County (and link for air ambulance)

Appendix 758
 Trauma Response Areas (TRAs) by County

Appendix 873
 8-A - Approved EMS Education and Training Programs
 8-B – ESE & SEIC & SEI

Appendix 976
 Patient Care Procedures (PCPs)

Appendix 10110
 West Region committee Handbooks
 10-A - Trauma QIF
 10-B - Cardiac & Stroke
 10-C - EMS Council Bylaws

Appendix 11138
 11-A - Top 10 causes of injury and death in the West Region Original data
 11-B – By mechanism
 11-C - By age

Appendix 12143
 12-A – West Region Population data

Plan Introduction

The 2023-25 West Region Emergency Medical Services (EMS) and Trauma Care System Strategic Plan applies to the five-county area of Grays Harbor, Lewis, North Pacific, Pierce, and Thurston Counties. The purpose is two-fold:

1. sustain a robust continuum of care that effectively reduces injuries and fatalities.
2. maintain a continuum of care which treats and rehabilitates victims of trauma and medical emergencies.

The West Region EMS & Trauma Care (WREMS) Council is empowered by legislative authority (RCW 70.168.100-70.168.130) and Washington Administrative Code (WAC 246.976.960) to plan, develop, and administer the EMS and trauma care system in the five counties that make up the Region. It is composed of appointed volunteer representatives and funded primarily by the Washington State Department of Health (WA DOH).

WREMS is one of eight EMS and trauma care regions in Washington State. Each region is responsible for developing an in-depth strategic plan every two years with input from their respective local councils, county medical program directors, and stakeholders (MPDs). These plans are the cornerstone in the maintenance, improvement, and sustainability of Washington state's EMS and trauma care system. Based on plan guidance and a basic format template from the Washington State Department of Health (WA DOH), the regional plans focus on the work each council will accomplish. These regional plans align with the Washington State goals in the EMS and Trauma System Strategic Plans and are specific to the unique needs of each region. Goals are defined, objectives stated, strategies described, and tools outlined for measuring progress—these are the heart of each plan.

To provide the 1,409,500 citizens (Appendix 12) and additional visitors (up 24,846 from previous plan) with appropriate and timely EMS, medical and trauma care, the WREMS Council focuses its efforts on the following issues:

- Prevention education and medical training of EMS, hospital and trauma personnel
- Trauma level designations of hospitals
- Trauma verification and licensing of prehospital agencies
- Cardiac and stroke level-categorizations of hospitals
- All-hazards preparedness
- Improved data collection
- Regional quality evaluation and improvement
- Regional resources to support high quality trauma rehabilitation.

The Vision Statement of the West Region EMS and Trauma Care Council captures those efforts:

Vision Statement: We envision a tenable regional EMS and Trauma Care System with a plan that:

- Keeps patient care and interest the number one priority.

- Recognizes the value of prevention and public education to decrease trauma/cardiac/stroke-related morbidity and mortality.
- Preserves local integrity and authority in coordination with inter/intra-regional agreements.

Through this strategic plan, the West Region EMS and Trauma Care Council will work as a non-partisan facilitator, coordinator, and resource for regional EMS issues to achieve the Council mission:

Mission Statement: To assist and guide local EMS and trauma care providers in the coordination and improvement of emergency medical services and injury/illness prevention and public education in the West Region.

West Region Council Structure

The West Region EMS Council accomplishes comprehensive planning through a committee structure with final approval by the Council. The WREMS Council meets quarterly, with 49 Council positions representing local healthcare providers, local government agencies, and consumers from areas as metropolitan as Tacoma and as remote as the rainforest on the Olympic Peninsula. (See Appendix 9: WREMS Council Bylaws for a list of Council positions.)

The Council benefits from a diverse representation of dedicated decision-makers, many of whom are also regular contributors at state Technical Advisory Committee (TAC) meetings where they share expertise.

The Council includes an Executive Board comprised of eight members, three of whom are officers to include chair, vice-chair and secretary/treasurer. The Executive Board and its officers are elected by a majority of the Council for a two-year term. No more than two of the officers may be from the same county. The Executive Board meets monthly and has fiduciary oversight of the Council's regional plan, budget, finances, contracts, as well as administrative policies and procedures. The Executive Board is responsible for developing recommendations to the full Council with any action being subject to review and ratification by the full Council.

West Region Subcommittees

There are three standing committees which undertake the core work of the Council:

- Injury and Violence Prevention
- Training, Education and Development
- and the MPD, Planning and Standards Committees

Independent committees receive administrative support with the majority approval of Council members. At least one Council member must be a member of the independent committee and shall, at the minimum, give written quarterly reports on committee activities to the full Council. Independent committees include West Region Trauma Quality Improvement Forum and the West Region Cardiac and Stroke Quality Improvement Forum.

- **The Injury and Violence Prevention (IVP) Committee** is dedicated to preventing the leading causes of injury and death in the West Region which are poisoning, falls, motor vehicle crashes, firearms, , suffocation, drowning and fire/burn. (2016-20 data from WA DOH = Appendix 11). IVP meetings are held five times per year and engage participants from all West Region counties. Meetings provide opportunities for building partnerships, sharing best practices, and learning about resources and prevention programs in the region and at the state level. And importantly it is also a chance for grantees to share their work and outcomes with the region and prevention partners.
- **The Training, Education and Development (TED) Committee** makes recommendations to the Executive Board and Council on the use of available EMS training funds in the West Region. The TED Committee is also engaged in year-long planning of the regional council's annual EMS conference, which provides high quality EMS education and training opportunities to West Region and Washington State providers. When a regional conference cannot be undertaken due to exceptional circumstances, such as a pandemic, the TED Committee plans regional prehospital education alternatives. This committee typically meets on a monthly basis.
- **The MPD, Joint Standards and Planning Committee** has the responsibility of developing and updating regional patient care procedures, overseeing updates to the strategic plan on issues related to prehospital patient care delivery, and reviewing recommended changes to the minimum/maximum numbers and levels of trauma designated services and verified prehospital services. All four MPDs participate on this committee as well as WREMS Council members. The committee convenes directly following each WREMS Council meeting, four times annually.
- **The WREMS Council** collaboratively assists the independent regional quality improvement (QI) work of the region's two Quality Improvement Forums (QIF). The Council administratively supports the Trauma QIF, and the Cardiac and Stroke QIF responsibilities to improve patient outcomes, identify areas for improvement, educate providers and build coordination between services. The Trauma QIF meets five times a year and the Cardiac and Stroke QIF meets quarterly.

Regional Profile: West Region Counties

The five-county West Region is not only a major population, manufacturing, transportation, and shipping corridor, it is a tourist center of the state. The large urban and rural geography (over 7,765 square miles) means the population density centers are spread out, and also increases the challenges for emergency medical service (EMS) response and treatment. The region serves an estimated 1,409,500 citizens.

1. Grays Harbor County

Gateway to the Pacific Ocean and Olympic Peninsula, Grays Harbor County has a landscape which varies from coastline to rainforest. Total square mileage is 2,224; 1,902 is land and 322 is water. As of April 1, 2022, the Washington State Office of Financial Management Website (see Attachment A) shows the following information for the population of Grays Harbor County:

	CENSUS	ESTIMATE	ESTIMATE
	2020	2021	2022
Grays Harbor	75,636	76,050	76,400
Unincorporated	28,993	29,020	29,125
Percentage of total	38%	38%	38%
Incorporated	46,643	47,030	47,275
Percentage of total	62%	62%	62%

WEST REGION TRAUM RESPONSE AREAS - OVERVIEW						
	# BLS	# ILS	# ALS		# AMB	# AID
Grays Harbor County	234	2	116		65	39
See Appendix 7 for full County details						

Due to its coastal location, Grays Harbor County has tourism throughout the year, and specialized EMS responses (such as ocean rescues) are common. Two Indian tribes have territories bordering Grays Harbor County: The Confederated Tribes of the Chehalis Reservation, and the Quinault Indian Nation. A vast portion north of the county is the Quinault Indian Nation’s territory and the Olympic National Forest.

2. Lewis County

Lewis County is split by the 1-5 corridor, with a total square mileage of 2,436; of that 2,403 is land and 33 is water. The geography varies from the mountain views of Packwood to the east, to the agricultural landscapes of the west. Fire and EMS respond to emergencies frequently along the corridor. As of April 1, 2022, the Washington State Office of Financial Management Website (see Appendix 12-B) shows the following information for the population of Lewis County:

	CENSUS	ESTIMATE	ESTIMATE
	2020	2021	2022
LEWIS	82,149	82,700	83,400
Unincorporated	49,461	49,840	50,185
percentage of total	60%	60%	60%
Incorporated	32,688	32,860	33,215
percentage of total	40%	40%	40%

WEST REGION TRAUM RESPONSE AREAS - OVERVIEW						
Lewis County	# BLS	# ILS	# ALS		# AMB	# AID
	388	19	206		103	31
See Appendix 7 for full County details						

3. Pacific County, North

The As of April 1, 2022, the Washington State Office of Financial Management Website (see Appendix 12-B) shows the following information for HALF the population of Pacific County¹:

	CENSUS	ESTIMATE	ESTIMATE
	2020	2021	2022
Pacific (50% for WREMS)	11,683	11,713	11,800
Unincorporated	7,882	7,908	7,980
percentage of total	67%	68%	68%
Incorporated	3,801	3,805	3,820
percentage of total	33%	32%	32%

WEST REGION TRAUM RESPONSE AREAS - OVERVIEW						
N. Pacific County	# BLS	# ILS	# ALS		# AMB	# AID
	17	-	6	#	4	3
See Appendix 7 for full County details						

¹ Pacific County is divided into two separate regions for the purpose of EMS transport to healthcare locations: the northern half of Pacific is in the West Region and southern half of the county is in the Southwest Region; a portion of the natural line of division is the Grays River along State Route 4. The two North Pacific County EMS agencies work under the guidance of the Grays Harbor/North Pacific EMS Medical Program Director (MPD).

Population numbers for just the northern portion of the county are approximately half of the total. The population density is 22 people per square mile or an estimate of 11,974.

4. Pierce County

Pierce County’s total area is 1806 square miles, of which 1669 is land and 137 is water. It is notable for being home to Mount Rainier, the tallest mountain in the Cascade Range (14,410 feet) and a volcano, too. The most recent recorded eruption was between 1820 and 1854. There is no imminent risk of eruption, but geologists expect that the volcano will erupt again. If this should happen, parts of Pierce County and the Puyallup Valley would be at risk from lahars, lava, or pyroclastic flows.² The Mount Rainier Volcano Lahar Warning System was established in 1998 to assist in the evacuation of the Puyallup River valley in case of eruption, and sirens in that valley continue to be tested monthly. There are three rivers that run through the county, and six islands in the Pierce County portion of Puget Sound. As of April 1, 2022, the Washington State Office of Financial Management Website (see Appendix 12-B) shows the following information for the population of Pierce County:

	CENSUS	ESTIMATE	ESTIMATE
	2020	2021	2022
Pierce	920,393	928,200	937,400
Unincorporated	430,248	435,135	440,800
percentage of total	47%	47%	47%
Incorporated	490,145	493,065	496,600
percentage of total	53%	53%	53%

WEST REGION TRAUM RESPONSE AREAS - OVERVIEW					
Pierce County	# BLS	# ILS	# ALS	# AMB	# AID
	1,338	1	479	163	149
See Appendix 7 for full County details					

² A **lahar** is a violent type of mudflow or debris flow composed of a slurry of pyroclastic material, rocky debris and water. The material flows down from a volcano, typically along a river valley. A **pyroclastic flow** is a dense, fast-moving flow of solidified lava pieces, volcanic ash, and hot gases; extremely hot, burning anything in its path.

Tacoma-Pierce County Health Department conducted a Community Health Assessment to determine some of the barriers to healthy lives. The following key factors are among the findings:

- Access to healthcare—especially mental health and substance abuse services,
- People are dying before their time—premature death from injuries,
- Access to healthy food,
- Safe, reliable and affordable housing, and
- ways to get around (transportation).

Income, education, housing and transportation can create opportunities for, or barriers to, optimal health. With a focus on equity, health should not be dependent upon zip code, income, race, or any other socioeconomic factor. Health should not be determined by zip code, income, race or any other factor. Safe and affordable housing and reliable ways to get around should be available for everyone in Pierce County.

Seven particular health needs were selected as the focus of the next three-year implementation period by the healthcare systems in Pierce County:

- Access to Care,
- Obesity,
- Behavioral Mental Health and substance use disorders,
- Maternal and Child Health,
- Injury & Violence Prevention,
- Cancer, and
- Food insecurity

Top issues facing children and youth include exposure to behavioral health, youth obesity, crime and violence, poverty and lack of positive relationships.

5. Thurston County

As of April 1, 2022, the Washington State Office of Financial Management Website (see Appendix 12-B) shows the following information for the population of Thurston County:

	CENSUS	ESTIMATE	ESTIMATE
	2020	2021	2022
Thurston	294,793	297,800	300,500
Unincorporated	144,856	145,255	143,760
percentage of total	49%	49%	48%
Incorporated	149,937	152,545	156,740
percentage of total	51%	51%	52%

WEST REGION TRAUM RESPONSE AREAS - OVERVIEW						
Thurston County	# BLS	# ILS	# ALS		# AMB	# AID
	1,512	-	78		339	145
See Appendix 7 for full County details						

Thurston County is the eighth most populated county among Washington State’s 39 counties. EMS in Thurston County is overseen by Thurston County Medic One. The pre-hospital ALS service is funded by a tax on the citizens of Thurston County and carried out through a partnership between Thurston County Medic One and 3 of the local fire departments: Olympia Fire Department, Lacey Fire District 3, and Tumwater Fire Department. Each of the three ALS departments staff dual medic units and carry out ALS 911 transports in their response area, as well as in the areas immediately surrounding them. BLS pre-hospital transports are carried out by a combination of the local fire departments and by two private ambulance providers.

These particular health needs were selected as the focus of the next three-year implementation period by the healthcare systems in Thurston County:

- Access to Care,
- Behavioral Health,
- Immunizations,
- Maternal and Child Health

**Providence CHNA is from 2020 and has listed that equity will be used in addressing the top three (homeless, access to care, and behavioral health).

Emergency Care System Resources

Trauma Verified Prehospital Resources

Identification of need and distribution of verified aid and ambulance services is facilitated by local county EMS councils in Grays Harbor/North Pacific, Lewis, Pierce and Thurston Counties. Local councils also identify where those services operate within their county’s unique Trauma Response Areas.

For an extensive GIS map³ of West Region Trauma Response Areas available please go to: <https://fortress.wa.gov/doh/ems/index.html>

There are currently 77 prehospital trauma-verified aid and ambulance agencies within the West Region (down by 4), providing 319 AMB units and 300 AID units. We also have a total of 2,919 EMS providers which is down 216 from 2021 (7% drop - See Appendix 5A). Of these, 2,586 are paid and 654 are volunteers. This indicates a decline of 230 since the last plan. (See Appendix 5C) Even though these two numbers do not match, the data reports both indicate a decline of over 200 EMS providers since the 2021.

Trauma-Designated Facilities

Fourteen designated trauma care services currently operate within the West Region. The following DOH chart shows the facility name, trauma designation level and city. (see also Appendix 1)

West	II		Madigan Army Medical Center	Joint Base Lewis McChord
		II P	Mary Bridge Children’s Hospital & Health Center	Tacoma
	II		St. Joseph Medical Center Tacoma General Hospital	Tacoma Trauma Trust Tacoma
	III		Harbor Regional Health	Aberdeen
	III	IR	Multicare Good Samaritan Hospital	Puyallup
	III		Providence St. Peter Hospital	Olympia
	IV		Multicare Allenmore Hospital	Tacoma
	IV		Providence Centralia Hospital	Centralia
	IV		St. Anthony Hospital	Gig Harbor
	IV		St. Clare Hospital	Lakewood
	IV		Summit Pacific Medical Center	Elma
	V		Arbor Health	Morton
	V		Willapa Harbor Hospital	South Bend

³ A GIS map is a computer-based system of software and hardware designed to link computer generated maps with information about the mapped entities, in this case different trauma and care services.

Emergency Cardiac & Stroke Resources

Washington State’s Emergency Cardiac and Stroke System saves lives and reduces disability from heart attack, cardiac arrest, and stroke, EMS will take patients directly to hospitals that meet care requirements and choose to participate in the system. Fourteen hospitals in the West Region are categorized as cardiac and stroke care facilities. The following DOH chart shows the facility name, cardiac & stroke designation level, city and county. (see also Appendix 4)

West	II	III	Allenmore Hospital	Tacoma	Pierce
	I	NP	Capital Medical Center	Olympia	Thurston
	II	II	Grays Harbor Community Hospital	Aberdeen	Grays Harbor
	I	II	Madigan Army Medical Center*	Tacoma	Pierce
	II	III	Summit Pacific Medical Center	McCleary	Grays Harbor
	II	III	Morton General Hospital	Morton	Lewis
	I	II	MultiCare Good Samaritan Hospital	Puyallup	Pierce
	II	III	Providence Centralia Hospital	Centralia	Lewis
	I	II	Providence St. Peter's Hospital	Olympia	Thurston
	II	II	St. Anthony Hospital	Gig Harbor	Pierce
	II	III	St. Clare Hospital	Lakewood	Pierce
	I	I	St. Joseph Medical Center*	Tacoma	Pierce
	I	I	Multicare Tacoma General Hospital*	Tacoma	Pierce
	II	III	Willapa Harbor Hospital	South Bend	Pacific

- Note: Recent change in Thrombectomy availability at Thurston County Hospital could add extended transfer/care time for stroke patients. Also see ‘Challenges’ below.

Key Accomplishments from the West Region 2021-23 Strategic Plan

- Completed min/max review of Level III-V trauma designated hospitals.
- Completed min/max review of county prehospital agencies.
- Six prevention grants were awarded in FY22, and six in FY23, targeting the leading causes of injury and death in the region during each fiscal year. \$16,000.00 was awarded in FY22 (one recipient did not complete their project) and \$20,000 was awarded in FY23 (see appendix 13 for full details):

FY20

Lacey FD#3 - Senior Safety at Home: 34 IN-HOME ASSESSMENTS. Safety enhancements or recommendations were made in 94% of the homes visited. Includes smoke alarms, carbon monoxide detectors and fire extinguishers. Also provided nightlights, anti-slip flooring materials and grab bars.

Lewis County FD#2 – Water Safety devices and harnesses: Purchased 2 double clutch kits and harnesses. Initial training was completed, and on-going training is scheduled. Products were used 3 times during the summer on actual events.

Northwest Infant Survival & SIDS Alliance – Safe Sleep Cribs: Purchased 120 Safety Sleep Cribs and sheets with a safety message printed on the sheets. Placed 104 of these cribs. Continued with the education of Safe Sleep.

New Phoebe House – Parent Coaching: 507 parent coaching hours covering core childhood needs, love and logic, safer, smarter kids and functions of child behavior.

Child Care Action Council – Child Safety Calendars: Produced and distributed 1,000 calendars with child safety topics for each month of the year. This is up from 750 in 2021.

FY21

Child Care Action Council – Child Safety Calendars: Produced and placed 1,000 calendars with child safety topics for each month of the year and had requests for more. Will try to produce 1,250 next year.

Northwest Infant Survival & SIDS Alliance – Safe Sleep Cribs: As of Feb 10, 2023, 125 cribs have been placed. Work continues through the grant cycle.

New Phoebe House -Parent Coaching: As of Feb 1,2023, they have added 35 families into their residential living facility. Work continues through the grant cycle.

Murdin Therapy – Otago at home – Exercise programs for Seniors: 3 sites currently setup for elderly physical exercise training, free of charge. Work continues through the grant cycle.

Mary Bridge Hospital – Safe Gun Storage: Purchased 120-gun safes. Plans continue as they roll out distribution methodology. Work continues through the grant cycle.

Lewis County FD#2 – Senior Fall Prevention: On 12/2/22 held a Fall Prevention event at the local senior center. Distributed free home safety equipment to 40 people.

- Prehospital training contracts were awarded in FY22 and FY23 to local EMS councils for a total of \$40,280 each year to fund Ongoing Training and Evaluation Programs in each West Region County. Current

West Region providers number over 3,480. These dollars are used to support County EMT classes, IV classes, MCI training, airway courses, the Ongoing Training and Education Program (OTEP) and more.

- Submitted Annual Reports to the WA State Auditor for FY21 and FY22
- Completed FY2021 WA State Auditor's Assessment Audit of Financial Accountability with no findings.
- Council members participated in EMS & Trauma Steering Committee Technical Advisory Committees, to include: Cardiac & Stroke TAC, Hospital TAC, Pediatric TAC, Prehospital TAC, and Regional Advisory TAC.
- Continued recruitment efforts of Council membership and we are now at over 70% of positions filled.
- All Strategic Plan deliverables reports were delivered to DOH complete and on time.
- Despite the challenges of COVID-19 during the biennium, the Council continued to hold all meetings remotely and carry out the work of its strategic plan.
- In September 2021 we sponsored a 3-day Cadaver Lab which provided BLS training for 49 EMT's and ALS training for 90 Paramedics.
- In October 2022 we provided 3 days of Airway Management training. It was attended by 10 EMT's and 22 Paramedics.
- In March 2023 we provided a one-day SEI workshop focused on teaching pediatric topics/ airway skills that accepted up to 40 students (31 attended) and there was no fee for the attendees.
- In December 2021 the Council elected to provide \$7,000 to support the EMT class in Grays Harbor, since a large amount of their local funding was lost.
- We updated our website with new pictures, information, lessons learned, 988 suicide hotline link, various announcements and a new page providing links for Jobs and Volunteer Opportunities.
- In June of 2021 we hired a new Executive Director to replace Anne Benoist, after 35 years of service. A special award was given to Anne at the Council Meeting just after her retirement.
- Council reviewed 'After-Action' reports that support response improvement in a multidiscipline, multi-jurisdictional and multi-county disaster response.
- Older Falls prevention presentations were completed annually.
- Pediatric injury prevention presentations were complete annually.
- Continued our efforts to recruit trauma and first responders to attend Cardiac, Stroke, Trauma and Injury Prevention meetings.
- Scheduled Cardiac and Stroke committee's annual meetings.
- FY22 and FY23 draft budgets were developed and approved by the Executive Board and presented to the Council and to DOH.
- Biennial contracts were distributed to and signed by local EMS Councils.
- New Rehab representative was appointed and began presentations to the Council in December 2022.
- Mental Health presentations were presented to the Council twice during the contract period.
- Suicide Prevention presentations were presented twice during the contract period to the IVP committee.
- Two-year meeting calendars were submitted and approved by all West Region Committees.

Challenges

The challenges remain complex:

- A rapidly changing healthcare environment (COVID, Mpox, flu),
- Limited and declining resources,
- Increasing demand, workforce shortages due to lack of interest in healthcare career pathways,
- Continuous 'divert' status,
- Increased patient off-loading time for Ambulances at destinations
- Increased 'wall times' for patients at destinations,
- Increased hospital discharge time and access to rehab, skilled nursing, and long-term care facilities
- On-scene communication issues across counties and with military agencies at MCI events,
- Recent change in Thrombectomy availability at Thurston County Hospital could add extended transfer/care time for stroke patients,
- Barriers to quality assurance and improvement,
- Unequal access,
- Rapidly changing technology,
- Funding issues: There is a widening gap between Fire and EMS's primary source of revenue - levies based on property taxes, and operating costs.
- Increase in population (up over 1.7%) compounded by workforce shortages including hospital and EMS personnel resigning due to mandatory vaccination requirements. EMS personnel is down 7% overall, (216 persons since last plan).
- Sustainability of community collaboration.

Priorities

Our priorities reflect our vision and mission statement:

- Quality care and quality improvement,
- Cost efficiency,
- Access for as many as possible to appropriate care,
- Data-driven decision making,
- Education and outreach,
- Improving integration and collaboration with all stakeholders,
- Resource and workforce development, and regulatory adjustment to increase effectiveness and efficiency.

Goal 1 Introduction

Maintain, assess and increase emergency care resources.

Regional councils identify the need, establish the number and level of facilities, and recommend distribution and level of care of prehospital services, per RCW 70.168.100 (g)(h). Every two years, the West Region engages in the process of reviewing the minimum and maximum numbers, and the levels of trauma-designated hospitals and trauma-verified prehospital agencies in each county. The councils offer recommendations for changes to their min/max to the EMS and Trauma Steering Committee, and the DOH gives final approval.

Trauma-Designated Hospitals

In continuation of the findings from The American College of Surgeons Committee on Trauma (ACS) in April 2019, we continue with the *review and revision* of

- The criteria for trauma designation by level,
- Methodologies for calculation of min max numbers,
- And that a process for implementation be reviewed and revised.

Subsequently, DOH established a workgroup to assess methodologies for determining the distribution of Levels I and II across the state.

Meanwhile the EMS and Trauma Care Councils also conduct reviews of the regional hospital min/max numbers. The West Region solicits participation in this process from the West Region Trauma Quality Improvement Forum (QIF), which then makes recommendations to the Council. However, it has become difficult to conduct this review without clear methodologies and guidance. The 2014 DOH Criteria and Process for Establishing Number and Level of Designated Facilities is a reference for conducting the review but is insubstantial as guidance for a regional analysis of the needs and distribution of designated trauma centers. The regions need a standardized methodology to assist them in this task.

There are 14 designated trauma care services currently operating within the West Region.⁴ Overcrowding of emergency departments throughout Washington State has been partly attributed to the large number of mental health patients being held there due to a lack of resources and inpatient capacity for these patients elsewhere. To address this, the region has obtained new behavioral health resources in the last several years:

- In 2019 South Sound Behavioral Health opened a 108-bed mental health facility in Thurston County. Located in Lacey, the hospital provides 24/7 free assessments, inpatient and outpatient behavioral health

⁴ (See Appendix 2B for a list of Approved Minimum & Maximum Numbers of Designated Trauma Care Services.)

and addiction treatment programs to all adults ages 18 and over and have committed to care for involuntary patients.

- Olympia Behavioral Health (OBH) received approval from WA DOH to build an 85-bed mental health hospital also in Lacey. They were slated to break ground in 2021 but the website does not provide an update. If this facility is completed, it will care for children, adolescents and adults and has also committed to care for involuntary patients.
- Wellfound Behavioral Health Hospital in Tacoma opened an adult 120-bed psychiatric hospital in 2019, providing partial hospitalization and inpatient mental health care. In addition, Wellfound will take transfers from hospital emergency departments.
- Telecare Thurston Mason Evaluation and Treatment Center is a 15-bed mental health facility in Thurston County which accepts patients directly from the local hospital emergency department. It serves ages 18 and older who have a chronic or serious mental health disorder and are experiencing an acute crisis. Telecare will care for voluntary and involuntary patients.

The new legislation allowing voluntary participation of EMS ambulance and aid services to transport patients from the field to mental health or chemical dependency services (Washington SHB 1721), may also relieve some of the burden of mental health patients in the ED. For example, the Pierce County MPD incorporated SHB 1721 guidelines into the updated mental health transport protocol, and has reported some progress in deflecting admission of behavioral health patients in the ED.

Prehospital Trauma Verified Services

The WREMS Council supports local EMS agencies in meeting the requirements of WAC to assure adequate availability of trauma-verified prehospital aid and ambulance services for each response area, based upon agency response time standards, geography, topography and population density. Identification of need with distribution of verified aid and ambulance services is determined by local county EMS councils in Grays Harbor/North Pacific, Lewis, Pierce and Thurston Counties. Each council has an operations committee responsible for recommending minimum/maximum numbers of prehospital services which is subsequently reviewed and endorsed by the county EMS council. Each county's recommendations are reviewed by the WREMS Council and forwarded to WA DOH for approval.

Every two years, County evaluation of minimum/maximum numbers of prehospital services is conducted, considering the following objective criteria as outlined in the WA DOH's Guideline for Addressing Minimum/Maximum Levels of Trauma Verified Prehospital EMS Resources.

1. Demand for prehospital EMS resources.
2. Population.
3. Increased trauma responses.
4. Available prehospital EMS resources.

5. Response time. Does system quality improvement/evaluation suggest that response time for prehospital EMS resources has increased? Do current resources meet response time requirements outlined in WAC 246-976-390?
6. Level of verified trauma service. Is there a demonstrated (data-driven) need for another level of service?

There is now 77 EMS trauma-verified aid and ambulance agencies within the West Region.⁵ New applications for prehospital trauma verification are reviewed by the West Region Council in accordance with the following criteria from WAC 246-976-395(4) & (5):

- (4) Regional EMS and trauma care councils may provide comments to the department regarding the verification application, including written statements on the following if applicable*
 - (a) Compliance with the department-approved minimum and maximum number of verified trauma services for the level of verification being sought by the applicant.*
 - (b) How the proposed service will impact care in the region to include discussion on.*
 - (i) Clinical care.*
 - (ii) Response time to prehospital incidents.*
 - (iii) Resource availability; and*
 - (iv) Unserved or underserved trauma response areas.*
 - (c) How the applicant's proposed service will impact existing verified services in the region.*
- (5) Regional EMS/TC councils will solicit input from local EMS/TC councils where local councils exist.*

⁵ (See Appendix 5-A for a list of verified prehospital services in the West Region.)

<p>Objective 1: By June 2025, the WREMS Council will review the current minimum and maximum numbers and levels of Trauma Designated Services. and provide recommendations to the WA DOH.</p>	1	<p>Strategy 1. By September 2024, the WREMS Executive Board will solicit input from the Trauma QIF group. The Trauma QIF group will provide input based on a review and analysis of the WA State DOH Trauma Services (DOH 530-101 = trauma registry data), from members and stakeholders regarding Regional Designated Adult, Pediatric and Rehabilitation Trauma Service’s needs.</p>
	2	<p>Strategy 2. By January 2025, the WREMS Executive Board will review input from the Trauma QIF group for current designated Trauma Services designations and make recommendations for minimum and maximum numbers, levels and locations to the West Region EMS Council.</p>
	3	<p>Strategy 3. By June 2025, the WREMS Council will make recommendations regarding minimum and maximum numbers, levels and locations of designated Trauma Services to the Washington State Department of Health.</p>
<p>Objective 2: By June 2025, the WREMS Council will review the current minimum and maximum numbers and levels of Prehospital EMS Licensed and Verified Services by county and provide recommendations to the WA DOH.</p>	1	<p>Strategy 1. By September 2024, the WREMS Executive Board will request that local EMS Councils and MPD Planning & Standards Committee review minimum and maximum numbers and levels of Prehospital EMS Licensed and Verified Services by county. They will make recommendations for any changes using the standardized methods provided by WA DOH to determine optimal prehospital system recommendations to the WREMS Council for approval.</p>
	2	<p>Strategy 2. By January 2025, the WREMS Executive Board will review input and any changes suggested by EMS Councils and MPD Planning & Standards Committee to minimum and maximum numbers and levels of Prehospital EMS Licensed and Verified Services by county and make recommendations to the WREMS Council.</p>
	3	<p>Strategy 3. By June 2025, the WREMS Council will make recommendations for the minimum and maximum numbers of Prehospital EMS Licensed and Verified Services by county to the WA DOH.</p>

<p>Objective 3: By June 2025, the WREMS Council will review the current minimum and maximum numbers and levels of Cardiac and Stroke facilities and provide recommendations to the WA DOH.</p>	1	<p>Strategy 1. By September 2024, the WREMS Executive Board will solicit input from the Cardiac and Stroke QIF groups. The Cardiac and Stroke QIF groups will provide input based on review and analysis of the WA State Emergency Cardiac and Stroke System (DOH 345-299 Participating Hospitals by Region), from members and stakeholders regarding changes to the minimum and maximum numbers, categorization levels and locations.</p>
	2	<p>Strategy 2. By January 2025, the WREMS Executive Board will review input from the Cardiac and Stroke QIF groups and make recommendations for minimum and maximum numbers, categorization levels and locations, to the West Region EMS Council.</p>
	3	<p>Strategy 3. By June 2025, the WREMS Council will make recommendations regarding minimum and maximum numbers, categorization levels and locations of designated Cardiac and Stroke facilities to the Washington State Department of Health.</p>
<p>Objective 4. By June 2025, the WREMS Council will review the status of resources within the region.</p>	1	<p>Strategy 1. By June 2024, the WREMS Council will assess hospital divert hours and how that affects pre-hospital agencies.</p>
	2	<p>Strategy 2. By June 2025, the WREMS Council will assess the healthcare system within the West Region to identify causes of 'back-ups' to support positive outcomes for our patients.</p>
	3	<p>Strategy 3. By June 2025, the WREMS Council will research methods to entice individuals to enter the healthcare field.</p>
<p>Objective 5: By June 2025, the WREMS Council will review staffing for regional EMS, hospital, and rehab facilities. These findings will then be utilized to provide recommendations to the WA DOH.</p>	1	<p>Strategy 1. By January 2024, the WREMS Executive Board will begin to solicit monthly input from stakeholders listed in Objectives 1-3. The WREMS Executive Board, or their designee, will create a system-wide electronic survey designed to assess staffing shortages in all aspects of the region's healthcare system.</p>
	2	<p>Strategy 2. By January 2025, the WREMS Executive Board will review the initial 12 months of data and input from the aforementioned survey and begin to compile a report from the West Region EMS Council to the Department of Health.</p>
	3	<p>Strategy 3. By June 2025, the WREMS Council will make recommendations regarding staffing considerations to Washington State Department of Health.</p>

Goal 2 Introduction

Support emergency preparedness activities.

The Council is committed to a “whole community” approach to preparing for, responding to, and recovering from an all-hazards, emergency incident.

As we move to the future, the region’s priorities will be to focus on:

- Collaboration with local, regional and statewide partners to support all-hazards preparedness and response planning.
- Continue collaboration with pre-hospital emergency medical agency partners to support an all-hazards response effort.

The WREMS Council is not an operational agent in the response function of this goal, but it is a critical partner that supports preparedness and response improvement planning.

<p>Objective 1: Throughout the planning cycle, the WREMS Council will collaborate with EMS, hospitals, public health, and emergency management to support cross-county all-hazards preparedness and response.</p>	1	<p>Strategy 1. By Feb 2024, the WREMS Council will schedule a seminar for council members to participate in an informal discussion to cross walk response plan updates.</p>
	2	<p>Strategy 2. By September 2024, the WREMS Council will schedule a tabletop with a multi-discipline, multi-jurisdictional, and multi-county scenario to include state and tribal response partners.</p>
	3	<p>Strategy 3. By December 2024, the WREMS Council will support partner efforts to update current planning efforts that make improvements to multi-discipline, multi-jurisdictional, and multi-county disaster response.</p>
	4	<p>Strategy 4. By March 2025, the WREMS Council will review After-Action Reports that support response improvement in a multi-discipline, multi-jurisdictional, and multi-county disaster response.</p>
	5	<p>Strategy 5. Beginning in June 2024, the MPD Joint Standards and Planning Committee will continue their update of the West Region’s Mass Casualty Incident (MCI) Patient Care Procedure (PCP) to include a new Prehospital MCI Algorithm based upon common elements of all West Region County MCI plans.</p>
	6	<p>Strategy 6: During declared emergencies or after such events, the WREMS Council will review and discuss EMS agency collaborations between local Department of Emergency Management and/or County Public Health Departments at scheduled meetings.</p>
	7	<p>Strategy 7. Throughout the planning cycle, the WREMS Council will participate in and support the implementation of a WA State EMS Emergency Preparedness Toolkit.</p>

Goal 3 Introduction

Plan, implement, monitor and report outcomes of programs to reduce the incidence and impact of injuries, violence and illness in the region.

Washington State Dept. of Health (WA DOH) data tells us that in 2016-2020, 4,384 people died from preventable injuries in the West Region (data does not include ages 0-14). Of these 1,176 were self-inflicted injuries. (Appendix 11)

The top-10 causes of injury and/or death in the West Region are listed here:

<u>TOP 10 CAUSES OF INJURY DEATH - WEST REGION - 2016 - 2020 =</u>		
<u>BY MECHANISM</u>		
1	1314	POISONINGS
2	980	FALLS
3	842	FIREARMS
4	437	SUFFOCATIONS
5	207	MOTOR VEHICLE - OCCUPANT
6	180	MOTOR VEHICLE - UNSPECIFIED
7	95	MOTOR VEHICLE - PEDESTRIAN
8	89	MOTORCYCLIST
9	84	DROWNING
10	25	FIRE/BURNS

The West Region includes many rural areas with limited resources. Building and strengthening partnerships is vital; it helps rural areas increase capacity and reduces duplication of efforts.

This data is used to set priorities, inform decisions regarding injury-prevention grant awards and evaluate the efficacy of prevention programs. By supporting evidence-based or even promising prevention strategies, and by providing education and resources to regional stakeholders the number of injuries and fatalities due to trauma can be reduced.

Regional Councils have strong support from WA DOH staff who share a wealth of expertise and resources. For example, IVP TAC and WA State Older Adult Falls Prevention Coalition meetings provide an opportunity to network with other regional prevention leads and address prevention issues at the state level.

The West Region is also currently collaborating with DOH staff, local and regional EMS responders along with the Training and Education committee in an effort to develop a pilot prevention program and/or an educational campaign directed at EMS Wellness and Resilience and supports their goal of implementing a program or campaign statewide.

Injury prevention information on a wide variety of topics is shared with prevention partners across the regions and is also available on the WREMS website, www.wrems.com/prevention.

West Region IVP meetings are held five times per year. Meetings include an educational component and an updated report from WA DOH. The meetings provide an opportunity for building partnerships, sharing best practices, and learning about prevention programs that participants can adopt in their own communities. As of June 2020, WREMS Prevention meetings were held via Zoom; participation and engagement remain strong. WREMS IVP meetings bring together a wide array of stakeholders to include prehospital providers, hospitals, public health and for-profit and non-profit organizations. Every year by providing grant opportunities, new partnerships are forged.

Each year WREMS awards prevention grants. Such grants are used to develop or strengthen prevention programs in local communities. Grant applications must address a leading cause of injury and death in the region and use evidence-based or promising strategies. (See also, Appendix 7 for full details) A subcommittee reviews all prevention grant requests submitted for consideration. Grant recipients then submit bi-monthly updates which include interventions and outcomes, and a final project report at the end of the grant year. Grant recipients must attend at least one IVP meeting during the grant year. The grants are a valuable resource for rural, underserved areas; a relatively small grant can have a big impact there. Grants make it possible to develop successful prevention programs which can then be eligible for additional grant funds from other sources. Six prevention grants were awarded in FY22, and six prevention grants were awarded in FY23.

Historically, the annual WREMS Conference included a Prevention Workshop. Approximately 42 people attended the 2019 Prevention Workshop. That Workshop included interactive open water safety education, as well as a hands-on training in social media for prevention-focused public education. Since 2020, the WREMS Conferences were cancelled due to COVID-19 restrictions on gatherings.

With the COVID-19 pandemic, which began in 2020, we have seen an increase in the number of suicide deaths. WREMS had amplified its commitment to providing education and resources in suicide prevention in the 2023-25 plan cycle. WREMS will work closely with the Thurston County TAC as they continue to develop Resilience Training Programs that can possibly be shared with other West Region Counties.

Current events have had a significant impact on the economy. Many families do not have the financial resources to purchase lifesaving safety equipment. Local prevention organizations, fire and EMS agencies, and local and state government are operating with reduced funding and staff for prevention work. WREMS continues to prioritize underserved communities when awarding prevention grants and other resources.

Since 2020, WREMS prevention grant recipients and partners adapted their programs to comply with COVID-19 social distancing requirements.

- NW Infant Survival & SIDS Alliance developed virtual safe sleep trainings, <https://nwsids.org/>

- Mary Bridge Children’s Hospital provided virtual car seat checks, <https://www.marybridge.org/services/childhood-safety/services/car-seat-inspections/>
- The Crisis Clinic of Thurston & Mason Counties updated their website to provide suicide prevention education and resources online and continues to be available 24/7 through their Crisis Line, 360-586-2800 and youth line, 360-586-2777. <https://crisis-clinic.org/>

In FY23, as we begin to return to normal and COVID restrictions ease, the Prevention Grant recipients also return to a more normal work routine.

- Mary Bridge is working on a Safe Gun Storage project.
- Lewis County FD-2 is working on a Senior Fall Prevention Project
- NISSA (Northwest Infant Survival & SIDS Alliance) continues their important work on Unsafe Infant Sleep.
- New Phoebe House also continues to move forward with their program for parenting education for mothers in recovery.

<p>Objective 1: Annually throughout the planning cycle, the WREMS Council will research the most recent injury and mortality data available to identify the leading causes of traumatic injury and death in the West Region and support evidence-based, best available, or promising strategies and programs.</p>	1	<p>Strategy 1a. By August 2024, the WREMS Council will review the most current injury and mortality data from WA DOH and other sources, as available, to determine the leading causes of traumatic injury and death in the West Region and use this information as criteria for funding local programs and activities.</p>
		<p>Strategy 1b. By August 2025, the WREMS Council will review the most current injury and mortality data from WA DOH and other sources, as available, to determine the leading causes of traumatic injury and death in the West Region and use this information as criteria for funding local programs and activities.</p>
	2	<p>Strategy 2a. By September 2024, the IVP Grant Workgroup will identify evidence-based or promising injury prevention programs and activities and provide funding to regional injury prevention partners as funding is available.</p>
		<p>Strategy 2b. By September 2025, the IVP Grant Workgroup will identify evidence-based or promising injury prevention programs and activities and provide funding to regional injury prevention partners as funding is available.</p>

<p>Objective 2: Annually, throughout the planning cycle, the WREMS Council will coordinate and offer training that addresses a leading cause of injury and mortality in the West Region.</p>	1	<p>Strategy 1a. By April 2024, the WREMS Council will coordinate and offer at least one IVP training.</p>
		<p>Strategy 1b. By April 2025, the WREMS Council will coordinate and offer at least one IVP training.</p>
<p>Objective 3: Throughout the planning cycle, the WREMS Council will support suicide prevention, awareness & education programs and activities.</p>	1	<p>Strategy 1. Throughout the planning cycle, the WREMS Council will share suicide prevention resources and information with regional stakeholders.</p>
	2	<p>Strategy 2a. Annually, by September 30, 2024, the WREMS Prevention grants will be offered for projects that address the leading causes of death and injury, including suicide.</p>
		<p>Strategy 2b. Annually, by September 30, 2025, the WREMS Prevention grants will be offered for projects that address the leading causes of death and injury, including suicide.</p>
	3	<p>Strategy 3a. Throughout the 2024 grant year, funding recipients will report on the progress of their programs, including interventions and outcomes, to the WREMS Council.</p>
		<p>Strategy 3b. Throughout the 2025 grant year, funding recipients will report on the progress of their programs, including interventions and outcomes, to the WREMS Council.</p>
	4	<p>Strategy 4a. Throughout the 2024 grant year, the WREMS Council will provide bi-monthly progress reports to WA DOH.</p>
		<p>Strategy 4b. Throughout the 2025 grant year, the WREMS Council will provide bi-monthly progress reports to WA DOH.</p>
	5	<p>Strategy 5a. By April 30, 2024, Suicide prevention education will be presented at a WREMS Prevention meeting.</p>
		<p>Strategy 5b. By April 30, 2025, Suicide prevention education will be presented at a WREMS Prevention meeting.</p>
	<p>Objective 4: Annually, throughout the planning cycle, the WREMS Council will promote older adult falls prevention.</p>	1
2		<p>Strategy 2a. By September 30, 2024, the WREMS Prevention grants will be offered for projects that address the leading causes of death and injury, including older adult falls prevention.</p>

		Strategy 2b. By September 30, 2025, the WREMS Prevention grants will be offered for projects that address the leading causes of death and injury, including older adult falls prevention.
	3	Strategy 3a. Throughout the 2024 grant year, funding recipients will report on the progress of their programs, including older adult falls prevention, interventions and outcomes, to the WREMS Council.
		Strategy 3b. Throughout the 2025 grant year, funding recipients will report on the progress of their programs, including older adult falls prevention, interventions and outcomes, to the WREMS Council.
	4	Strategy 4a. By June 30, 2024, older adult falls prevention education will be presented at a WREMS Prevention meeting.
		Strategy 4b. By June 30, 2025, older adult falls prevention education will be presented at a WREMS Prevention meeting.
	5	Strategy 5. Throughout each grant year, the WREMS Council will provide bi-monthly progress reports to WA DOH on older adult falls programs.
Objective 5: Annually, Throughout the planning cycle, the WREMS Council will promote pediatric injury prevention for the leading causes of death for children ages 1-14 yrs which are suffocation, burn/fire, drowning, suicide, poisoning and MVC.	1	Strategy 1. Throughout each grant year, the WREMS Council will provide bi-monthly progress reports to WA DOH on older adult falls programs.
	2	Strategy 2a. By September 30, 2024, WREMS Prevention grants will be offered for projects that address the leading causes of death and injury for children.
		Strategy 2b. By September 30, 2025, WREMS Prevention grants will be offered for projects that address the leading causes of death and injury for children.
	3	Strategy 3a. Throughout the 2024 grant year, funding recipients will report on the progress of their programs, including interventions and outcomes, to the WREMS Council.
		Strategy 3b. Throughout the 2025 grant year, funding recipients will report on the progress of their programs, including interventions and outcomes, to the WREMS Council.
	4	Strategy 4a. By June 30, 2024, Pediatric injury prevention education will be presented at a WREMS Prevention meeting.
		Strategy 4b. By June 30, 2025, Pediatric injury prevention education will be presented at a WREMS Prevention meeting.

	5	Strategy 5. Throughout each grant year, the WREMS Council will provide bi-monthly progress reports to WA DOH.
Objective 6: Throughout the planning cycle, the WREMS Council will collaborate to educate the public, partners and policy makers on the Emergency Care System.	1	Strategy 1. Throughout the planning cycle, the WREMS Council will make current Emergency Care system information available to stakeholders on the WREMS website and by email.

Goal 4 Introduction

Assess weakness and strengths of quality improvement programs in the region.

West Region Trauma Quality Improvement Forum

The WREMS Council supports the independent, collaborative, regional quality improvement work of the Trauma Quality Improvement Forum (QIF).

The purpose of the Trauma QIF include:

- To improve patient outcomes,
- To identify areas for improvement,
- To educate providers
- And to build coordination between services.

The designated trauma facilities (Level II, III, IV and V), and trauma-verified ALS and BLS EMS agencies all participate at the Trauma QIF meetings,

- To review regional data,
- To provide case presentations,
- To share successful process-improvement projects
- And to receive trauma education presentations.

Hospital data for the Trauma QIF is regularly supplied through the WA State Trauma Registry. A Trauma QIF Plan calls for confidential meetings five times per year, a membership of both hospitals and prehospital agencies, and the sharing of case reviews and data. (See Appendix 10A for the West Region Trauma QIF plan.)

The Trauma QIF Plan Revision Workgroup convened once in January 2020 to begin an update of the West Region Trauma QIF Plan. The Workgroup discussed broadening the plan to address the issues of:

- How to prove the region is providing quality care,
- Identifying system issues and QI indicators
- And implementing systems QI.

The Plan Revision Workgroup needs to continue meeting to complete the updates. Goal 4 Objective 2, Strategy 3 is a strategy to continue those meetings.

West Region Cardiac & Stroke Quality Improvement Forum

The WREMS Council also supports the Emergency Cardiac and Stroke System in the West Region. That System is similar to the WA Trauma System but is intended to save lives and reduce disability specifically for heart attack, cardiac arrest, and stroke patients. The WREMS Council provides administrative support to the West Region Cardiac/Stroke QI Forum and brings together hospitals and prehospital agencies to review regional data, provide case presentations, and share successful process improvement projects.

Cardiac and stroke care differ, so the two groups meet separately to address their QI issues. The Cardiac/Stroke QI has a West Region Cardiac/Stroke QI Plan. (See Appendix 9 for the plan.)

During 2019-21, the West Region Stroke QI group identified one of the major barriers to reducing the time to treatment for acute stroke: inconsistent prehospital documentation of key stroke data elements. In 2020 the WREMS Council was awarded a Coverdell Stroke grant from DOH to improve the prehospital provider’s knowledge through education on the importance of documenting stroke indicators. An educational video was produced for prehospital providers through the collaborative efforts of the regional MPDs, Thurston County Medic One, and Chris Sharp Productions. The finished video, “Stroke Outcomes: Saving Lives Through Documentation” <https://vimeo.com/389844612> was released in January 2020, and preliminary data has shown:

- 1) More EMS providers have consistently reported Last Known Well in clock hour time versus lapsed time, leading to improved, more accurate, and timely care and coordination of stroke patients.
- 2) A 10% improvement in EMS documentation of Last Known Well, FAST-BEFAST exam, pre-notification of arrival, stroke severity score.
- 3) A 5% improvement for patients with a LAMS 4 or 5 being transported to a comprehensive stroke center capable of endovascular treatment.
- 4) A 5% improvement of appropriately documented blood glucose levels in EMS documentation.

In September 2022, a DOH representative presented WEMSIS (Washington State EMS Information System) stroke data for 2021 at the Stroke QI meeting:

The West Region EMS responses captured, is about 20% lower than the rest of the state with Thurston County the weakest responses. This is due to liability issues that will hopefully be resolved within the first or second quarter of calendar year 2023 and/or the implementation of mandatory reporting. If/when mandatory reporting is implemented, we expect the West Region data will be more equal to that of other regions. Here is the current West Region breakdown:

Grays Harbor	72%
Lewis County	100%
Pacific	66%
Pierce	94%
Thurston	31%

EMS transport times in minutes (mean and median) for stroke transports are as follows:

	<u>Mean</u>	<u>Median</u>
Grays Harbor	9.1 minutes	7 minutes
Lewis	10.4 minutes	9 minutes
Pacific	7.3 minutes	6 minutes
Pierce	7.9 minutes	7 minutes
Thurston	19.8 minutes	11 minutes

The number of EMS transports for Stroke related incidents is as follows:

Grays Harbor	134
Lewis	173
Pacific	54
Pierce	1281
Thurston	402

On scene times are as follows:

	<u>Mean</u>	<u>Median</u>
Grays Harbor	20.9 minutes	19 minutes
Lewis	17 minutes	16 minutes
Pacific	16.2 minutes	13 minutes
Pierce	16.7 minutes	16 minutes
Thurston	11.4 minutes	11 minutes

Additionally, the door to needle time for the West Region is 46.5 minutes, which is just slightly higher than the 42.5-minute average for the state.

Regional Cardiac and Stroke QI Programs are challenged by the absence of regulation. The Cardiac and Stroke System is voluntary and receives no funding at the state level. It is a top concern for the WREMS Council that the Emergency Cardiac & Stroke System receive funding.

West Region Prehospital QI

Each county in the West Region has a prehospital QI process. Some have case reviews with the local hospital and others have formal committees. There is a need for more prehospital participation at the regional level, for both Trauma and Cardiac/Stroke QI Forums. Goal 4, Objective 1, Strategy 4 is a strategy to enhance participation.

Submission of prehospital data into the WA Emergency Medical Service Information System (WEMSIS), has improved in the last two years. Full implementation of WEMSIS reporting requirements is anticipated following CR103 filing and may result in improved reporting rates after 2023.

<p>Objective 1: Throughout the planning cycle, the WREMS Council will review regional emergency care system performance.</p>	1	<p>Strategy 1. On a quarterly basis throughout the contract year, the WREMS Council will review meeting reports from the West Region Quality Improvement Forums for Trauma, Cardiac, and Stroke.</p>
	2	<p>Strategy 2. When appropriate, the WREMS Council will share recommended opportunities for improvement from the QIF to the Training, Education and Development Committee (TED), IVP Committee, and the WREMS Council. WREMS Committees will disseminate among West Region agencies/facilities.</p>
	3	<p>Strategy 3a. By November 15, 2023, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3b. By January 15, 2024, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3c. By April 15, 2024, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3d. By June 15, 2024, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3e. By November 15, 2024, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>

		<p>Strategy 3f. By January 15, 2025, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3g. By April 15, 2025, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 3h. By June 15, 2025, the West Region local EMS councils will be requested to report quarterly ‘lessons learned’ from prehospital case reviews back to the Council as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
	4	<p>Strategy 4. When appropriate, ‘lessons learned’ will be posted on the West Region website. West Region staff will explore methods to inform constituents of the availability of the information.</p>
	5	<p>Strategy 5a: By November 15, 2023, the West Region local councils will be requested to submit a copy of an email verifying EMS attendance recruitment to regional trauma, cardiac and stroke quality improvement meetings as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
		<p>Strategy 5b: By November 15, 2024, the West Region local councils will be requested to submit a copy of an email verifying EMS attendance recruitment to regional trauma, cardiac and stroke quality improvement meetings as a Service Agreement Contract Deliverable for their prehospital training funds.</p>
<p>Objective 2: Throughout the planning cycle, the West Region EMS Quality Improvement Forums will review Trauma, Cardiac and Stroke data.</p>	1	<p>Strategy 1. Throughout the planning cycle, the WREMS Council will continue to assist the West Region Trauma, Cardiac and Stroke QIFs in meeting preparation.</p>
	2	<p>Strategy 2a. By June 30, 2024, participating members of the Trauma, Cardiac and Stroke QIFs will establish yearly schedules of meetings to review regional data to allow for comprehensive system evaluation.</p>

		<p>Strategy 2b. By June 30, 2025, participating members of the Trauma, Cardiac and Stroke QIFs will establish yearly schedules of meetings to review regional data to allow for comprehensive system evaluation.</p>
<p>Objective 3: Throughout the planning cycle, the West Region Cardiac Quality Improvement Forum (QIF) will explore barriers to STEMI activation from all hospital admit sources, to include EMS transports and facility transfers.</p>	<p>3</p>	<p>Strategy 3. In January 2025, the West Region Trauma QIF will resume the update of the West Region QI – Trauma Plan to include strategic goals with at least three trauma system indicators to review and improve.</p>
	<p>1</p>	<p>Strategy 1a. In December 2023 (and throughout the planning cycle), the West Region Cardiac QIF will work with the Region’s MPDs to meet reporting requirements enacted by WEMESIS legislation requiring EMS agencies to train on appropriate data entry.</p>
		<p>Strategy 1b. In December 2024 (and throughout the planning cycle), the West Region Cardiac QIF will work with the Region’s MPDs to meet reporting requirements enacted by WEMESIS legislation requiring EMS agencies to train on appropriate data entry.</p>
	<p>2</p>	<p>Strategy 2a. By December 31, 2023, the West Region Cardiac QIF will examine the WEMESIS data dictionary to develop appropriate STEMI reports to be analyzed on a routine basis. This strategy will also address identifying applicable prehospital training.</p>
		<p>Strategy 2b. By December 31, 2024, the West Region Cardiac QIF will examine the WEMESIS data dictionary to develop appropriate STEMI reports to be analyzed on a routine basis. This strategy will also address identifying applicable prehospital training.</p>
<p>3</p>	<p>Strategy 3. Once strategies 1 & 2 are completed, the West Region Cardiac QIF will identify, and address, barriers to direct-to-catheterization lab patients that come from a prehospital STEMI activation. This strategy will also address the Get with The Guidelines goals of 90 minutes from first medical contact to intervention and/or the 30 minute transport goal for lytic/non-catheterization sites.</p>	

<p>Objective 4: Throughout the planning cycle, the West Region Stroke QIF will reduce the time to treatment for acute stroke by 5% from baseline.</p>	1	<p>Strategy 1a. In December 2023 (and throughout the planning cycle), the West Region Stroke QIF will work with the Region’s MPDs to meet reporting requirements enacted by WEMISIS legislation requiring EMS agencies to train on appropriate data entry.</p>
		<p>Strategy 1b. In December 2024 (and throughout the planning cycle), the West Region Stroke QIF will work with the Region’s MPDs to meet reporting requirements enacted by WEMISIS legislation requiring EMS agencies to train on appropriate data entry.</p>
	2	<p>Strategy 2a. In April 2024 (and throughout the planning cycle), the West Region Stroke QIF will examine the WEMISIS data dictionary to develop appropriate stroke reports to be analyzed on a routine basis. This strategy will also address identifying applicable prehospital training.</p>
		<p>Strategy 2b. In April 2025 (and throughout the planning cycle), the West Region Stroke QIF will examine the WEMISIS data dictionary to develop appropriate stroke reports to be analyzed on a routine basis. This strategy will also address identifying applicable prehospital training.</p>
	3	<p>Strategy 3. Throughout the planning cycle, the West Region Stroke QIF will identify barriers to reducing the time to treatment for acute stroke.</p>
	4	<p>Strategy 4. Throughout the planning cycle, the West Region Stroke QIF will implement initiatives to reduce the time to treatment for acute stroke.</p>
	5	<p>Strategy 5. Throughout the planning cycle, the West Region Stroke QIF will share progress and results with the West Region Council and the Emergency Cardiac & Stroke Technical Advisory Committee.</p>
<p>Objective 5: Throughout the planning cycle, the WREMS Council will identify and implement strategies to increase prehospital services reporting to and participation in prehospital data sources.</p>	1	<p>Strategy 1. Throughout the planning cycle, the WREMS Council will monitor the developments of WEMISIS rulemaking and once incorporated into WAC, develop written recommendations to help increase prehospital data submission to WEMISIS in the West Region.</p>
	2	<p>Strategy 2. By June 2023, the WREMS Council will submit the recommendations to the WEMISIS Workgroup and WA DOH.</p>
	3	<p>Strategy 3. By September 2023, the WREMS Council will request WEMISIS data training be provided to demonstrate to EMS agencies the WEMISIS data analysis opportunities.</p>

Goal 5 Introduction

Promote regional system sustainability.

A quality Emergency Care System is maintained and broadened by the exchange of information and expertise among the West Region Council membership and the system stakeholders. The Council's inclusive membership and dedicated, engaged members, along with valued stakeholders work together to build and expand the Care System.

The WREMS Council adheres to a timeline for developing, reviewing, approving and implementing its annual fiscal budget. While the DOH contract with WREMS has remained stable for almost a decade, other financial resources for the EMS and Trauma System have been declining (consider the lost funding in Grays Harbor in 2022 and the West Region supported their EMT class with \$7,000.00 from our savings account. The West Region Council continues to be a responsible steward of public funds and continues to practice cost efficiencies and look for creative opportunities to cut costs.

Annual training grants are awarded to the West Region counties to supplement their training budgets. Contracts are initiated with local EMS councils to distribute funds for coordination and delivery of Ongoing Training and Evaluation Program (OTEP) and Continuing Medical Education (CME) EMS training. This supplemental funding covers a small portion of funds needed for training by the counties and the prehospital agencies they support.

The Council sponsors an annual conference which provides high quality EMS education and training opportunities to West Region and Washington State providers. The Council has produced the three-day conference for 36 years. Despite facing rising costs, diminishing funds, and a pandemic, the Council will annually provide either online training or an in-person conference. Although WREMS has been unable to produce the EMS conference since 2019, due to necessary COVID-19 restrictions on gatherings, they were able to provide training opportunities remotely. (In January 2023, the WREMS office emailed all prior conference attendees asking for their input on training topics. In February 2023 a second email was sent out asking for the type of training and how they would like to participate in these training events.)

The WREMS Council recognizes enhanced education for credentialed Senior EMS Instructors (SEIs) and EMS Evaluators (ESE) as critical for the sustainability of the EMS system. An example of enhancing workforce development is to improve EMT numbers by graduating more EMTs. The Council is committed to providing annual training and development for SEIs and ESEs. Workshops have historically been provided at the Council's annual EMS conference. In March of 2023 a one-day SEI training event was held in Tacoma with an emphasis on pediatrics. This was funded with an EMSC Grant and we had over 24 attendees.

Along with funding EMS training, the Council is dedicated to funding data-driven injury prevention projects which target the leading causes of trauma injury and death in the region. (See Goal 3 and Appendix 13 for more information regarding the WREMS Injury and Violence Prevention Program.) Additionally, we continue our concern for ongoing training for all healthcare providers and support [RCW 43.70.613: Health care professionals—Health equity continuing education. \(wa.gov\)](#) and [RCW 43.70.615: Multicultural health awareness and education program—Integration into health professions basic education preparation curriculum.](#)

<p>Objective 1: Throughout the planning cycle, the WREMS Council will identify cost saving practices.</p>	<p>1</p>	<p>Strategy 1a. During March 2024, the WREMS Council Executive Board will begin to develop a draft budget for the next fiscal year, which takes into consideration cost efficiencies.</p>
		<p>Strategy 1b. In June 2024, the WREMS Executive Board will present the next fiscal year’s draft budget for Council member review and approval.</p>
	<p>2</p>	<p>Strategy 2a. During March 2025, the WREMS Council Executive Board will begin to develop a draft budget for the next fiscal year, which takes into consideration cost efficiencies.</p>
		<p>Strategy 2b. In June 2025, the WREMS Executive Board will present the next fiscal year’s draft budget for Council member review and approval.</p>
<p>Objective 2: Annually, the WREMS Council will identify needs and allocate available funding to support prehospital training.</p>	<p>1</p>	<p>Strategy 1a. In February 2024, the WREMS Training and Education Committee will query stakeholders regarding how to best provide EMS education and training opportunities in the West Region.</p>
		<p>Strategy 1b. In February 2025, the WREMS Training and Education Committee will query stakeholders regarding how to best provide EMS education and training opportunities in the West Region.</p>
	<p>2</p>	<p>Strategy 2. In March 2025, the WREMS Council will review needs and approve educational funding levels for each local EMS council.</p>
	<p>3</p>	<p>Strategy 3. During May 2025, the WREMS staff will initiate biennial contracts with local EMS councils to distribute funds for coordination and delivery of OTEP and CME EMS training.</p>
	<p>4</p>	<p>Strategy 4: Annually, by June, the WREMS Council will facilitate SEI training and development by scheduling at least one SEI workshop.</p>
	<p>5</p>	<p>Strategy 5. Annually, by June, the WREMS Council will conduct an EMS conference or regional training which provides EMS education and training opportunities within the West Region and is available to all Washington State and out of state providers.</p>

<p>Objective 3: Throughout the planning cycle, the WREMS Council will work with the WA DOH and the State Auditor’s Office to ensure the Regional Council business structure and practices remain compliant with RCW.</p>	1	<p>Strategy 1. Annually, at the beginning of the plan year, the WREMS Council will provide WA DOH with a regional budget.</p>
	2	<p>Strategy 2. Annually, by November 15, the WREMS Council will submit to the Washington State Auditor’s Office an Annual Report of the previous year’s financial information and required schedules.</p>
<p>Objective 4: Beginning in July 2023, the WREMS Council will implement the 2023-25 Regional EMS and Trauma System Strategic Plan.</p>	1	<p>Strategy 1. Beginning in July 2023, the WREMS staff will begin collaborating with stakeholders to accomplish the WA DOH reporting process on implementing the 2023-25 Strategic Plan.</p>
	2	<p>Strategy 2. By August 2023, the WREMS Office will distribute the 2023-25 Plan to the local councils and county MPDs and post it on the Council website.</p>
	3	<p>Strategy 3. Beginning August 2023, and throughout the plan cycle, the WREMS Office will provide bi-monthly progress reports to the WA DOH and to the Executive Board.</p>
<p>Objective 5: Throughout the planning cycle, the WREMS Council will facilitate the exchange of information throughout the emergency care system.</p>	1	<p>Strategy 1. Beginning in July 2023, and throughout the plan cycle, WREMS Executive Board and staff will manage Council membership to ensure adequate representation.</p>
	2	<p>Strategy 2. Beginning in July 2023, and throughout the plan cycle, meeting facilities, agendas and minutes will be provided to WREMS Council members and regional EMS stakeholders in advance of each meeting through email.</p>
	3	<p>Strategy 3. Beginning in July 2023, and throughout the plan cycle, WREMS Council members will participate in EMS stakeholder meetings including EMS & Trauma Steering Committee and various Technical Advisory Committees and then share information with the WREMS Council at regularly scheduled meetings.</p>
	4	<p>Strategy 4. Throughout the planning cycle, WREMS Council will bring EMS system and patient care issues forward to the WA DOH, as necessary.</p>

<p>Objective 6: By March 2025, the WREMS Council will complete a review and update of the Regional EMS & Trauma Care System Strategic Plan to define the system direction and work in the West Region for 2025-27.</p>	1	<p>Strategy 1. By September 2024, the WREMS Council will obtain and begin a review of directives from the WA DOH for the 2023-25 system plan components.</p>
	2	<p>Strategy 2. From November 2024-March 2025, the regional designated planners will develop objectives and strategies identifying work under each plan goal to maintain, further develop or refine the regional system and will report progress to the WREMS Council.</p>
	3	<p>Strategy 3. By March 2025, the designated planners will present a completed draft of the 2023-25 West Region Strategic Plan to the WREMS Council, and subsequently to the WA DOH.</p>
	4	<p>Strategy 4. By March 2024, the WREMS Council will collaborate with regulatory entities in identifying methods to minimize barriers within the healthcare system to move patients appropriately.</p>

Goal 6 Introduction

Sustain a region-wide system of designated trauma rehabilitation services to provide adequate capacity and distribution of resources to support high quality trauma rehabilitation.

Washington Trauma Registry data presented at the January 2015 DOH EMS & Trauma Steering Committee (EMSTC) showed the percentage of trauma patients discharged to acute rehabilitation centers was declining in our state. Data showed only a small percentage of the trauma patients who needed rehabilitation care received it. Data further showed that patients who received rehabilitation care were almost 9 times more likely to be discharged home or to an Adult Family Home. Those that do not receive proper rehabilitation care experience a higher mortality rate. More recent data from the WA Trauma Registry shows the number of trauma patients discharged to acute care rehabilitation has stopped declining and has become steady.

There is currently only one trauma-designated rehabilitation center within the West Region; MultiCare Good Samaritan Hospital in Puyallup is a Level I. Their Trauma Rehabilitation Service is recognized as one of the best rehabilitation centers in the nation. Good Samaritan Hospital's expansion of its rehabilitation unit to 48 beds was completed in 2019.

CHI Franciscan St. Joseph Medical Center closed their inpatient trauma rehabilitation unit to open the free-standing CHI Franciscan Rehabilitation Hospital in Tacoma in May 2018. The 60-bed inpatient acute rehabilitation hospital offers care tailored to individuals recovering from stroke, brain injury, neurological conditions, spinal cord injury, amputation, and orthopedic injury. It is not a trauma-designated facility.

The shortage of trauma designated rehabilitation facilities may be partly due to the CMS limitations imposed which govern reimbursement of trauma rehabilitation, and the difficulty of finding placement of TBI patients. Limited acute care hospital bed capacity has also impacted rehabilitation units and beds. In some cases, rehab beds will be removed to make space for acute care beds. This was the case at several facilities in 2020 due to COVID-19.

Another issue rehabilitation facilities are struggling with is being able to discharge patients to Adult Family Homes and Skilled Nursing Facilities. It has been difficult to find bed space which results in longer lengths of stay in the rehabilitation unit than is needed or required. This trend continues through FY22 and FY 23.

The WREMS Council is concerned about the lack of access to local rehabilitation facility resources in the more rural areas of Lewis, North Pacific and Grays Harbor counties. The work outlined for the 2024-25 cycle continues to focus on outpatient rehabilitation care availability in the West Region. It is vital that trauma rehabilitation patients be referred to outpatient rehabilitation care in their own communities; however, many rural areas do not have access to these services.

<p>Objective 1: Throughout the planning cycle, the West Region EMS Council will continue to integrate trauma rehabilitation information/issues into Regional Council meetings.</p>	1	<p>Strategy 1. Quarterly during the plan cycle, the Trauma Rehabilitation Representative of the West Region Council will prepare regular reports and updates for the West Region EMS Council meetings from the DOH EMS and Trauma Steering Committee’s Trauma Rehabilitation TAC.</p>
	2	<p>Strategy 2. By October 2023, an ad hoc workgroup of the WREMS Council will work with the Rehab Without Walls agency to identify pathways for rural communities to access therapy.</p>
	3	<p>Strategy 3. By June 2024, the WREMS Council will research the reasons why rehabilitation facilities within our region closed, and research barriers to opening new facilities.</p>
	4	<p>Strategy 4. By June 2025, the WREMS Council will collaborate with and identify pathways to support local healthcare systems’ / entities’ in establishing rehabilitation facilities in non-traditional areas such as Joint Base Lewis-McChord and Lewis or Grays Harbor counties.</p>
<p>Objective 2: During the Plan cycle, the trauma rehabilitation committee will continue to meet.</p>	1	<p>Strategy 1. By March 2024, the West Region Trauma Rehabilitation Committee will meet to explore strategies to address the need for rehabilitation outpatient clinic services in underserved communities within the West Region.</p>
	2	<p>Strategy 2. By March 2025, the West Region Trauma Rehabilitation Committee will report their strategies to the WREMS Council.</p>

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 1

ADULT AND PEDIATRIC TRAUMA DESIGNATED HOSPITALS AND REHAB FACILITIES

West	II		Madigan Army Medical Center	Joint Base Lewis McChord
		II P	Mary Bridge Children's Hospital & Health Center	Tacoma
	II		St. Joseph Medical Center Tacoma General Hospital	Tacoma Trauma Trust Tacoma
	III		Harbor Regional Health	Aberdeen
	III		IR Multicare Good Samaritan Hospital	Puyallup
	III		Providence St. Peter Hospital	Olympia
	IV		Multicare Allenmore Hospital	Tacoma
	IV		Providence Centralia Hospital	Centralia
	IV		St. Anthony Hospital	Gig Harbor
	IV		St. Clare Hospital	Lakewood
	IV		Summit Pacific Medical Center	Elma
	V		Arbor Health	Morton
	V		Willapa Harbor Hospital	South Bend



**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 2

2A = DOH 689-163

**2B = West Region Approved Minimum/Maximum Numbers of Designated Trauma Care
Services**

**Designated Trauma Facility
Regional Minimum/Maximum Numbers**

[APPENDIX-2A](#)

Region	Level	State Approved		Current Status
		Min	Max	#
Central	II	0	0	0
	III	4	4	4
	IV	3	3	3
	V	1	2	2
	II-P	0	0	0
	III-P	0	0	0
	II-R	4	6	0
East	II	1	3	1
	III	3	4	4
	IV	4	7	5
	V	3	9	7
	II-P	1	2	1
	III-P	1	2	1
	II-R	0	0	0
North	II	1	3	2
	III	4	6	3
	IV	1	5	5
	V	1	4	0
	II-P	0	1	0
	III-P	0	1	1
	II-R	2	3	1
North Central	II	1	1	0
	III	2	2	1
	IV	4	7	7
	V	3	3	2
	II-P	1	0	0
	III-P	1	1	1
	II-R	1	1	1

Region	Level	State Approved		Current Status
		Min	Max	#
Northwest	II	1	1	0
	III	2	2	2
	IV	2	3	3
	V	3	4	0
	II-P	0	0	0
	III-P	1	1	0
	II-R	0	0	0
South Central	II	1	2	0
	III	5	6	4
	IV	4	5	5
	V	1	2	1
	II-P	0	1	0
	III-P	3	3	2
	II-R	3	4	2
Southwest	II	1	1	1
	III	1	1	1
	IV	3	3	3
	V	1	2	0
	II-P	0	1	0
	III-P	0	1	0
	II-R	1	1	1
West	II	2	3	3
	III	1	6	3
	IV	2	8	5
	V	1	3	2
	II-P	1	1	1
	III-P	0	0	0
	II-R	1	4	0

P = Pediatric
R = Rehabilitation
EMSTCSC = EMS/Trauma Care Steering Committee

Statewide/Level I			
Level	Min	Max	#
I	1		1
I-P	1		1
I-R	3	4	3
I-PR	2	4	2

Approved Minimum/Maximum of Designated Trauma Care Services			
Level	State Approved		Current Status
	Min	Max	
I	0	0	0
II	2	3	3
III	1	6	3
IV	2	8	5
V	1	3	2
II P	1	1	1
III P	0	0	0

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 3

**Approved Minimum/Maximum Numbers of Designated Rehabilitation Trauma Care
Services**

Approved Minimum/Maximum of Designated Rehabilitation Trauma Care Services			
Level	State Approved		Current Status
	Min	Max	
I	0	1	1
II	1	4	0
III*	0	5	0

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 4

Washington State Emergency Care Categorized Cardiac and Stroke System Hospitals

APPENDIX 4

West	II	III	Allenmore Hospital	Tacoma	Pierce
	I	NP	Capital Medical Center	Olympia	Thurston
	II	II	Grays Harbor Community Hospital	Aberdeen	Grays Harbor
	I	II	Madigan Army Medical Center*	Tacoma	Pierce
	II	III	Summit Pacific Medical Center	McCleary	Grays Harbor
	II	III	Morton General Hospital	Morton	Lewis
	I	II	MultiCare Good Samaritan Hospital	Puyallup	Pierce
	II	III	Providence Centralia Hospital	Centralia	Lewis
	I	II	Providence St. Peter's Hospital	Olympia	Thurston
	II	II	St. Anthony Hospital	Gig Harbor	Pierce
	II	III	St. Clare Hospital	Lakewood	Pierce
	I	I	St. Joseph Medical Center*	Tacoma	Pierce
	I	I	Multicare Tacoma General Hospital*	Tacoma	Pierce
	II	III	Willapa Harbor Hospital	South Bend	Pacific

NP = Not Participating

For people with disabilities, this document is available on request in other formats.

To submit a request, please call 1-800-525-0127 (TDD/TTY 1-800-833-6388).

* - Meets requirements of a Level I or Level II Stroke Center with all aspects of Emergent Large Vessel Occlusion (ELVO) therapy available on a 24 hour per day, seven day per week (24/7) basis.

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 5

EMS Resources, Prehospital Verified Services

5A = EMS Agency Report/Data

5B = Verified and Non-Verified by County

5C = Paid & Volunteer by County

Approved Minimum/Maximum Numbers of Verified Prehospital Trauma Services by Level and Type by County

WEST REGION EMS AGENCY RESOURCE REPORT - 2/8/23

APPENDIX - 5A

EMS County UDL	Agency Name	Mailing City	Agency Type	Care Level	Ground Vehicles		Aircraft		Personnel			Agency Count
					# AMB	# AID	# FIXED	# Rotary	#BLS	# ILS	#ALS	
Grays Harbor	Aberdeen Fire Department	Aberdeen	AMBV	ALS	5	0	0	0	18	0	21	1
Grays Harbor	Adventure Medics LLC	Onalaska	AMB	ALS	4	0	0	0	0	0	0	2
Grays Harbor	City of McCleary	McCleary	AIDV	BLS	0	1	0	0	7	0	0	3
Grays Harbor	Cosmopolis Fire Department	Cosmopolis	AIDV	BLS	0	5	0	0	1	0	0	4
Grays Harbor	East Grays Harbor Fire And Rescue	Elma	AMBV	ALS	6	3	0	0	11	0	7	5
Grays Harbor	Grays Harbor FD # 10	Aberdeen	AIDV	BLS	0	2	0	0	6	0	0	6
Grays Harbor	Grays Harbor Fire Dist #17	Humtulpis	AIDV	BLS	0	1	0	0	1	0	0	7
Grays Harbor	Grays Harbor Fire Dist #7	Copalis Beach	AMBV	BLS	2	2	0	0	9	0	0	8
Grays Harbor	Grays Harbor Fire District #6	Hoquiam	AIDV	BLS	0	5	0	0	3	0	0	9
Grays Harbor	Grays Harbor Fire District #8	Pacific Beach	AMBV	BLS	2	0	0	0	7	0	0	10
Grays Harbor	Grays Harbor Fire District No. 2	Aberdeen	AMBV	ALS	3	5	0	0	24	0	4	11
Grays Harbor	Grays Harbor Fire Protection District #1	Oakville	AMBV	BLS	2	0	0	0	10	0	0	12
Grays Harbor	Grays Harbor/Pacific County Fire District 15	Cosmopolis	AIDV	BLS	0	3	0	0	0	0	0	13
Grays Harbor	Hoquiam Fire Department	Hoquiam	AMBV	ALS	5	0	0	0	7	0	14	14
Grays Harbor	Lake Quinalt Volunteer Fire Department	Quinalt	AMBV	BLS	2	0	0	0	4	0	0	15
Grays Harbor	Montesano Fire Department	Montesano	AMBV	ALS	3	4	0	0	17	0	7	16
Grays Harbor	Ocean Shores Fire Department	Ocean Shores	AMBV	ALS	4	0	0	0	17	0	11	17
Grays Harbor	Quinalt Nation Ambulance	Taholah	AMBV	ILS	2	0	0	0	4	0	3	18
Grays Harbor	Ride To Wellness	Elma	AMB	BLS	2	0	0	0	2	0	0	19
Grays Harbor	South Beach Regional Fire Authority	Westport	AMBV	ALS	4	0	0	0	13	0	7	20
Lewis	Adventure Medics LLC	Onalaska	AMBV	ALS	1	1	0	0	5	0	9	21
Lewis	American Medical Response	Centralia	AMBV	ALS	8	0	0	0	16	0	26	22
Lewis	City of Chehalis Fire Department	Chehalis	AMBV	BLS	1	3	0	0	12	0	0	23
Lewis	Cowlitz County - Lewis County Fire Dist.20	Vader	AMBV	BLS	2	0	0	0	3	0	0	24
Lewis	Glenoma Fire and EMS	Glenoma	AMBV	ILS	2	0	0	0	2	1	0	25
Lewis	Lewis County Fire District 10	Packwood	AMBV	ILS	2	1	0	0	5	3	0	26
Lewis	Lewis County Fire District	Curtis	AIDV	BLS	0	7	0	0	4	0	0	27
Lewis	Lewis County Fire District	Winlock	AMBV	ALS	2	0	0	0	7	0	0	28
Lewis	Lewis County Fire District #3	Mossyrock	AMBV	ILS	1	0	0	0	9	1	0	29
Lewis	Lewis County Fire District #4	Morton	AMBV	BLS	1	0	0	0	6	0	0	30
Lewis	Lewis County Fire District #6	Chehalis	AMBV	ALS	2	3	0	0	11	1	6	31
Lewis	Lewis County Fire District #8	Salkum	AMBV	BLS	3	0	0	0	12	1	1	32
Lewis	Lewis County Fire District 17	Ashford	AMBV	BLS	1	0	0	0	0	0	0	33
Lewis	Lewis County Fire District 2	Toledo	AMBV	ALS	2	0	0	0	10	0	1	34
Lewis	Lewis County Fire Protection Dist #5	Napavine	AMBV	ALS	3	0	0	0	16	0	4	35
Lewis	Lewis County Fire Protection District 11	Pe Ell	AMBV	BLS	1	0	0	0	6	0	0	36
Lewis	Mineral Fire & Rescue	Mineral	AMBV	ILS	1	0	0	0	3	0	0	37
Lewis	Onalaska Ambulance	Onalaska	AMBV	ALS	3	2	0	0	7	0	1	38
Lewis	Randle Fire and EMS	Randle	AMBV	ILS	3	0	0	0	5	4	0	39
Lewis	Riverside Fire Authority	Centralia	AMBV	ALS	3	0	0	0	39	0	13	40
Pacific	Raymond Fire Department	Raymond	AMBV	ALS	4	3	0	0	17	0	6	41
Pierce	American Medical Response Ambulance Service INC	Tukwila	AMBV	ALS	50	6	0	0	89	0	34	42
Pierce	Anderson Island Fire and Rescue	Anderson Island	AMBV	BLS	2	0	0	0	12	0	0	43
Pierce	Boeing Fire Department	Seattle	AID	BLS	0	1	0	0	0	0	0	44
Pierce	Central Pierce Fire and Rescue	Spanaway	AMBV	ALS	17	21	0	0	204	0	83	45
Pierce	City of Buckley Fire Department	Buckley	AMBV	ALS	3	0	0	0	41	0	5	46
Pierce	Coastal Transport LLC	Elma	AMB	BLS	2	0	0	0	0	0	0	47
Pierce	Crystal MT.	Enumclaw	AID	ALS	0	0	0	0	12	0	0	48
Pierce	Dupont Fire Department	Dupont	AMBV	ALS	2	3	0	0	10	0	3	49

WEST REGION EMS AGENCY RESOURCE REPORT - 2/8/23

APPENDIX - 5A

EMS County UDL	Agency Name	Mailing City	Agency Type	Care Level	Ground Vehicles		Aircraft		Personnel			Agency Count
					# AMB	# AID	# FIXED	# Rotary	#BLS	# ILS	#ALS	
Pierce	East Pieroe Fire and Rescue	Bonney Lake	AMBV	ALS	12	18	0	0	86	0	61	50
Pierce	Explorer Search and Rescue	Tacoma	ESSO		0	0	0	0	1	0	0	51
Pierce	Gig Harbor Fire and Medic One	Gig Harbor	AMBV	ALS	7	10	0	0	96	0	32	52
Pierce	Graham Fire and Rescue	Graham	AMBV	ALS	5	13	0	0	69	0	34	53
Pierce	Joint Base Lewis-McChord Fire and Emergency Services	Tacoma	AIDV	ALS	0	10	0	0	92	1	14	54
Pierce	Key Peninsula Fire Department	Lakebay	AMBV	ALS	2	4	0	0	19	0	20	55
Pierce	Madigan Ambulance Service	Tacoma	AMBV	ALS	4	0	0	0	5	0	8	56
Pierce	McNeil Island Fire	Steilacoom	AMBV	BLS	4	0	0	0	11	0	0	57
Pierce	Northwest Ambulance	Arlington	AMBV	ALS	0	0	0	0	1	0	4	58
Pierce	Olympic Ambulance Service	Lacey	AMB	BLS	4	0	0	0	5	0	1	59
Pierce	Orting Valley Fire and	Orting	AMBV	ALS	4	8	0	0	20	0	11	60
Pierce	Pierce County EMS/Emergency	Tacoma	ESSO		0	0	0	0	6	0	6	61
Pierce	Pierce County Fire Dist #13	Tacoma	AMBV	BLS	1	2	0	0	39	0	3	62
Pierce	Pierce County Fire District #23	Elbe	AMBV	BLS	4	0	0	0	15	0	0	63
Pierce	Pierce County Fire District 26	Enumclaw	AIDV	BLS	0	2	0	0	12	0	0	64
Pierce	Riverside Fire and Rescue	Puyallup	AMBV	BLS	2	5	0	0	25	0	0	65
Pierce	Ruston Fire Department	Ruston	AIDV	BLS	0	1	0	0	6	0	0	66
Pierce	South Pierce Fire & Rescue	Eatonville	AMBV	ALS	6	0	0	0	24	0	17	67
Pierce	Steilacoom Department of Public Safety	Steilacoom	AIDV	BLS	0	8	0	0	8	0	0	68
Pierce	Tacoma Fire Department	Tacoma	AMBV	ALS	19	33	0	0	321	0	80	69
Pierce	Tacoma Mountain Rescue	Tacoma	AID	ALS	0	1	0	0	0	0	0	70
Pierce	Town of Carbonado Fire Department	Carbonado	AIDV	BLS	0	3	0	0	7	0	0	71
Pierce	West Pierce Fire and Rescue	University	AMBV	ALS	11	2	0	0	115	0	64	72
Thurston	American Medical Response	Olympia	AMBV	BLS	8	0	0	0	23	0	0	73
Thurston	Bucoda Fire Department	Bucoda	AID	BLS	0	3	0	0	4	0	0	74
Thurston	City of Olympia Fire Department	Olympia	AMBV	ALS	5	12	0	0	66	0	23	75
Thurston	Fire Protection Dist #13 Thurston County	Olympia	AMBV	BLS	2	3	0	0	23	0	0	76
Thurston	Lacey Fire District #3	Lacey	AMBV	ALS	8	10	0	0	89	0	34	77
Thurston	McLane Black Lake Fire Department	Olympia	AMBV	BLS	5	12	0	0	34	0	0	78
Thurston	Olympic Ambulance Service	Lacey	AMBV	BLS	17	0	0	0	56	0	0	79
Thurston	SE Thurston Fire Authority	Yelm	AIDV	BLS	0	4	0	0	31	0	0	80
Thurston	SE Thurston Fire Authority	Yelm	AMB	BLS	2	0	0	0	7	0	0	81
Thurston	South Thurston Fire & EMS	Tenino	AMBV	BLS	4	6	0	0	22	0	0	82
Thurston	Thurston County Fire District #6	East Olympia	AMBV	BLS	1	7	0	0	25	0	0	83
Thurston	Thurston County Fire Protection District #17 and Bald Hills Fire Department	Yelm	AMBV	BLS	2	9	0	0	14	0	0	84
Thurston	Thurston County Fire Protection District 8	Olympia	AMBV	BLS	2	9	0	0	31	0	0	85
Thurston	Tumwater Fire Department	Tumwater	AMBV	ALS	5	7	0	0	30	0	21	86
Thurston	West Thurston Fire	Olympia	AMBV	BLS	5	16	0	0	46	0	0	87
					319	300	0	0	2208	12	699	
					TOTALS:	619	0	0	2919			
								2021 =	3135			
								VARIANCE:	-216			



Total Prehospital Verified Services by County						
County	AMBV-ALS	AMBV-ILS	AMBV-BLS	AIDV-ALS	AIDV-ILS	AIDV-BLS
Grays Harbor	7	1	4	0	0	6
Lewis	8	5	6	0	0	1
North Pacific	1	0	0	0	0	0
Pierce	14	0	5	1	0	4
Thurston	3	0	9	0	0	1

Total Prehospital Non-Verified Services by County							
County	AMB-ALS	AMB-ILS	AMB-BLS	AID-ALS	AID-ILS	AID-BLS	ESSO
Grays Harbor	1	0	1	0	0	0	0
Lewis	0	0	0	0	0	0	0
North Pacific	0	0	0	0	0	0	0
Pierce	0	0	0	2	0	1	2
Thurston	0	0	1	0	0	1	0

Numbers are current as of 2/14/2023

WEST REGION - PAID VOLUNTEER BY COUNTY

APPENDIX - 5C

County	# of EMR			# of EMT			# of AEMT			# of Paramedic		
	Paid	Volunteer	None	Paid	Volunteer	None	Paid	Volunteer	None	Paid	Volunteer	None
Grays Harbor	0	19	0	57	93	0	0	0	0	72	2	0
Lewis	0	17	0	70	98	0	3	7	0	66	0	0
Pacific	0	5	0	65	46	0	3	0	0	39	1	1
Pierce	0	0	0	1237	210	0	1	0	0	493	12	0
Thurston	0	1	0	401	143	1	0	0	0	79	0	0
Totals	0	42	0	1830	590	1	7	7	0	749	15	1

	2022	2020	variance
Total Paid	2586	2356	-230
Total Volunteer	654	779	125
			0
Total	3240	3135	-105



**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 6

APPROVED MIN AND MAX NUMBERS FOR TRAUMA VERIFIED EMS SERVICES.

Link is included for approved WA air ambulance Strategic Plan

<https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/530129.pdf>

Approved Minimum/Maximum of Verified Prehospital Trauma Services by Level and Type by County					
County	Verified Service Type	Care Level	State Approved Minimum #	State Approved Maximum #	Current Status (total # verified for each service type)
Grays Harbor	AIDV	BLS	7	9	6
		ILS	0	0	0
		ALS	0	0	0
	AMBV	BLS	2	6	4
		ILS	0	1	1
ALS		6	9	7	
Lewis	AIDV	BLS	1	21	1
		ILS	0	2	0
		ALS	0	2	1
	AMBV	BLS	5	21	6
		ILS	1	6	5
ALS		1	10	8	
North Pacific	AIDV	BLS	1	2	0
		ILS	0	0	0
		ALS	0	0	0
	AMBV	BLS	0	0	0
		ILS	0	0	0
ALS		1	1	1	
Pierce	AIDV	BLS $\Phi\Omega$	1	14	4
		ILS	0	0	0
		ALS Φ	0	10	1
	AMBV	BLS $\Phi\Omega$	1	11	6
		ILS	0	0	0
ALS Ω		1	16	14	
Thurston	AIDV	BLS	1	3	2
		ILS	0	0	0
		ALS	0	0	0
	AMBV	BLS	1	11	9
		ILS	0	0	0
ALS		1	3	3	

Φ Any current BLS agency may submit an application to upgrade to ALS.

Ω Any current Fire Department which provides EMS (city, town, county) may submit an application to upgrade to Amb-ALS within their own jurisdiction. Any new ambulance service must offer to serve the underserved areas as reviewed by the Pierce County EMS Council at the time of licensure application. It is a goal that the response time to any location within the underserved area must be equal to that of an urban service area if the underserved area is urban per WAC; otherwise, the response time must be at the suburban service area time of fifteen minutes eighty percent of the time according to the Pierce County Aid & Ambulance Rules and Regulations. The offer to serve an area should be at a rate commensurate with and in consideration of recent history and the local economy.

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 7

Trauma Response Areas (TRAs) by County

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Grays Harbor	#1	GHFD #1 Elma FD McCleary FD	Encompasses the geographic boundaries of GHFD #1, City of Elma FD and City of McCleary FD. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 28 BLS 0 ILS 7 ALS Vehicles: 8 AMB 4 AID
Grays Harbor	#2	GHFD #2 Montesano FD	Encompasses the geographic boundaries of GHFD #2 and Montesano FD. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 41 BLS 0 ILS 11 ALS Vehicles: 6 AMB 9 AID
Grays Harbor	#3	Aberdeen FD Hoquiam FD Cosmopolis FD GHFD #6 GHFD #10 GHFD #15 GHFD #17	Encompasses the geographic boundaries of Aberdeen FD, Cosmopolis FD, Hoquiam FD, GHFD #6, GHFD #10, GHFD #15, GHFD #17. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 36 BLS 0 ILS 35 ALS Vehicles: 10 AMB 16 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Grays Harbor	#4	South Beach Regional Fire Authority	Encompasses the geographic boundaries of Westport, Ocosta, Grayland, North Cove, and Tokeland in Pacific County to milepost 17 on Highway 105. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 13 BLS 0 ILS 7 ALS Vehicles: 4 AMB 0 AID
Grays Harbor	#5	Ocean Shores FD GHFD #4 GHFD #7 GHFD #8 GHFD #16 Hoquiam FD Quinault Nation Amb	Encompasses the geographic boundaries of Ocean Shores FD, Taholah FD, GHFD #7, GHFD #8, GHFD #16. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 61 BLS 0 ILS 35 ALS Vehicles: 17 AMB 2 AID
Grays Harbor	#6	Quinault Nation Amb GHFD #2 GHFD #4 GHFD #8 GHFD #10 GHFD #17 Hoquiam FD	Encompasses the geographic boundaries of GHFD #4 and Quinault Nation Ambulance. EMS agencies closest to the rural and wilderness areas of the zone were used to determine responses to these areas.	Personnel: 53 BLS 0 ILS 21 ALS Vehicles: 14 AMB 8 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Lewis	#1	Riverside FA AMR	Within the current boundaries of the City of Chehalis and urban growth area	Personnel: 55 BLS 0 ILS 39 ALS Vehicles: 11 AMB 0 AID
Lewis	#2	Lewis Co FD #6 AMR Chehalis FD	Within the current boundaries of the City of Chehalis and urban growth area	Personnel: 39 BLS 1 ILS 32 ALS Vehicles: 11 AMB 6 AID
Lewis	#3	Riverside FA AMR Lewis Co FD #5 Lewis Co FD #6 Pe Ell Volunteer FD & Ambulance Auxiliary Lewis Co FD #13	Area 3 is located in the NW corner of Lewis County bordering Thurston County to the North, Grays Harbor County and Pacific County to the West, and on the South by an imaginary line proceeding due West from the intersection of US Highway 12 and I-5 and on the east by Interstate 5.	Personnel: 60 BLS 1 ILS 36 ALS Vehicles: 19 AMB 10 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Lewis	#4	Riverside FA AMR Lewis Co FD #1 Lewis Co FD #2 Lewis Co FD #6 Lewis Co FD #8	Area 4 is bordered on the east side of Interstate 5, bordering Thurston County to the North and US Highway 12 to the south, the eastern border is the community of Mossyrock.	Personnel: 118 BLS 2 ILS 52 ALS Vehicles: 26 AMB 5 AID
Lewis	#5	Lewis Co FD #2 AMR Lewis Co FD #13 Lewis Co FD #15 Cowlitz-Lewis Co FD #20/Lewis Co FD #7	Area 5 is located West of Interstate 5 and South of an imaginary line running west from US Highway 12 and Interstate 5 to Pacific Co, then South to Cowlitz County.	Personnel: 40 BLS 0 ILS 27 ALS Vehicles: 14 AMB 7 AID
Lewis	#6	Lewis Co FD #2 Lewis Co FD #3 Lewis Co FD #8 Adventure Medics	Area 6 is located East of Interstate 5 and North of the Cowlitz Co line bordering US Highway 12 to the North and Mossyrock to the East.	Personnel: 36 BLAS 2 ILS 11 ALS Vehicles: 7 AMB 1 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Lewis	#7	Lewis Co FD #3 Lewis Co FD #4 Mineral Fire & Rescue Randle Fire & EMS Glenoma Fire & EMS Adventure Medics	Area 7 is east from Mossyrock to Kiona Creek 5 miles west of Randle on Us Highway 12, then North to the Pierce Co line and South to the Cowlitz Co and Skamania Co line.	Personnel: 30 BLS 6 ILS 9 ALS Vehicles: 9 AMB 1 AID
Lewis	#8	Lewis Co FD #10 Randle Fire & EMS Lewis Co FD #17	East on US Highway 12 from Kiona Creek to the Summit of White Pass at milepost 151 at the Yakima Co line, south to the Skamania Co and Yakima Co lines and North to the Pierce Co line/Nisqually River including the Mt Rainier wilderness area.	Personnel: 10 BLS 7 ILS 0 ALS Vehicles: 6 AMB 1 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
North Pacific	#1	Raymond FD South Beach RFA	City of Raymond, City of South Bend, Pacific Co FD #3, #6, #7 & #8 and all adjoining forest lands, both public and private. Encompasses FD #5 to milepost 17 on Highway 105 and any adjoining forest lands, both public and private. Encompasses area of Pacific Co in and around the community of Brooklyn in the northeast corner of Pacific Co.	Personnel: 17 BLS 0 ILS 6 ALS Vehicles: 4 AMB 3 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Pierce	#1	Ruston FD Steilacoom PS PCFD #13 PCFD #14 PCFD #27 McNeil Isl FD PCFD #3 PCFD #5 PCFD #16 PCFD #22 Central Pierce F&R Tacoma FD AMR	Area #1 (North) Area 1 is bordered by Kitsap County in NE by an imaginary line running along 160 th St east to Colvos Passage at water, then west along 160 th St KPN to NW corner at Kitsap/Mason/Pierce counties border where the imaginary line goes south along 198 th Ave KPN to water at Rocky Bay in Case Inlet to Thurston county	Personnel: 154 BLS 0 ILS 17 ALS Vehicles: 21 AMB 17 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
		Falck NW Rural Metro	border at Nisqually River at Nisqually Beach, then follows water line north to Chambers Creek Rd W, then east to Waller Rd, then north to River Rd, then east to Freeman Rd E, then north to Yuma St, then east to Meridian-Hwy 161 then north to an imaginary line bordering King County running west along 384 th St through city of Milton to Pacific Hwy, then north to a point at 7 th St Ct NE where it runs NNW to a point at Water St in Dash Point. There it enters the water and crosses the Puget Sound to meet the point at Colvos Passage.	
Pierce	#2	Steilacoom PS JBLM FD Dupont FD PCFD #3 PCFD #17 PCFD #21 Central Pierce F&R AMR Falck NW MAMC Rural Metro Tacoma FD	Area #2 (South) Area 2 is bordered by Thurston County in SW at the Nisqually River at Nisqually Beach, then follows water line north to Chambers Creek Rd W, then along an imaginary line east to Waller Rd, then south along an imaginary line along Mountain Hwy to 260 th , then west to 8 th Ave E, then south along an imaginary line to Thurston	Personnel: 592 BLS 1 ILS 174 ALS Vehicles: 39 AMB 56 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
			county border at Nisqually River, then west along Nisqually River to Nisqually Beach.	
Pierce	#3	PCFD #26 Greenwater Rescue Carbonado FD PCFD #14 PCFD #23 PCFD #17 PCFD #18 PCFD #21 PCFD #22 Buckley FD Central Pierce F&R AMR Falck NW Rural Metro	Area #3 (East) Area #3 is bordered by Thurston County in SW at a point where an imaginary line running south along 8 th Ave E would then intersect the Nisqually River, it then follows the Nisqually River east to a Thurston, Pierce, and Lewis Counties junction at Hwy 7 in Elbe, then continues east along Nisqually River to Mt. Rainier Nat'l Park at end of Hwy 706 along imaginary line east to Yakima County border, then NE along imaginary line bordering Yakima, Kittitas, King, Pierce Counties junction at Green River, then west along Green Water River to junction with White River continuing NW along White River to a point in Muckleshoot Indian Reservation where the imaginary line goes along imaginary line along 1 st Ave E west through Auburn, then along County Line	Personnel: 592 BLS 0 ILS 245 ALS Vehicles: 103 AMB 76 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
			west to 384 th St west to Meridian-Hwy 161, then south to Yuma St, then west to Freeman, then south River Rd, then west to Waller Rd, then south along an imaginary line along Mountain Hwy to 260th, then west to 8 th Ave E, then south along an imaginary line to Thurston county border at Nisqually River.	

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Thurston	#1	City of Olympia FD Lacey FD #3 Tumwater FD AMR	City of Olympia jurisdictional boundaries	Personnel: 89 BLS 0 ILS 23 ALS Vehicles: 13 AMB 12 AID
Thurston	#2	City of Olympia FD Lacey FD #3 Tumwater FD	City of Tumwater jurisdictional boundaries & FD# 15 jurisdictional boundaries	Personnel: 86 BLS 0 ILS 21 ALS

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
		Olympic Ambulance		Vehicles: 22 AMB 7 AID
Thurston	#3	City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	City of Lacey jurisdictional boundaries & FD# 3 jurisdictional boundaries	Personnel: 145 BLS 0 ILS 34 ALS Vehicles: 25 AMB 10 AID
Thurston	#4	SE Thurston FA City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	SETRFA City of Yelm jurisdictional boundaries & FD# 2 jurisdictional boundaries & City of Rainer jurisdictional boundaries & FD# 4 jurisdictional boundaries	Personnel: 94 BLS 0 ILS 0 ALS Vehicles: 19 AMB 4 AID
Thurston	#5	SE Thurston FA City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	SETRFA City of Yelm jurisdictional boundaries & FD# 2 jurisdictional boundaries & City of Rainer jurisdictional boundaries & FD# 4 jurisdictional boundaries	Personnel: 94 BLS 0 ILS 0 ALS Vehicles: 19 AMB 4 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Thurston	#6	Thurston Co FD #17 City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	FD# 17 jurisdictional boundaries	Personnel: 70 BLS 0 ILS 0 ALS Vehicles: 19 AMB 9 AID
Thurston	#7	South Thurston Fire & EMS City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	City of Tenino jurisdictional boundaries & FD# 12 jurisdictional boundaries	Personnel: 78 BLS 0 ILS 0 ALS Vehicles: 21 AMB 6 AID
Thurston	#8	South Thurston Fire & EMS City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	Town of Bucoda jurisdictional boundaries	Personnel: 60 BLS 0 ILS 0 ALS Vehicles: 17 AMB 3 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Thurston	#9	South Thurston Fire & EMS City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	FD# 16 jurisdictional boundaries	Personnel: 78 BLS 0 ILS 0 ALS Vehicles: 21 AMB 6 AID
Thurston	#10	West Thurston Fire City of Olympia FD Lacey FD #3 Tumwater FD	WTRA FD# 11 jurisdictional boundaries & FD# 1 jurisdictional boundaries	Personnel: 102 BLS 0 ILS 0 ALS Vehicles: 22 AMB 16 AID
Thurston	#11	McLane Black Lake FD City of Olympia FD Lacey FD #3 Tumwater FD	FD# 5 jurisdictional boundaries	Personnel: 90 BLS 0 ILS 0 ALS Vehicles: 22 AMB AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Thurston	#12	Thurston Co FD #6 City of Olympia FD Lacey FD #3 Tumwater FD	FD# 6 jurisdictional boundaries	Personnel: 81 BLS 0 ILS 0 ALS Vehicles: 18 AMB 7 AID
Thurston	#13	Thurston Co FD #8 City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	FD #8 jurisdictional boundaries	Personnel: 87 BLS 0 ILS 0 ALS Vehicles: 19 AMB 9 AID
Thurston	#14	McLane Black Lake FD City of Olympia FD Lacey FD #3 Tumwater FD	FD# 9 jurisdictional boundaries	Personnel: 87 BLS 0 ILS 0 ALS Vehicles: 19 AMB 9 AID

Trauma Response Area by County				
County	Trauma Response Area Number	Name of Agency Responding in Trauma Response Area	Description of Trauma Response Area's Geographic Boundaries	Number of Verified Services in the response area
Thurston	#15	TCFD #13 City of Olympia FD Lacey FD #3 Tumwater FD Olympic Ambulance	FD# 13 jurisdictional boundaries	Personnel: 90 BLS 0 ILS 0 ALS Vehicles: 22 AMB 12 AID
Thurston	16	West Thurston Fire Olympic Ambulance	FD# 16 jurisdictional boundaries	Personnel: 102 BLS 0 ILS 0 ALS Vehicles: 22 AMB 16 AID
Thurston	17	Fire Protection dist #13 Olympic Ambulance	FD# 17 jurisdictional boundaries	Personnel: 79 BLS 0 ILS 0 ALS Vehicles: 19 AMB 3 AID

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 8

Approved EMS Education and Training Programs and Testing Sites

8A = Approved Training Programs

8B = ESE/SEIC/SEI

WEST REGION TRAINING PROGRAMS APPROVED BY WASHINGTON STATE DEPARTMENT OF HEALTH					
Credential #	Status	Expiration Date	Facility Name	Site City	Site County
TRNG.ES.60117935-PRO	APPROVED	04/30/2027	Grays Harbor EMS And Trauma Care Council	Aberdeen	Grays Harbor
TRNG.ES.60124990-PRO	APPROVED	04/30/2027	Centralia College	Centralia	Lewis
TRNG.ES.60795337-PRO	APPROVED	04/30/2023	Glenoma Fire and EMS	Glenoma	Lewis
TRNG.ES.60128932-PRO	APPROVED	07/31/2027	Pacific County Fire District #1	Ocean Park	Pacific
TRNG.ES.60128987-PRO	APPROVED	04/30/2027	Bates Technical College	Tacoma	Pierce
TRNG.ES.60128993-PRO	APPROVED	04/30/2027	City of Buckley Fire Department	Buckley	Pierce
TRNG.ES.60122307-PRO	APPROVED	04/30/2028	Pierce College Fort Steilacoom EMS	Lakewood	Pierce
TRNG.ES.60128980-PRO	APPROVED	04/30/2027	Pierce County EMS/Emergency Management	Tacoma	Pierce
TRNG.ES.60129016-PRO	APPROVED	04/30/2023	South Pierce Fire & Rescue	Eatonville	Pierce
TRNG.ES.60116437-PRO	APPROVED	04/30/2028	Tacoma Community College	Tacoma	Pierce
TRNG.ES.60128972-PRO	APPROVED	04/30/2027	Tacoma Fire Department	Tacoma	Pierce
TRNG.ES.60129031-PRO	APPROVED	04/30/2023	Thurston County Medic One	Olympia	Thurston

APPROVED EMS EDUCATORS BY COUNTY

ESE			
	2021	2022	CHANGE
Grays Harbor	70	59	(11)
Lewis	65	56	(9)
Pacific	21	21	0
Pierce	346	354	8
Thurston	84	105	21
TOTALS	2607	2617	10

SEIC			
	2021	2022	CHANGE
Grays Harbor	0	0	0
Lewis	0	1	1
Pacific	0	1	1
Pierce	1	4	3
Thurston	0	1	1
TOTALS	2022	2029	7

SEI			
	2021	2022	CHANGE
Grays Harbor	3	5	2
Lewis	3	5	2
Pacific	1	1	0
Pierce	19	18	(1)
Thurston	9	6	(3)
TOTALS	2056	2057	1

Total EMS educators in the West Region is 6,703

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 9

Patient Care Procedures (PCPs)

Who To Contact

Grays Harbor and N. Pacific Counties

Medical Program Director	Julie Buck, MD	(360) 533 6038
Grays Harbor County EMS Council	Louisa Schreier	(360) 532 2067

Lewis County

Medical Program Director	Peter McCahill, MD	(253) 325 9343
Lewis County EMS Council	Gregg Peterson	(360) 880 4552

Pierce County

Medical Program Director	Clark Waffle, MD	(253) 798 7722
Pierce County EMS Coordinator	Norma Pancake	(253) 798 7722

Thurston County

Medical Program Director	Larry Fontanilla, MD	(360) 704 2787
Thurston County Medic One	Chris Clem	(360) 704 2786

WA Department of Health

Office of Community Health Systems, EMS Health Systems Quality Assurance	Catie Holstein	(360) 236 2841
---	----------------	----------------

To Request Additional Copies

West Region EMS & Trauma Care Council	Greg Perry	(360) 705 9019
---------------------------------------	------------	----------------

Patient Care Procedures = TABLE OF CONTENTS

WEST REGION PATIENT CARE PROCEDURES	<u>Page</u>
1. Medical Branch Director or Group Supervisor at the Scene.....	79
2. Responders and Response Times.....	80
3. Trauma Patient Destination - Trauma Triage/Transport.....	82
• WA State Prehospital Trauma Triage Destination Procedure	
• Pierce County Prehospital Trauma Triage Destination Procedure	
4. Air Transport Procedure.....	88
5. Hospital Resource – Interfacility Transfer.....	90
6. Prehospital Report Form.....	92
7. EMS/Medical Control - Communications.....	94
8. EMS All Hazards-Mass Casualty Incident (MCI) Response.....	95
9. Cardiac Patient Destination.....	98
• WA State Prehospital Cardiac Triage Destination Procedure	
10. Stroke Patient Destination.....	101
• WA State Prehospital Stroke Triage Destination Procedure	
• Pierce County Prehospital Stroke Triage Destination Procedure	
11. Mental Health/Chemical Dependency.....	109
Alternate Destination Transport	

Patient Care Procedure #1

Medical Branch Director or Group Supervisor at the Scene

OBJECTIVE

To define who is the Medical Branch Director or Group Supervisor at the EMS scene, and to define line of command when multiple providing agencies respond.

PROCEDURE

The regional standard shall be for the incident command system to be used at all times. Per the incident command system, the Medical Branch Director or Group Supervisor will be designated by the incident commander. The Medical Branch Director or Group Supervisor should be the individual with the highest level medical certification who is empowered with local jurisdictional protocols.

Law enforcement will be responsible for overall scene security.

QUALITY ASSURANCE

Departure from this policy shall be reported to the MPD in the jurisdiction of the incident.

Patient Care Procedure #2

Responders & Response Times

OBJECTIVE

To geographically define urban, suburban, rural, & wilderness, and the required prehospital response time for those areas.

PROCEDURE

The regional standard for response times and responders shall be in accordance with current WAC 246-976-390 as follows:

Verified **aid services** shall meet the following minimum agency response times for response areas as defined by the department and identified in the approved regional plan:

- (a) To urban response areas: Eight minutes or less, eighty percent of the time;
- (b) To suburban response areas: Fifteen minutes or less, eighty percent of the time;
- (c) To rural response areas: Forty-five minutes or less, eighty percent of the time;
- (d) To wilderness response areas: As soon as possible.

Verified aid services shall provide **personnel** on each trauma response including:

- (a) Aid service, basic life support: At least one individual, Emergency Medical Responder (EMR) or above;
- (b) Aid service, intermediate life support: At least one Advanced Emergency Medical Technician (AEMT);
- (c) Aid service, advanced life support: At least one paramedic.

Verified **ground ambulance** services shall meet the following minimum agency response times for response areas as defined by the department and identified in the approved regional plan:

- (a) To urban response areas: Ten minutes or less, eighty percent of the time;
- (b) To suburban response areas: Twenty minutes or less, eighty percent of the time;
- (c) To rural response areas: Forty-five minutes or less, eighty percent of the time;
- (d) To wilderness response areas: As soon as possible.

Verified ambulance services shall provide **personnel** on each trauma response including:

- (a) Ambulance, basic life support: At least two certified individuals, one EMT plus one EMR;
- (b) Ambulance, intermediate life support: At least two certified individuals, one AEMT plus one EMT;
- (c) Ambulance, advanced life support-Paramedic: At least two certified individuals, one paramedic and one EMT.

Patient Care Procedure #2 (continued)

IMPLEMENTATION

Per WAC 246-976-430(2) verified prehospital services that transports trauma patients must:

- (a) Provide an initial report of patient care to the receiving facility at the time the trauma patient is delivered as described in WAC 246-976-330.
- (b) Within twenty-four hours after the trauma patient is delivered, send a complete patient care report to the receiving facility to include the data in this WAC, see WREMS PCP #6.

QUALITY ASSURANCE

The response times and all agencies that do not meet the state standard will be reviewed by the local MPD and referred to West Region Quality Improvement Forum as necessary. Response times will be tracked over a two-year period and the standards reevaluated based on input from the MPDs and responder agencies.

Patient Care Procedure #3

Trauma Patient Destination- Trauma Triage/Transport *(reviewed 3/6/19)*

OBJECTIVES

To define the anatomic, physiologic, and mechanistic parameters mandating trauma systems inclusion.

To define the anatomic, physiologic, and mechanistic parameters mandating designated trauma facility team activation.

PROCEDURES

See the attached State of Washington Prehospital Trauma Triage Destination Procedure and the Pierce County Prehospital Trauma Triage Destination Procedure. Each county has looked at its medical, environmental and physical resources and developed training and/or protocols to determine trauma patient destination.

IMPLEMENTATION

As of March 1, 1996, the region will utilize the resources of designated trauma facilities as they are designated within the region.

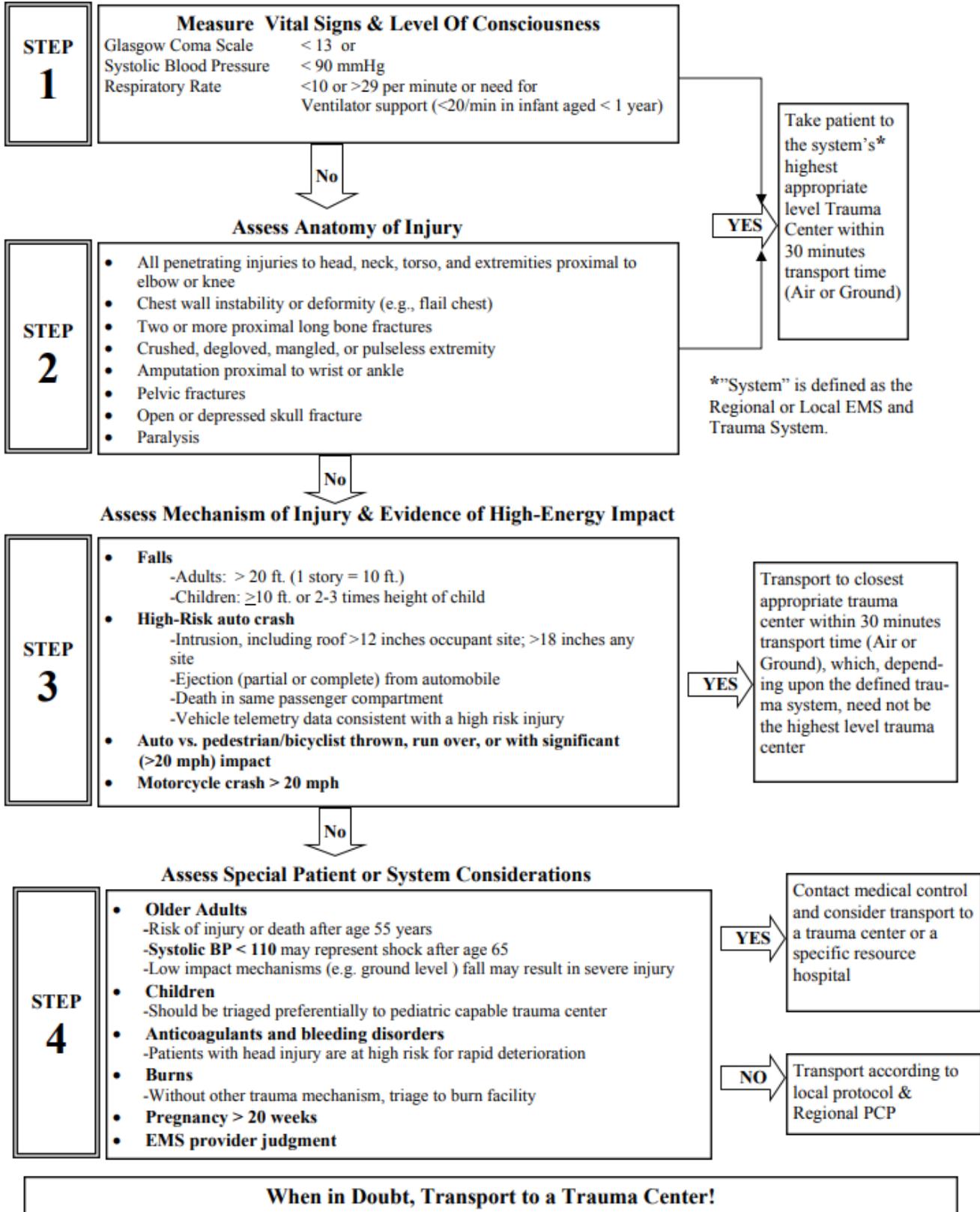
Providers will transport trauma patients according to the regional trauma facility designation plan as the plan is implemented.

QUALITY ASSURANCE

Per WAC 246-976-430, each prehospital agency is required to participate in the state data system by submitting a completed patient care report to the facility to which the patient was transported. The West Region Quality Improvement Forum will review trauma team activation and surgeon activation, as reported by the State Trauma Registry. This will include procedures and guidelines.

Medical control or trauma receiving facilities will keep accurate recorded communications for auditing as needed by local communication boards/local EMS councils and MPDs. Departure from this policy will be reported to the West Region Quality Improvement Forum.

Washington State Trauma Triage Destination Procedures



State of Washington

Prehospital Trauma Triage (Destination) Procedure

Purpose

The Trauma Triage Procedure was developed by the Centers for Disease Control in partnership with the American College of Surgeons, Committee on Trauma. The guidelines have been adopted by the Department of Health (DOH) based on the recommendation of the State EMS and Trauma Steering Committee.

The procedure is described in the attached algorithm. The guidelines represent the current best practice for the triage of trauma patients. The algorithm allows EMS and Trauma Responders to quickly and accurately determine if the patient is a major trauma patient. Major trauma patients must be taken to the highest appropriate level trauma facility in the defined system within 30 minutes transport time (Air or Ground).

The “defined system” is the trauma system that exists within an EMS and Trauma Care Region.

Explanation of Procedure

Any certified EMS and Trauma responder can identify a major trauma patient and activate the trauma system. This may include asking for Advanced Life Support response or air medical evacuation.

Step (1) Assess the patient’s vital signs and level of consciousness using the Glasgow Coma Scale. Step 1 findings require activation of the trauma system. They also require rapid transport to the highest, most appropriate trauma center within 30 minutes transport time (ground or air). If unable to manage the patient’s airway, consider meeting up with an ALS unit or transporting to the nearest facility capable of definitive airway management.

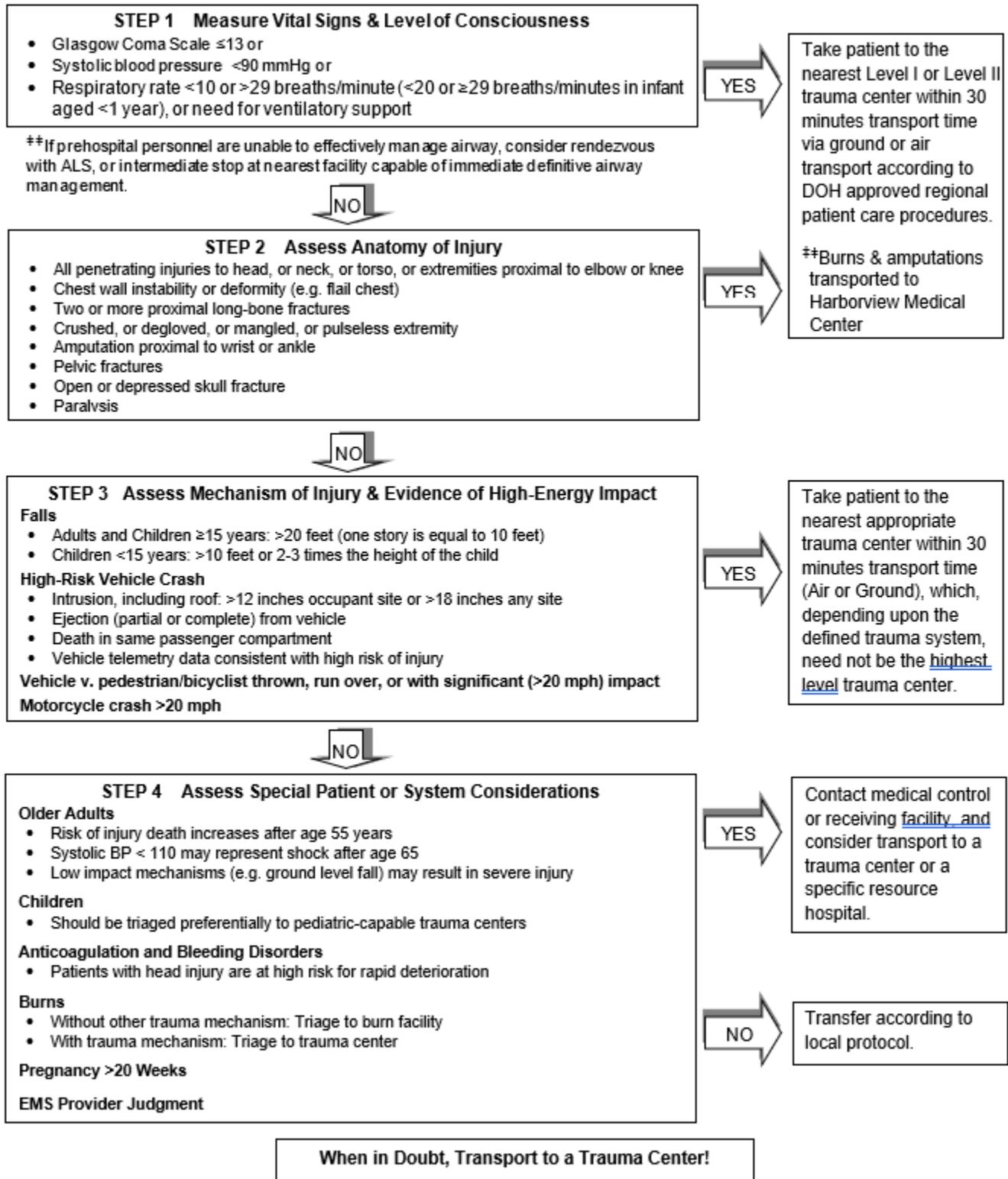
Step (2) Assess the anatomy of injury. Step 2 findings require activation of the trauma system. They also require rapid transport to the highest, most appropriate trauma center within 30 minutes transport time (ground or air). The presence of the specific anatomical injuries even with normal vital signs, lack of pain or normal levels of consciousness still require calling medical control and activating the trauma system.

Step (3) Assess biomechanics of the injury and address other risk factors. The conditions identified are reasons for the provider to transport to a trauma center. The destination trauma center need not be the highest level trauma center. Medical control should be contacted as soon as possible.

Step (4) has been added to assess special patients or system considerations. Risk factors coupled with “Provider Judgment” are reasons for the provider to contact Medical Control and discuss appropriate transport for these patients. In some cases, the decision may be to transport to the nearest trauma center.

Regional Patient Care Procedures (PCP’s) and Local County Operating Procedures (COPS) provide additional detail about the appropriate hospital destination. PCP’s and COP’s are intended to further define how the system operates. The Prehospital Trauma Triage procedure and the Regional Patient Care Procedures work in a “hand in glove” fashion to address trauma patient care needs.

B. PIERCE COUNTY PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURES



Email to Norma – 2/14/2023

State of Washington (Pierce County Rev. April 2019) Prehospital Trauma Triage (Destination) Procedure

Purpose

The Trauma Triage Procedure was developed by the Centers for Disease Control in partnership with The American College of Surgeons, Committee on Trauma. The guidelines have been adopted by the Department of Health (DOH) based on the recommendation of the State EMS and Trauma Steering Committee.

The procedure is described in the attached algorithm. The guidelines represent the current best practice for the triage of trauma patients. The algorithm allows EMS and trauma responders to quickly and accurately determine if the patient is a major trauma patient. Major trauma patients must be taken to the highest appropriate level trauma facility in the defined system within 30 minutes transport time (Air or Ground).

The "defined system" is the trauma system that exists within an EMS and Trauma Care Region.

Explanation of Procedure

Any certified EMS and trauma responder can identify a major trauma patient and activate the trauma system. This may include asking for Advanced Life Support response or air medical evacuation.

Step (1) Assess the patient's vital signs and level of consciousness using the Glasgow Coma Scale.

Step 1 findings require activation of the trauma system. They also require rapid transport to the nearest, most appropriate trauma center within 30 minutes transport time (ground or air). If unable to manage the patient's airway, consider meeting up with an ALS unit or transporting to the nearest facility capable of definitive airway management.

Step (2) Assess the anatomy of injury. Step 2 findings require activation of the trauma system. They also require rapid transport to the nearest, most appropriate trauma center within 30 minutes transport time (ground or air). The presence of the specific anatomical injuries even with normal vital signs, lack of pain or normal levels of consciousness still require activating the trauma system.

Step (3) Assess biomechanics of the injury and address other risk factors. The conditions identified are reasons for the provider to transport to a trauma center. Transport to the nearest appropriate trauma center within 30 minutes transport time (air or ground), which, depending upon the defined trauma system, need not be the highest-level trauma center.

Step (4) has been added to assess special patients or system considerations. Risk factors coupled with "Provider Judgment" are reasons for the provider to contact Medical Control and discuss appropriate transport for these patients. In some cases, the decision may be to transport to the nearest trauma center.

Regional Patient Care Procedures (PCPs) and Local County Operating Procedures (COPs) provide additional detail about the appropriate hospital destination. PCPs and COPs are intended to further define how the

system operates. The Prehospital Trauma Triage procedure and the Regional Patient Care Procedures work in a "hand in glove" fashion to address trauma patient care needs

Patient Care Procedure #4

Air Transport Procedure

OBJECTIVES

To define who may initiate the request for on scene emergency medical air transport services.

To define under what circumstances nonmedical personnel may request air transport on scene service.

To define medical control/receiving center communication and transport destination determination.

To reduce prehospital time for transport of trauma patients to receiving facility.

PROCEDURE

Any public safety personnel, medical or nonmedical, may call to request on scene air transport when it appears necessary and when prehospital response is not readily available. This call should be initiated through dispatch services. In areas where communications with local dispatch is not possible/available, direct contact with the air transport service is appropriate.

Air ambulance activation requires appropriate landing zones are available at or near the scene and at the receiving facility. Consider air transport when:

1) Hoisting is needed; 2) Helicopter transport will reduce the prehospital time to the greatest extent regarding the trauma triage procedures requirements.

Do not consider air transport when transport by helicopter to the receiving facility exceeds 30 minutes and exceeds the time for ground transport to another designated trauma or appropriate receiving facility. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient will be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility as needed. See Plan Introduction or most current Washington State list of designated trauma care service facilities. Activation of the helicopter does not predetermine the destination.

Steps 1 and 2 require prehospital personnel to notify medical control and activate the trauma system. Activation of the trauma system in Step 3 and Step 4 is determined by medical control.

When BLS/ALS responds, medical control contact should be made as early as possible by BLS/ALS ground personnel for the purpose of medical control and to confirm transport destination. The medical control should contact the receiving facility.

When the use of a helicopter is believed by the field personnel to be the most expeditious and efficacious mode of transport, contact of local online medical control and activation of the trauma system will be concurrent to the activation of the helicopter.

Patient Care Procedure #4 (continued)

Medical control will consider the following in confirming patient destination: location, Estimated Time of Arrival (ETA) of helicopter, availability of ground transportation, proximity of other designated trauma receiving centers, their current capabilities and availability.

The air transport service is responsible for communicating to the initiating dispatch center the estimated time of arrival and significant updates as necessary. Air transport services are subject to their own protocols for appropriate activation. Air transport must contact the initiating dispatch center if unable to respond.

QUALITY ASSURANCE

The West Region Quality Improvement Forum will review reports by air transport agencies of launches including cancels, transports, and destinations, as provided by the State Trauma Registry.

Patient Care Procedure #5

Hospital Resource - Interfacility Transfer

OBJECTIVE

To establish recommendations for transport of patients from one designated trauma facility or undesignated medical facility to a designated trauma facility, consistent with established West Region guidelines.

PROCEDURE

All interfacility transfers will be in compliance with current OBRA/COBRA regulations.

Major trauma patients that were transported to undesignated trauma facilities for the purposes of stabilization and resuscitation must be transferred to a designated trauma facility.

The transferring facility must make arrangements for appropriate level of care during transport.

The receiving center and the receiving medical provider (physician) must both accept the transfer prior to the patient's leaving the sending facility.

All appropriate documentation must accompany the patient to the receiving center.

The transferring physician's orders will be followed during transport as scope of provider care allows. Should the patient's condition change during transport, the sending physician, if readily available, or nearest medical control should be contacted for further orders.

Prehospital protocols from county of origin will be followed during the transport.

To the extent possible, a patient whose condition requires treatment at a higher level facility should be transferred to an appropriate facility within the region.

The destination medical center will be given the following information:

- Brief history
- Pertinent physical findings
- Summary of treatment
- Response to therapy and current condition

Further orders may be given by the receiving physician.

TRAINING

Hospital personnel will be oriented to regional transfer requirements and familiarized with OBRA requirements.

QUALITY ASSURANCE

The numbers of and reasons for interfacility transfers will be reviewed by the West Region Quality Improvement Forum as needed, based on data reports supplied by the State Trauma Registry. Inclusion

indicators will be developed by the Forum in accordance with state and federal guidelines, as well as regional standards.

Patient Care Procedure #6 (reviewed 3/6/19)

Prehospital Report Form

OBJECTIVE

To define the regional requirements for reporting prehospital patient data.

PROCEDURE

All Patient Care Reports shall be consistent with the requirements specified in WAC 246.976.330 Furthermore; the Regional Standard for reporting Trauma Patient Data shall be consistent with **WAC 246.976.430**.

All completed patient care forms will include the following information:

1. Applicable components of system response time as defined in WAC 246.976.330:
At the time of arrival at the receiving facility, a minimum of a brief written or electronic patient report including agency name, EMS personnel, and:
 - Date and time of the medical emergency;
 - Time of onset of symptoms;
 - Patient vital signs including serial vital signs where applicable;
 - Patient assessment findings;
 - Procedures and therapies provided by EMS personnel;
 - Any changes in patient condition while in the care of the EMS personnel;
 - Mechanism of injury or type of illness.

Within twenty-four hours of arrival, a complete written or electronic patient care report that includes at a minimum:

- Names and certification levels of all personnel providing patient care;
- Date and time of medical emergency;
- Age of patient;
- Applicable components of system response time;
- Patient vital signs, including serial vital signs if applicable;
- Patient assessment findings;
- Procedures performed and therapies provided to the patient; this includes the times each procedure or therapy was provided;
- Patient response to procedures and therapies while in the care of the EMS provider;
- Mechanism of injury or type of illness;
- Patient destination.

Patient Care Procedure #6 (continued)

2. Applicable components of system response time as defined in WAC 246.976.430:

Incident Information:

Transporting EMS agency number
Unit en route date/time
Patient care report number
First EMS agency on scene identification number
Crew member level
Method of transport
Incident county
Incident zip code
Incident location type

Patient Information:

Name
Date of birth, or Age
Sex
Cause of injury
Use of safety equipment (occupant)
Extrication required

Times:

Unit notified by dispatch date/time
Unit arrived on scene date/time
Unit left scene date/time

Vital Signs:

Date/time vital signs taken
Systolic blood pressure (first)
Respiratory rate (first)
Pulse (first)
GCS eye, GCS verbal, GCS motor, GCS total, GCS qualifier

Treatment:

Procedures performed
Procedure performed prior to unit's care

The transporting agency will report additional Trauma Data elements to the receiving facility within 10 days as described in **WAC 246.976.430**.

Licensed services must make all patient care records available for inspection and duplication upon request of the county MPD or Department of Health.

Patient Care Procedure #7

EMS/Medical Control – Communications

OBJECTIVES

To define methods of expedient communication between prehospital personnel and medical control and receiving centers.

To define methods of communication between medical controls and regional designated trauma facilities and other facilities.

PROCEDURE

Communications between prehospital personnel and medical controls and receiving medical centers will utilize the most effective communication means to expedite patient information exchange.

IMPLEMENTATION

The State of Washington, the West Region EMS & Trauma Care Council, and regional designated trauma facilities will coordinate with prehospital and hospital EMS providers to create the most effective communication system based on the EMS provider's geographic and resource capabilities. Communication between the EMS prehospital provider and the receiving center can be direct (provider to center) or indirect (provider to medical control to designated trauma facility). Local medical control will be responsible for establishing communication procedures between the prehospital provider(s) and receiving hospital(s).

QUALITY ASSURANCE

Significant communication problems affecting patient care will be investigated by the provider agency and reported to the West Region Quality Improvement Forum for review. The agency will maintain communication equipment and training needed to communicate in accordance with WAC.

The West Region Quality Improvement Forum will address the issues of communication as needed.

Patient Care Procedure #8

EMS All Hazards-Mass Casualty Incident (MCI) Response

OBJECTIVES

To provide direction for the use of appropriate emergency medical care procedures, while in an all hazards environment, that is consistent with the Washington State DOH “Mass Casualty-All Hazards Field Protocols” as well as those protocols established by the County Medical Program Director (MPD).

To provide for the standardization/integration of Mass Casualty Incident (MCI) Plans between counties throughout the West Region. To enhance the response capability of EMS agencies between counties throughout the West Region during an All-Hazards-MCI incident.

PROCEDURE

Pre-hospital EMS responders will follow, at a minimum, the Washington State DOH “Mass Casualty-All Hazards Field Protocols” during an All Hazards-MCI incident. Prehospital EMS responders will additionally follow any other All Hazards-MCI protocols/procedures set forth by the County Medical Program Director.

The **General EMS All Hazards-Mass Casualty Incident (MCI) Algorithm** on page 53

IMPLEMENTATION

The West Region EMS & Trauma Care Council, Regional Disaster Medical Control Center Hospitals in Region 3 (Providence St. Peter Hospital) and in Region 5 (Good Samaritan Hospital) and EMS agencies throughout the West Region will coordinate to plan the most effective response to an All Hazards-Mass Casualty Incident based on the EMS provider’s geographic and resource capabilities. Local medical control and/or emergency management and dispatch agencies will be responsible for communicating and coordinating needs between the prehospital provider agencies and the Incident site(s) during an actual event.

TRAINING

In coordination with the county MPDs and EMS directors, the following will be distributed to the regional EMS agencies:

1. Mass Casualty-All Hazards Field Protocols website address:
<https://www.doh.wa.gov/Portals/1/Documents/Pubs/530142.pdf>
2. West Region Patient Care Procedure # 8, All Hazards-Mass Casualty Incident Response
3. Pierce County Disaster Patient Care Guidelines <http://www.piercecountywa.org/ems>
4. Weapons of Mass Destruction Awareness Level web-based or face-to-face training on signs and symptoms AWR160 www.hsi.wa.gov or www.training.fema.gov
5. Pierce County Burn Plan <http://www.piercecountywa.org/ems>
6. Advanced Burn Life Support: <http://www.ameriburn.org/ABLS/ABLSEnow.htm>

7. WMD Emergency Medical Services Training (EMS) face-to-face at <http://cdp.dhs.gov/coursesems.html>
8. FEMA's NIMS training link: <http://www.training.fema.gov/NIMS/>

QUALITY ASSURANCE

Significant problems affecting patient care will be investigated by the provider agency(ies) and reported to the West Region Quality Improvement Forum for review. A Regional After Action Review will be conducted post an All Hazards – Mass Casualty Incident to identify issues to resolve prior to any subsequent event.

Prehospital Mass Casualty Incident (MCI) General Algorithm

Receive dispatch
Respond as directed
Arrive at scene & Establish Incident Command (IC)
Scene Assessment and size-up
Determine if mass casualty conditions exist
Implement county MCI plan
Request additional resources as needed

The dispatch center shall coordinate notification and dispatch of appropriate agencies and resources to the scene Notification of the Disaster Medical Control Center (DMCC) will be according to county protocol. The appropriate local Public Health Department shall be notified in events where a public health threat exists.

Identify hazards and determine needs to control or eliminate them. Take immediate action to isolate and deny access (Site Access Control) or mitigate the hazards as necessary to prevent additional injuries. Consider possibility of terrorist attack (WMD, secondary device)

Initiate **START**

Reaffirm additional resources

Initiate ICS 201 and/or other similar NIMS compliant worksheets

Upon arrival at medical facilities, transfer care of patients to medical facility staff (medical facility should activate their respective MCI Plan as necessary).

Prepare transport vehicle to return to service

Patient Care Procedure #9

Cardiac Patient Destination

OBJECTIVES

In the West Region, patients presenting with acute coronary signs/symptoms shall be identified and transported according to the State of Washington Prehospital Cardiac Triage (Destination) Procedures and County Medical Protocols/County Operating Procedures.

PROCEDURES

See the attached State of Washington Prehospital Cardiac Triage Destination Procedure.

IMPLEMENTATION

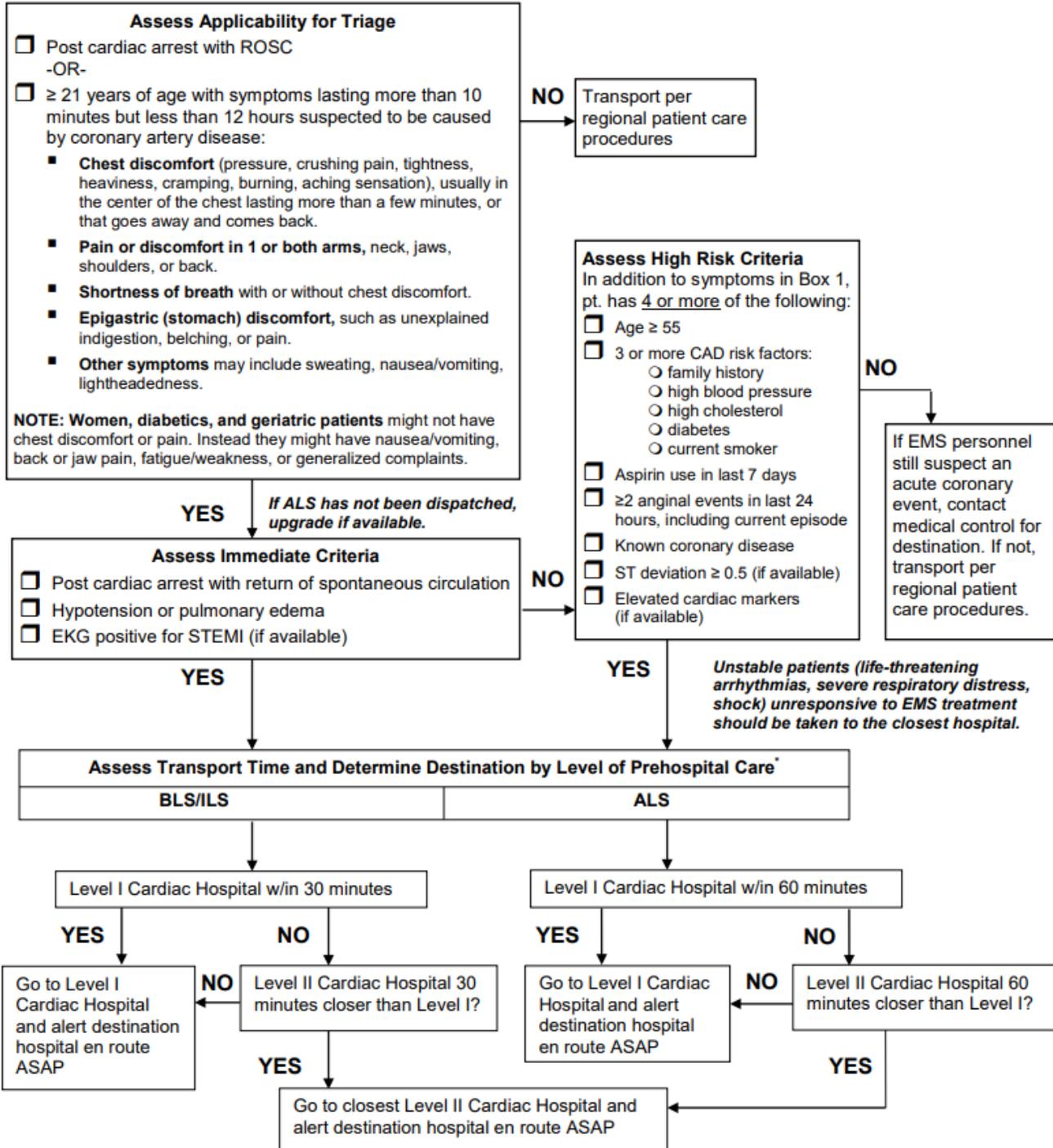
As of January 1, 2011, the region will utilize the resources of categorized cardiac facilities as they are designated within the region.

QUALITY ASSURANCE

West Region prehospital agencies participate in local and regional cardiac quality improvement. The West Region Cardiac Quality Improvement Forum, as established in October 2012, conducts quality improvement reviews to include all aspects of patient care from prevention, dispatch, pre-hospital, hospital and through rehabilitation.

For the most current State of Washington Prehospital Cardiac Triage Destination Procedure go to: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/346050.pdf>

State of Washington Prehospital Cardiac Triage Destination Procedure



* Slight modifications to the transport times may be made in county operating procedures. See page 2. Consider ALS and air transport for all transports greater than 30 minutes. If there are two or more Level I facilities to choose from within the transport timeframe, patient preference, insurance coverage, physician practice patterns, and local rotation agreements may be considered in determining destination. This also applies if there are two or more Level II facilities to choose from.

State of Washington Prehospital Cardiac Triage Destination Procedure

Why triage cardiac patients?

The faster a patient having a heart attack or who's been resuscitated gets treatment, the less likely he or she will die or be permanently disabled. Patients with unstable angina and non-ST elevation acute coronary syndromes (UA/NSTE) are included in the triage procedure because they often need immediate specialized cardiac care. This triage procedure is intended to be part of a coordinated regional system of care that includes dispatch, EMS, and both Level I and Level II Cardiac Hospitals.

How do I use the Cardiac Triage Destination Procedure?

- A. **Assess applicability for triage** – If a patient is post cardiac arrest with ROSC, or is over 21 and has any of the symptoms listed, the triage tool is applicable to the patient. Go to the "Assess Immediate Criteria" box. **NOTE:** Women, diabetics, and geriatric patients often have symptoms other than chest pain/discomfort so review all symptoms with the patient.
- B. **Assess immediate criteria** – If the patient meets any one of these criteria, he or she is very likely experiencing a heart attack or other heart emergency needing immediate specialized cardiac care. Go to "Assess Transport Time and Determine Destination" box. If the patient does not meet immediate criteria, or you can't do an ECG, go to the "Assess High Risk Criteria" box.
- C. **Assess high risk criteria** – If, in addition to meeting criteria in box 1, the patient meets four or more of these high risk criteria, he or she is considered high risk for a heart attack or other heart emergency needing immediate specialized cardiac care. These criteria are based on the TIMI risk assessment for unstable angina/non-STEMI. If the patient does not meet the high risk criteria in this box, but you believe the patient is having an acute coronary event based on presentation and history, consult with medical control to determine appropriate destination. High risk criteria definitions:
 - 3 or more CAD (coronary artery disease) risk factors:
 - Age \geq 55: epidemiological data for WA show that incidence of heart attack increases at this age
 - Family history: father or brother with heart disease before 55, or mother or sister before 65
 - High blood pressure: \geq 140/90, or patient/family report, or patient on blood pressure medication
 - High cholesterol: patient/family report or patient on cholesterol medication
 - Diabetes: patient/family report
 - Current smoker: patient/family report.
 - Aspirin use in last 7 days: any aspirin use in last 7 days.
 - \geq 2 anginal events in last 24 hours: 2 or more episodes of symptoms described in box 1 of the triage tool, including the current event.
 - Known coronary disease: history of angina, heart attack, cardiac arrest, congestive heart failure, balloon angioplasty, stent, or bypass surgery.
 - ST deviation \geq 0.5 mm (if available): ST depression \geq 0.5 mm is significant; transient ST elevation \geq 0.5 mm for $<$ 20 minutes is treated as ST-segment depression and is high risk; ST elevation $>$ 1 mm for more than 20 minutes places these patients in the STEMI treatment category.
 - Elevated cardiac markers (if available): CK-MB or Troponin I in the "high probability" range of the device used. Only definitely positive results should be used in triage decisions.
- D. **Determine destination** – The general guideline is to take a patient meeting the triage criteria directly to a Level I Cardiac Hospital within reasonable transport times. For BLS, this is generally within 30 minutes transport time, and for ALS, generally 60 minutes transport time. See below for further guidance. Regional patient care procedures and county operating procedures may provide additional guidance.
- E. **Inform the hospital en route so staff can activate the cath lab and call in staff if necessary.**

What if a Level I Cardiac Hospital is just a little farther down the road than a Level II?

You can make slight changes to the 30/60 minute timeframe. The benefits of opening an artery faster at a Level I can outweigh the extra transport time. To determine whether to transport beyond the 30 or 60 minutes, figure the difference in transport time between the Level I Cardiac Hospital and the Level II Cardiac Hospital. For BLS, if the difference is more than 30 minutes, go to the Level II Cardiac Hospital. For ALS, if the difference is more than 60 minutes, go to the level II Cardiac Hospital.

BLS examples: A) minutes to Level I minus minutes to Level II = 29: go to Level I
B) Minutes to Level I minus minutes to Level II = 35: go to Level II

ALS examples: A) minutes to Level I minus minutes to Level II = 45: go to Level I
B) Minutes to Level I minus minutes to Level II = 68: go to Level II

NOTE: We recommend ALS use a fibrinolytic checklist to determine if a patient is ineligible for fibrinolysis. If ineligible, transport to closest Level I hospital even if it's greater than 60 minutes or rendezvous with air transport.

What if there are two or more Level I or II facilities to choose from?

If there are two or more of the same level facilities to choose from within the transport times, patient preference, insurance coverage, physician practice patterns, and local rotation agreements may be considered in destination decision.

Patient Care Procedure #10

Stroke Patient Destination

OBJECTIVES

In the West Region, patients presenting with stroke signs/symptoms shall be identified and transported according to the State of Washington Prehospital Stroke Triage (Destination) Procedures and County Medical Protocols/County Operating Procedures.

PROCEDURES

See the attached State of Washington Prehospital Stroke Triage Destination Procedure.

IMPLEMENTATION

As of January 1, 2011, the region will utilize the resources of categorized stroke facilities as they are designated within the region.

QUALITY ASSURANCE

West Region prehospital agencies participate in local and regional stroke quality improvement. The West Region Cardiac Quality Improvement Forum, as established in October 2012, conducts quality improvement reviews to include all aspects of patient care from prevention, dispatch, pre-hospital, hospital and through rehabilitation.

For the most current State of Washington Prehospital Stroke Triage Destination Procedure go to:
<https://www.doh.wa.gov/Portals/1/Documents/Pubs/530182.pdf>



Prehospital Stroke Triage Destination Procedure

STEP 1: Assess Likelihood of Stroke

- Numbness or weakness of the face, arm, or leg, especially on one side of the body
- Confusion, trouble speaking, or understanding
- Trouble seeing in one or both eyes
- Trouble walking, dizziness, loss of balance, or coordination
- Severe headache with no known cause

If any of above, proceed to STEP 2, if none, transport per regional PCP/county operating procedures

STEP 2: Perform F.A.S.T. Assessment *(positive if any of Face/Arms/Speech abnormal)*

- **Face:** Unilateral facial droop
- **Arms:** Unilateral arm drift or weakness
- **Speech:** Abnormal or slurred
- **Time:** Best estimate of Time Last Known Well= _____

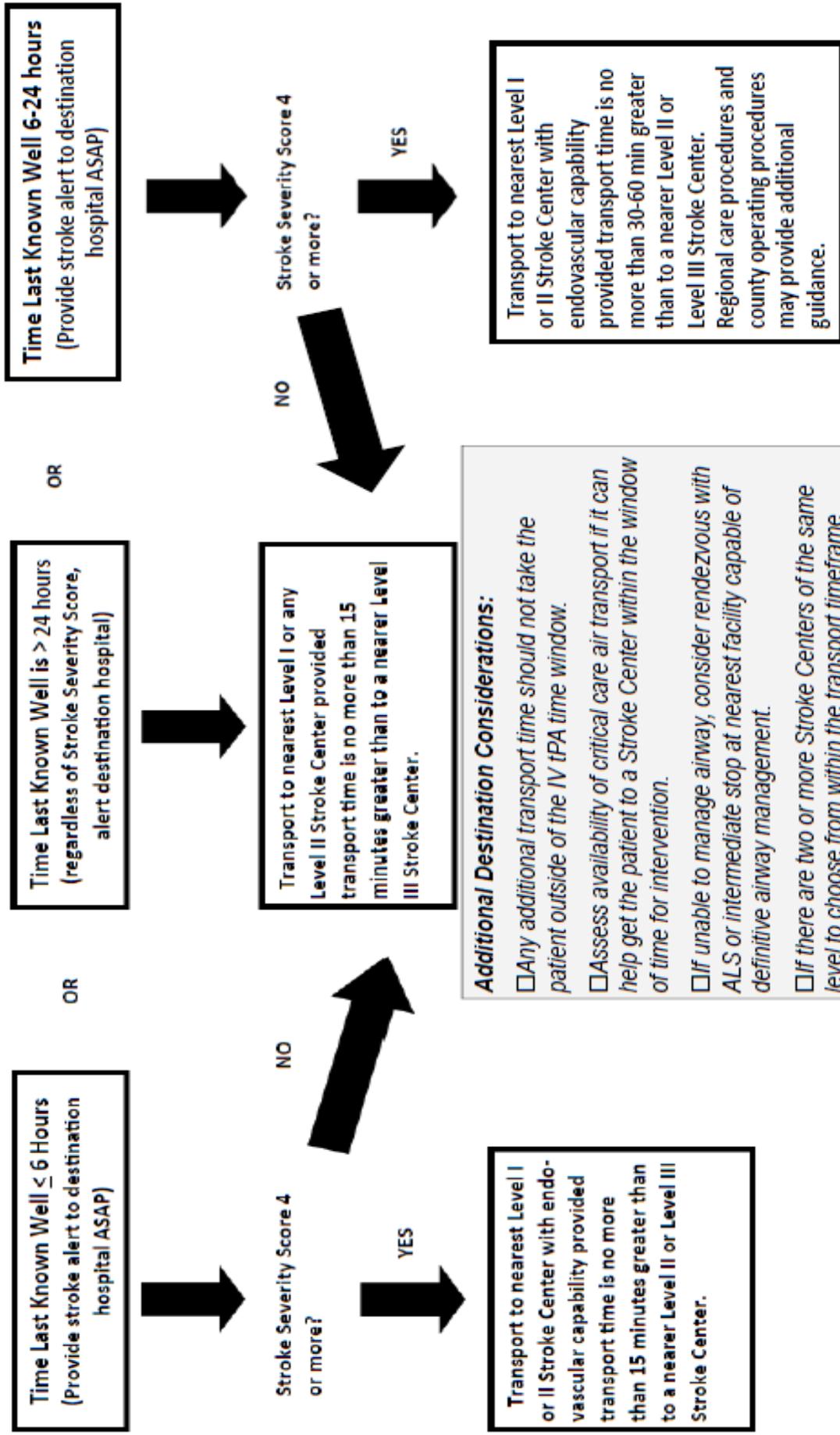
If FAST negative, transport per regional/county operating procedures

STEP 3: If F.A.S.T. Positive - Calculate Stroke Severity Score (LAMS)

Facial Droop:	Absent	0	Present	1		
Arm Drift:	Absent	0	Drifts	1	Falls Rapidly	2
Grip Strength:	Normal	0	Weak	1	No Grip	2
Total Stroke Severity Score =			(max. 5 points)			

DOH 530-182 February 2019

STEP 4: Determine Destination: Time Last Known Well + Stroke Severity Score



The purpose of the Prehospital Stroke Triage and Destination Procedure is to identify stroke patients in the field and take them to the most appropriate hospital, which might not be the nearest hospital. Stroke treatment is time-critical – the sooner patients are treated, the better their chances of survival and recovering function.

For strokes caused by a blocked blood vessel in the brain (ischemic, the majority of strokes), clot-busting medication (tPA) must be administered within 4.5 hours from the time the patient was last known well, a treatment that can be given at WA DOH Level 1, 2 or 3 stroke centers (for a list of categorized hospitals, please click [here](#)).

If a patient presents to EMS with a severe stroke, they are more likely to have blockage of a large vessel and can benefit from mechanical clot retrieval (thrombectomy). Thrombectomy must begin by 24 hours since last known well, and is a more complex intervention, only available in Level I and a small number of Level II stroke centers.

There are 3 key elements to determine the appropriate destination hospital:

- **FAST stroke screen** to identify a patient with a high probability of stroke.
- **Stroke Severity Score** to determine if a patient meets criteria for “severe” stroke.
- **Time since Last Known Well (LKW)** which helps determine eligibility for tPA and thrombectomy.

STEPS to determine destination:

Do a FAST Stroke Screen Assessment: (Facial droop, Arm drift, Speech changes, Time since LKW) is a simple way to tell if someone might be having a stroke. If FAST is negative, stroke is less likely, and standard destination procedures apply. If FAST is positive (face or arms or speech is abnormal), it’s likely the patient is having a stroke and the EMS provider moves on to assessing stroke severity.

Assess Stroke Severity Score: The stroke severity assessment scores the FAST stroke screen. Patients get points for deficits:

- **Facial droop** gets 1 point if present, 0 points if absent;
- **Arm drift** (have patient hold arms up in air) gets 2 points if an arm falls rapidly, 1 point if slowly drifts down and 0 points if the arms stay steady;
- **Grip strength** gets 2 points if no real effort can be made, 1 point if grip is clearly there but weak, and 0 points if grips seem of full strength.
- **Add up the points:** A score ≥ 4 is interpreted as “severe.”

Determine time since LKW: It is important to use the LKW time as opposed to when symptoms were first noticed. If a patient woke up in the morning with symptoms and was well when they went to bed, time LKW is the time they went to bed. If stroke symptoms occur when the patient is awake, LKW could be the same time the symptoms started if the patient or a bystander noticed the onset. LKW time could also be prior to symptoms starting if a patient delays reporting symptoms or, for example, someone discovers a patient with symptoms but saw them well 2 hours prior.

Determine Destination:

- **Time since LKW ≤ 6 hours and “Severe” (score ≥ 4):** This group benefits from preferential transport to a thrombectomy stroke center. The patient should be taken directly to the nearest thrombectomy stroke center provided it is no more than 15 extra minutes travel compared to the nearest stroke center.

- **Time since LKW is > 24 hours (regardless of severity score):** These patients should be taken to nearest Level I or II stroke center provided it is no more than 15 minutes greater than to a nearer Level III stroke center.
- **Time since LKW 6-24 hours but NOT “Severe”:** These patients should be taken directly to the nearest Level I or Level II stroke center provided it is no more than 15 extra minutes travel compared to a nearer Level 3 stroke center.
- **Time since LKW 6-24 hours AND “Severe”:** Transport to nearest Level I or II Stroke Center with endovascular capability provided transport time is no more than 30-60 min greater than to a nearer Level II or Level III Stroke Center. Regional care procedures and county operating procedures may provide additional guidance.

Notification: Immediately notify the destination hospital of incoming stroke. If the patient is within 6 hours LKW, call a stroke alert according to county operating procedures or locally determined protocol.

Document: key medical history, medication list and next of kin phone contacts; time on scene; FAST assessment and results (or reason why not); blood glucose level; LKW time (including unknown); and whether the hospital was notified from the field and if it was a stroke alert.

Note: In December 2022, Providence St. Peter Hospital in Thurston County announced that they can no longer accept Stroke patients requiring mechanical thrombectomy for large vessel occlusion. This will leave Thurston County with no comprehensive stroke (Level 1) facility due to a change in their staff. From this time forward, until a change has been announced, the MPD for Thurston County is requesting to immediately start performing a LAMS score and documenting it in your patient record. Starting December 16, 2022, for patients that have a LAMS score of 4 or 5, these patients should be transported to either Tacoma General or St. Joseph’s.

This information was also sent to all counties in the West Region. (see attachment A)

D. PIERCE COUNTY PREHOSPITAL STROKE TRIAGE (DESTINATION) PROCEDURES

STEP 1: Assess Likelihood of Stroke

- Numbness or weakness of the face, arm, or leg, especially on one side of the body
- Confusion, trouble speaking, or understanding
- Trouble seeing in one or both eyes
- Trouble walking, dizziness, loss of balance, or coordination
- Severe headache with no known cause

If any of above, proceed to STEP 2, if none, transport per county operating procedures

STEP 2: Perform B.E. F.A.S.T. Assessment (positive if any are abnormal)

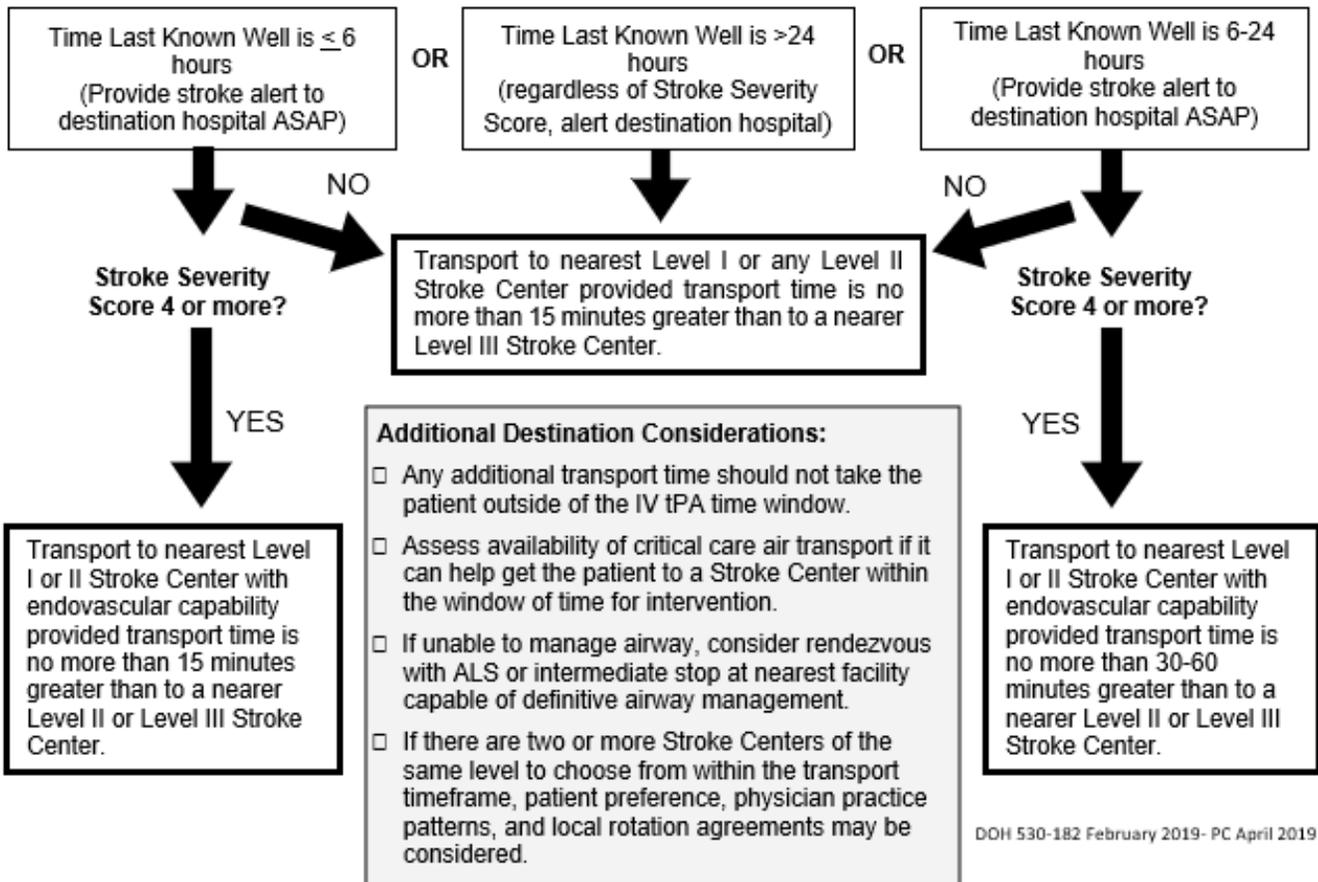
- **Balance:** Sudden trouble with balance or coordination
- **Eyes:** Sudden blurred or double vision or loss of vision in one or both eyes
- **Face:** Unilateral facial droop
- **Arms:** Unilateral arm drift or weakness
- **Speech:** Abnormal or slurred
- **Time:** Best estimate of Time Last Known Well = _____

If B.E. F.A.S.T. negative transport per county operating procedures

STEP 3: If B.E. F.A.S.T. Positive - Calculate Stroke Severity Score (LAMS)

Facial Droop: Absent 0 Present 1
 Arm Drift: Absent 0 Drifts 1 Falls Rapidly 2
 Grip Strength: Normal 0 Weak 1 No Grip 2
 Total Stroke Severity Score = ____ (max. 5 points)

STEP 4: Determine Destination: Time Last Known Well + Stroke Severity Score



DOH 530-182 February 2019- PC April 2019

PIERCE COUNTY

PREHOSPITAL STROKE TRIAGE (DESTINATION) PROCEDURES

The purpose of the Prehospital Stroke Triage and Destination Procedure is to identify stroke patients in the field and take them to the most appropriate hospital, which might not be the nearest hospital. Stroke treatment is time-critical – the sooner patients are treated, the better their chances of survival and recovering function.

For strokes caused by a blocked blood vessel in the brain (ischemic, the majority of strokes), clot-busting medication (tPA) must be administered within 4.5 hours from the time the patient was last known well, a treatment that can be given at WA DOH Level 1, 2 or 3 stroke centers (for a list of categorized hospitals, please click [here](#)).

If a patient presents to EMS with a severe stroke, they are more likely to have blockage of a large vessel and can benefit from mechanical clot retrieval (thrombectomy). Thrombectomy must begin by 24 hours since last known well, and is a more complex intervention, only available in Level I and a small number of Level II stroke centers.

There are 3 key elements to determine the appropriate destination hospital:

- **BE FAST Stroke Screen** to identify a patient with a high probability of stroke.
- **Stroke Severity Score** to determine if a patient meets criteria for “severe” stroke.
- **Time since Last Known Well (LKW)** which helps determine eligibility for tPA and thrombectomy.

STEPS to determine destination:

1) Do a BE FAST Stroke Screen Assessment: (Balance, Eyes, Facial droop, Arm drift, Speech changes, Time since LKW) is a simple way to tell if someone might be having a stroke. If BE FAST is negative, stroke is less likely, and standard destination procedures apply. If BE FAST is positive (balance or vision or face or arms or speech is abnormal), it’s likely the patient is having a stroke and the EMS provider moves on to assessing stroke severity.

2) Assess severity: The stroke severity assessment scores the FAST stroke screen. Patients get points for deficits:

Facial droop gets 1 point if present, 0 points if absent;

Arm drift (have patient hold arms up in air) gets 2 points if an arm falls rapidly, 1 point if slowly drifts down and 0 points if the arms stay steady;

Grip strength gets 2 points if no real effort can be made, 1 point if grip is clearly there but weak, and 0 points if grips seem of full strength.

3) Add up the points: A score ≥ 4 is interpreted as “severe.”

4) Determine time since LKW: It is important to use the LKW time as opposed to when symptoms were first noticed. If a patient woke up in the morning with symptoms and was well when they went to bed, time LKW is the time they went to bed. If stroke symptoms occur when the patient is awake, LKW could be the same time the symptoms started if the patient or a bystander noticed the onset. LKW time could also be prior to symptoms starting if a patient delays reporting symptoms or, for example, someone discovers a patient with symptoms but saw them well 2 hours prior. Report by actual clock hour, not by ‘30 prior to arrival’, etc.

5) Determine Destination:

Time since LKW \leq 6 hours and “Severe” (score ≥ 4): Transport to nearest Level I or II Stroke Center with endovascular capability provided transport time is no more than 15 minutes greater than to a nearer Level

II or Level III Stroke Center.

Time since LKW > 24 hours (regardless of severity score): Transport to the nearest Level I or Level II stroke center provided it is no more than 15 extra minutes travel than to a nearer Level III stroke center.

Time since LKW 6 – 24 hours AND “Severe”: Transport to the nearest Level I or Level II stroke center with endovascular capability provided transport time is no more than 30-60 extra minutes travel to a nearer Level II or Level III stroke center.

Time since LKW 6 – 24 hours but NOT “Severe”: Transport to the nearest Level I or Level II stroke center provided it is no more than 15 extra minutes travel compared to a nearer Level III stroke center.

6) Notification: Immediately notify the destination hospital of incoming stroke.

7) Document: key medical history, medication list and next of kin phone contacts; time on scene; BE FAST assessment completed and results (or reason why not); blood glucose level; LKW time (including unknown); and whether the hospital was notified from the field and if it was a stroke alert.

DOH 530-182 February 2019- PC June 2019

Patient Care Procedure #11

Mental Health/Chemical Dependency Alternate Destination Transport Procedure *(reviewed 3/6/19)*

STANDARD

In the state of Washington, Emergency Medical Services (EMS) licensed ambulance services may transport patients from the field to mental health or chemical dependency services in accordance with RCW 70.168.170.

OBJECTIVES

In the West Region, licensed EMS ambulance services may transport patients from the field to mental health or chemical dependency services in accordance with RCW 70.168.170, if approved by their county Medical Program Director (MPD).

PROCEDURES

1. Participation
 - a. Prehospital EMS agency participation is voluntary unless directed by the county MPD.
 - b. Receiving mental health and/or chemical dependency facility participation is voluntary.
2. Participating agencies and facilities will adhere to the WA State Department of Health Guideline for Implementation of SHB 1721.
3. Facilities that participate will work with the county MPD and EMS agencies to establish criteria that all participating facilities and EMS agencies will follow for accepting patients.
4. Prior to implementing and during ongoing operation of transport to alternate receiving facilities the following must be in place with DOH approval:
 - a. County operating procedure;
 - b. MPD patient care protocol
 - c. MPD specialized training for EMS providers participating in transport programs in accordance with RCW 70.168.170.

IMPLEMENTATION

As of December 6, 2017 the MPD and the local EMS and Trauma Care Council must develop a county operating procedure (COP)s. The COP must be consistent with the WA State Department of Health Guideline for Implementation of SHB 1721 and this PCP.

QUALITY ASSURANCE

The local EMS Council and MPD must establish a quality assurance process to monitor programs.

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 10

- 9-A - West Region Trauma QIF Handbook**
- 9-B - West Region Cardiac & Stroke QIF Handbook**
- 9-C - West Region EMS & Trauma Care Council Bylaws**

WEST REGION **TRAUMA** **QUALITY IMPROVEMENT PLAN**



Mission Statement

Continuously strive to optimize Trauma/EMS patient care and outcomes through the continuum of care.

5th Revision: October 21, 2022

Administrative Support Provided by
West Region Emergency Medical Services & Trauma Care Council, Inc.
Proudly Serving Grays Harbor, Lewis, N. Pacific, Pierce and Thurston Counties
5911 Black Lake Blvd SW, Olympia, WA 98512
360-705-9019 • www.wrems.com

Mission Statement

**Continuously strive to optimize
Trauma/EMS patient care and outcome through the continuum of care.**

GOAL: EVALUATE & IMPROVE PATIENT CARE THROUGH THE USE OF COMPREHENSIVE, DATA-DRIVEN QUALITY IMPROVEMENT PROCESSES.

1. Collect Accurate, Timely Data

Accurate, timely data is an essential prerequisite to effective quality improvement.

1.a. Patient Care Analysis

QI reviews should include all aspects of patient care from prevention, pre-hospital, hospital and through rehabilitation

2. Analyze Patterns and Trends of Regional Trauma and EMS

Compare similarities and differences between West Region and other regional, state and national models.

2.a Assess Patient Flow Patterns

A special concern of West Region is trauma patient flow patterns as well as inter-facility transfers and methods of transport. Ongoing monitoring will be required to provide data for consideration of additional (or fewer) designated trauma centers or when verified cardiac/stroke facilities are available.

2.b Compare Similar Hospital/Agency Outcomes

Case review requires objective comparisons with similar institutions within the region, state or nationally. In addition, a benchmark is used when available to which comparisons can be made.

2.c Analyze Individual Cases of Trauma and EMS

Highlighting the trends and patterns with individual case review. This will provide a specific focus for improvements and changes, as well as affording the opportunity to discuss individual cases.

3. Action Plan/Loop Closure

3.a Washington State Department of Health

Provide communication on patterns and trends of regional trauma, EMS & Cardiac/Stroke care through the West Region QIF or appropriate agency.

3.b Opportunities for Improvement

Recommend opportunities for improvement to the training or prevention committee of the West Region Council to disseminate among West Region agencies/facilities.

3.c Loop Closure

Cases sent to the QIF for review and recommendation require follow-up with action taken at the next meeting. Based upon information learned, key teaching points from each forum may be disseminated.

PRINCIPLES

- **Trauma Center Leadership**

As described in WAC 246-976-910 (2) and RCW 70.168.090 (2): Levels II, III, IV and V trauma care facilities shall establish and participate in regional EMS/TC systems quality improvement programs. West Region QIF encourages full participation¹ from all West Region hospitals.

- **System Analysis**

This is intended to be a process for continuous quality improvement of the regional system of trauma care throughout the age continuum. It is not intended to duplicate or supplant quality improvement programs of prehospital agencies, individual hospitals or rehabilitation units involved in regional trauma care. The state Trauma Registry will provide accurate data to assess regional performance as well as individual provider/agency performance.

- **Confidential Case Review & Education**

Effective identification, analysis and correction of problems require objective review by qualified, appropriate members of trauma care programs, protected by a process which ensures confidentiality. The approach used by the QIF will be standard case review profiling and issue for education and/or process improvement.

¹ It is the intention of this group to encourage and support participation from all Trauma Facilities and Medical Program Directors in the West Region. Bi-annually, the Leadership will prepare and present a draft of scheduled dates for meetings to include;

Meeting Date

Component (Process Improvement/Education/Case Review/etc.)

Facility to present

Topic choices (a list of the top causes of Injury in the West Region will be provided)

Selected entities' MPD is encouraged to support, review, and provide input/comments as to their county Protocols, Patient Care, and any possible considerations for change as a result of this presentation.

If a facility has a conflict with the draft schedule, component, or topic, they can submit a 'change request' to the Chair and the WREMS office.

PROCESS

TRAUMA QIF MEMBERSHIP

The West Region QIF membership includes the following voting & non-voting members and is consistent with WAC 246-976-910(3) & (4)

Voting Members:

- Trauma Medical Director from each designated trauma and trauma rehabilitation center
 - Trauma Program Managers from each designated trauma and trauma rehabilitation center
 - Medical Program Director (MPD) from each county - total 4
 - Emergency Department Representative from each designated trauma center (director or designee)
 - EMS representative (field provider preferred) - 3 from each county
 - CQI Representative – 1 prehospital and 1 hospital from each county
 - Regional EMS Council Chair
 - Regional Injury Prevention Representative: 1 pediatric and 1 adult
 - Regional Aero Medical Provider
- *Any of the above members may be replaced by an official designee from the represented facility or agency.*

Non-voting Members:

- State Department of Health Staff
- Appropriate medical specialists as needed and determined by QIF voting members
- Non-designated facility representatives
- EMS Coordinator/Director from each county
- Regional Council staff member

Quorum: A quorum shall consist of a minimum of 10 voting members at the beginning of the meeting and will continue as long as 6 or more voting members remain.

• **Confidentiality**

Actions of the QIF are confidential as provided in WAC 246-976-910 (5)(e)(f)(g)(h) and protected by RCW 43.70.510 and chapters 18.71, 18.73, and 70.168. *See Attachment A.* A written plan for confidentiality is required. *See Attachment B.* Notification in writing of the confidentiality of each meeting is required. Information identifying individual patients cannot be publicly disclosed without patient consent.

Regional QA meetings

- Frequency: 4 meetings per year
- Chairperson and 2 Vice Chairs: 3 year position elected by the majority of voting members (preferred structure: Chair = MD)
- 3 hours in length

- **Components to meeting:**
 - Review of regional data and trends
 - Performance Improvement (PI) Project Presentation or Mortality Review
 - Focused case(s) review with directed discussion
 - Next QIF meeting goals and targets
 - Yearly process/injury focus will be identified no later than the last QIF meeting of the year.

- **Summary Conclusions and Reporting**

The Chairperson is responsible for providing summary conclusions of discussions. Provisions must be provided for feedback to the Department of Health and the West Region EMS & Trauma Care Council on identified EMS and trauma care issues and concerns.

DETAILS

Component 1: Review of regional data and trends

- The state Department of Health Trauma Registry shall provide a focused report on issues/filters as requested.

Component 2: Performance Improvement Project Presentation

Presentation will include following points:

- Problem identification
- Process changes
- Implementation process
- Evaluation
 - Lessons learned

Component 3: Mortality Review

Component 4: Focused cases reviews:

Designated agencies present injury or process specific case reviews as assigned by the committee. Cases will not exceed 60 minutes and include:

- Continuum of care from dispatch through rehabilitation
- Major players involved be present or available for questions and discussion
- Audio-visual aids
- Topics from case for discussions
- Lessons learned

Component 5: Identification of next quarter's meeting goals and targets

**West Region Quality Improvement Plan
Confidentiality and Exemption from Discoverability
Policy and Procedures
January 2009 (revised March 2013)**

Policy

It is the intention of the West Region Quality Improvement Forum (QIF) to use the information gathered to support clinical research and improve patient care through measuring and improving systems performance. It is necessary that providers have protection from discoverability and possible liability to reach that end.

Pledge of Confidentiality

All attendees of the QIF will sign a pledge of confidentiality which will also act as a record of attendance. At each meeting the pledge of confidentiality will be read into the minutes. (See Att A).

Documentation

Patient records will be identified by the unique Trauma Registry identifier. Patient information cannot be publicly disclosed without written permission of the patient or guardian. All QIF handouts shall be labeled “Confidential QI Document/Privilege Information/Not Authorized for Distribution.” All confidential documents will be collected at the end of the meeting, and all copies will be destroyed following the meeting. One permanent copy will be kept in a locked cabinet.

Minutes

Minutes from QIF meetings will be prepared by the West Region EMS staff. Minutes will be reviewed and approved by the members. One copy of the minutes will be kept for the purpose of record by the West Region EMS, and its staff will be responsible for collecting and destroying all documents following the meeting. Retention schedule for minutes will be 4 years. The one permanent copy will be kept in a locked cabinet. Any case specific information presented during QIF meetings will be held in strict confidence among those attending the meeting. All identifying references to specific cases will be omitted from meeting minutes.

Reports

A report will be generated to summarize significant findings of the materials reviewed in the QIF meeting. The summary report will be modified to scrub information that might identify individuals or agencies involved in the QI review. Names, dates, times and situations may be modified to prevent loss of confidentiality while communicating intent of the finding(s). The QIF will approve the summary report (redacted meeting minutes) before it is released external to the QIF.

Educational Learning Points

Key learning points will be generated from a review of QI Forum reports and case presentations. To close the loop between quality improvement and training, this information will be distributed to EMS and hospital providers to assist with education and training. All information will be carefully scrubbed to eliminate individual or agency identifiers.

Access to Information

-

All members of the QIF, and those who have been invited to attend by members of the forum, have access to view or discuss patient, provider, and systems information when the patient and the provider's identifying information has been obscured. It is the obligation of the attendees to keep all information confidential and to protect it against unauthorized intrusion, corruption, and damage.

**West Region Quality Improvement Plan
TEMPLATE FOR CASE REVIEWS
December, 2002**

I. WRQIF Case Review

- *Name of presenter*
- *Name of agencies represented*
- *Date*

II. Topic

- *Question or issue to be addressed with this case review*

III. Scene/Background Information

IV. EMS Findings/Interventions

- *Description of Pt*
- *Vital Signs*
- *Interventions*

V. ED Interventions/Findings

- *Vital Signs*
- *Interventions*
- *Findings*
- *Injury List*
- *Consults*
- *Pt Disposition*

VI. Hospital Course

- *Length of Stay*
- *Surgeries*
- *Other Injuries/Procedures Done*
- *Cost*

VII. Rehab (if appropriate)

VIII. Outcome

- *Discharge Status*
- *Current Update on Pt Outcome*

West Region QIF Mortality Review Template

March, 2013

Hospital: _____
Patient ID: _____ Collector: _____ ED Arrival: _____
Mechanism: _____

Injury Note:

PREHOSPITAL INFORMATION

EMS Incident Report Available: _____
Scene Transport: _____
Procedures: _____
Pulse: _____ Respiratory Rate: _____ Systolic BP: _____
Triage Criteria Used _____

ED INFORMATION

Trauma Team Activated: _____
(yes/no)
Procedures: _____
ED Disposition: _____
Operations: _____
Diagnosis: _____
ICU Admit? _____ Days in ICU: _____
Hours from ED arrival to Death: _____
Autopsy: _____
Toxicology: _____
Pre-Existing Conditions: _____
Complications: _____

ED Memo: _____

TRAUMA SCORES

RTS = _____ GCS = _____ ISS = _____ TRISS = _____ HARM = _____
Maximum AIS Head/Neck: _____ Face: _____
Thorax: _____ Abdominal/Pelvic Contents: _____
Extremities/Pelvic Girdle: _____ External Structures: _____

WEST REGION **CARDIAC & STROKE** **QUALITY IMPROVEMENT PLAN**



Mission Statement

Continuously strive to optimize
Cardiac and Stroke patient care and outcome
through the continuum of care.

Approved 10/15/12

Administrative Support Provided by
West Region Emergency Medical Services & Trauma Care Council, Inc.
Proudly Serving Grays Harbor, Lewis, N. Pacific, Pierce and Thurston Counties
5911 Black Lake Blvd SW, Olympia, WA 98512
360-705-9019 • www.wrems.com

Mission Statement

**Continuously strive to optimize
Cardiac and Stroke patient care and outcome through the continuum of care.**

GOAL: EVALUATE & IMPROVE CARDIAC & STROKE PATIENT CARE THROUGH THE USE OF COMPREHENSIVE, DATA-DRIVEN QUALITY IMPROVEMENT PROCESSES.

1. Collect Accurate, Timely Data

Accurate, timely data is an essential prerequisite to effective quality improvement.

1.a. Patient Care Analysis

QI reviews should include all aspects of patient care from prevention, dispatch, pre-hospital, hospital and through rehabilitation.

2. Analyze Patterns and Trends of Regional Cardiac/Stroke Care

Compare similarities and differences between West Region and other regional, state and national models.

2.a Assess Patient Flow Patterns

A special concern of West Region is cardiac and stroke patient flow patterns as well as inter-facility transfers and methods of transport. Ongoing monitoring will be required to provide data to assure access to WA State categorized cardiac and stroke centers in accordance to the state triage tools for cardiac and stroke.

2.b Compare Similar Hospital/Agency Outcomes

Case review requires objective comparisons with similar institutions within the region, state or nationally. In addition, a benchmarking is used when available to which comparisons can be made.

2.c Analyze Individual Cases of Cardiac and Stroke Care

Analysis can be provided by highlighting the trends and patterns with examples from individual case review. This will provide a specific focus for education, improvements and changes, as well as affording the opportunity to discuss individual cases.

3. Action Plan/Loop Closure**3.a Washington State Department of Health**

Provide communication on patterns and trends of regional Cardiac/Stroke care through the West Region Quality Improvement Forum (QIF) or appropriate agency.

3.b Opportunities for Improvement

Recommend opportunities for improvement to the training or prevention committee of the West Region Council to disseminate among West Region agencies/facilities.

3.c Loop Closure

Cases sent to the Quality Improvement Forum (QIF) for review and recommendation require follow-up with action taken at the next meeting. Based upon information learned, key teaching points from each forum may be disseminated.

PRINCIPLES

- **Cardiac and Stroke Center Leadership and Participation**

According to Washington State Department of Health Participation Criteria for Level 1 Cardiac and Level 1 Stroke Categorization provide community/regional resources for guidance and recommendations through leadership. All Levels of Cardiac and Stroke centers have committed to participate in regional quality improvement activities through the categorization process. West Region QIF encourages full participation from all West Region hospitals.

- **System Analysis**

This is intended to be a process for continuous quality improvement of the regional system of cardiac and stroke care throughout the age continuum. It is not intended to duplicate or supplant quality improvement programs of prehospital agencies, individual hospitals or rehabilitation units involved in cardiac and stroke care. By use of COAP and Outcomes Science GWTG for Stroke or the additional data collection tool there will be accurate data provided to assess regional performance as well as individual provider/agency performance.

- **Confidential Case Review & Education**

Effective identification, analysis and correction of problems require objective review by qualified, appropriate members of cardiac and stroke care programs, protected by a process which ensures confidentiality. The approach used by the QIF will be standard case review profiling and issue for education and/or process improvement.

PROCESS

CARDIAC AND STROKE QIF MEMBERSHIP

The West Region Cardiac & Stroke QIF membership includes the following voting & non-voting members:

Voting Members:

- Cardiac and Stroke Medical Directors from each categorized cardiac and stroke hospital
 - Cardiologist
 - Neurologist
 - Emergency Medicine Physician
 - Emergency Department RN
- Cardiac and Stroke Coordinators from each categorized cardiac and stroke hospital
- Medical Program Director (MPD) from each county - total 4
- Emergency Department Representative from each categorized cardiac and stroke hospital (director or designee)
- EMS representative (field provider preferred) - 3 from each county
- CQI Representative – 1 prehospital and 1 hospital from each county
- Regional EMS Council Chair
- Prevention Representative: 1 cardiac and 1 stroke
- Regional Aero Medical Provider
- Representatives from County Cardiac and Stroke QI
 - *Any of the above members may be replaced by an official designee from the represented facility or agency.*

Non-voting Members:

- State Department of Health Staff
- Appropriate medical specialists as needed and determined by QIF voting members
- American Heart/Stroke Association representative
- Non-designated facility representatives
- EMS Coordinator/Director from each county
- Regional Council staff member

Quorum: A quorum shall consist of a minimum of 10 voting members at the beginning of the meeting and will continue as long as 6 or more voting members remain.

• **Confidentiality**

The ECS law amended RCW 70.168.090(2) to allow existing regional EMS and trauma quality assurance (QA) programs to evaluate cardiac and stroke care delivery in addition to trauma care delivery.

See Attachment A. A written plan for confidentiality is required. *See Attachment B.* Notification in writing of the confidentiality of each meeting is required. Information identifying individual patients cannot be publicly disclosed without patient consent.

• **Regional Cardiac and Stroke QIF meetings**

- Frequency: 4 meetings per year
- Chairperson and 1 Vice Chair: 3 year position elected by the majority of voting members (preferred structure: Chair = MD)
- Length
 - 1.5 hours cardiac
 - 1.5 hours stroke

• **Meeting Structure:**

- 0900-1030 – Cardiac QI Meeting
- 1030-1045 – Break
- 1045-1230 – Stroke QI Meeting

• **Components to meeting:**

- Review of regional data and trends
- Performance Improvement (PI) Project Presentation
- Focused case(s) review with teaching points and directed discussion
- Next QIF meeting goals and targets
- Yearly process/injury focus will be identified at the last QIF meeting of the year.
- Selection of goals and objectives for Cardiac/Stroke meetings will be identified annually.

• **Summary Conclusions and Reporting**

The Chairperson is responsible for providing summary conclusions of discussions. Provisions must be provided for feedback to the Department of Health and the West Region EMS & Trauma Care Council on identified cardiac and stroke care issues and concerns.

DETAILS

Component 1: Review of regional data and trends

COAP and Outcomes Science GWTG for Stroke or the additional data collection tools will be used for data and trend reporting.

Component 2: Performance Improvement Project Presentation

Presentation will include following points:

- Problem identification
- Process changes
- Implementation process
- Tools or resources
- Evaluation
 - Lessons learned

Component 3: Focused cases reviews:

Designated agencies present cardiac and stroke case reviews as assigned by the committee.

Cases will be not exceed 60 minutes and include:

- Continuum of care from dispatch through rehabilitation
- Major players involved be present or available for questions and discussion
- Audio-visual aids
- Topics from case for discussions
- Lessons learned

Component 4: Identification of next quarter’s meeting goals and targets

Attachment B

**West Region Quality Improvement Plan
Confidentiality and Exemption from Discoverability
Policy and Procedures
October 2012**

Policy

It is the intention of the West Region Quality Improvement Forum (QIF) to use the information gathered to support clinical research and improve patient care through improved systems performance. It is necessary that providers have protection from discoverability and possible liability to reach that end.

Pledge of Confidentiality

All attendees of the QIF will sign a pledge of confidentiality which will also act as a record of attendance. At each meeting the pledge of confidentiality will be read into the minutes. (See Att A).

Documentation

Patient records will be identified by the unique identifier. Patient information cannot be publicly disclosed without written permission of the patient or guardian. All QIF handouts shall be labeled “Confidential QI Document/Privilege Information/Not Authorized for Distribution.” All confidential documents will be collected at the end of the meeting, and all copies will be destroyed following the meeting. One permanent copy will be kept in a locked cabinet.

Minutes

Minutes from QIF meetings will be prepared by the West Region EMS staff. Minutes will be reviewed and approved by the members. One copy of the minutes will be kept for the purpose of record by the West Region EMS, and its staff will be responsible for collecting and destroying all documents following the meeting. Retention schedule for minutes will be 4 years. The one permanent copy will be kept in a locked cabinet. Any case specific information presented during QIF meetings will be held in strict confidence among those attending the meeting. All identifying references to specific cases will be omitted from meeting minutes.

Reports

A report will be generated to summarize significant findings of the materials reviewed in the QIF meeting. The summary report will be modified to scrub information that might identify individuals or agencies involved in the QI review. Names, dates, times and situations may be modified to prevent loss of confidentiality while communicating intent of the finding(s). The QIF will approve the summary report (redacted meeting minutes) before it is released external to the QIF.

Educational Learning Points

Key learning points will be generated from a review of QI Forum reports and case presentations. To close the loop between quality improvement and training, this information will be distributed to field and in-hospital EMS providers to assist with education and training. All information will be carefully scrubbed to eliminate individual or agency identifiers.

Access to Information

All members of the QIF, and those who have been invited to attend by members of the forum, have access to view or discuss patient, provider, and systems information when the patient and the provider's identifying information has been obscured. It is the obligation of the attendees to keep all information confidential and to protect it against unauthorized intrusion, corruption, and damage.

Attachment B

**West Region Quality Improvement Plan
TEMPLATE FOR CASE REVIEWS
October 15, 2012**

I. WRQIF Case Review

- *Name of presenter*
- *Name of agencies represented*
- *Date*

II. Topic

- *Question or issue to be addressed with this case review*

I. Scene/Background Information

IV. EMS Findings/Interventions

- *Description of Pt*
- *Vital Signs*
- *Symptoms*
- *Last known well time*
- *Onset of symptom time*
- *Interventions/Treatment*
- *EKG tracings*

V. ED Interventions/Findings

- *Vital Signs*
- *Interventions*
- *Findings*
- *12 lead EKG*
- *Imaging*
- *Consults*
- *Door to thrombolytic treatment and intervention time*

VI. Cath Lab/ Neuro Interventional lab/ OR

- *Balloon time*
- *Timing of neuro interventions or surgery preformed*
- *Imaging or diagrams of procedures*

VI. Hospital Course

- *Length of Stay*
- *Surgeries or Procedures Done*
- *Cost*

VII. Rehab (if appropriate)

VIII. Outcome

- *Discharge Status*
- *Current Update on Pt Outcome*



WEST REGION EMERGENCY MEDICAL SERVICES AND TRAUMA CARE COUNCIL

BYLAWS

REVISED: 6/22/15

ARTICLE 1 - NAME

The name of the council shall be the West Region Emergency Medical Services and Trauma Care Council, Inc., hereafter referred to as the Council. The Council shall be composed of no less than three (3) and no more than five (5) counties.

ARTICLE 2 - PURPOSE

The Council:

- 2.1 Shall be an advisory and coordinating council for the planning and implementation of comprehensive, integrated regional emergency medical services and trauma care.
- 2.2 Shall be advisory to the State Department of Health in implementation of the State of Washington Emergency Medical Services & Trauma System Strategic Plan.
- 2.3 Shall identify specific activities necessary to meet statewide standards, identified in statute and WAC, and patient care outcomes in the region and develop a plan of implementation for regional compliance.
- 2.4 Shall assess and analyze regional emergency medical services and trauma care needs and identify personnel, agencies, facilities, equipment, training, and education to meet regional and local needs.
- 2.5 Shall recommend to the Department of Health on distribution of regional funds based on those needs and priorities identified in Article 2.4.
- 2.6 Shall establish and review agreements with regional providers necessary to meet state standards and establish agreements with providers outside the region to facilitate patient transfer.
- 2.7 Shall establish the number and level of facilities to be designated that are consistent with state standards and based upon availability of resources and the distribution of trauma within the region.
- 2.8 Shall review and evaluate the emergency medical services and trauma care system as it develops and review grievances within the system as they arise.
- 2.9 Shall identify the need for and recommend distribution and level of care of prehospital services to assure adequate availability and avoid inefficient duplication and lack of coordination of prehospital services within the region.

2.10 Shall adopt a budget subject to the availability of funds from the State Department of Health and any other sources.

2.11 The authority, duties and responsibilities of the Council are defined by:

WAC 246-976-960 Regional Emergency Medical Services and Trauma Care Councils.

- (1) In addition to meeting the requirements of chapter 70.168 RCW and elsewhere in this chapter, regional EMS/TC councils must:
 - (a) Identify and analyze system trends to evaluate the EMS/TC system and its component subsystems, using trauma registry data provided by the department;
 - (b) Develop and submit to the department regional EMS/TC plans to:
 - (i) Identify the need for and recommend distribution and level of care (basic, intermediate or advanced life support) for verified aid and ambulance services for each response area. The recommendations will be based on criteria established by the department relating to agency response times, geography, topography, and population density;
 - (ii) Identify EMS/TC services and resources currently available within the region;
 - (iii) Describe how the roles and responsibilities of the MPD are coordinated with those of the regional EMS/TC council and the regional plan;
 - (iv) Describe and recommend improvements in medical control communications and EMS/TC dispatch, with at least the elements of the state communication plan described in RCW 70.168.060 (1) (h);
 - (v) Include a schedule for implementation.
- (2) In developing or modifying its plan, the regional council must seek and consider recommendations of:
 - (a) Local EMS/TC councils;
 - (b) EMS/TC systems established by ordinance, resolution, interlocal agreement or contract by counties, cities, or other governmental bodies.
- (3) In developing or modifying its plan, the regional council must use regional and state analyses provided by the department based on trauma registry data and other appropriate sources;
- (4) Approved regional plans may include standards, including response times for verified services, which exceed the requirements of this chapter.
- (5) An EMS/TC provider who disagrees with the regional plan may bring its concerns to the steering committee before the department approves the plan.
- (6) The regional council must adopt regional patient care procedures as part of the regional plans. In addition to meeting the requirements of RCW 18.73.030 (14) and 70.168.015 (23):
 - (a) For all emergency patients, regional patient care procedures must identify:
 - (i) Guidelines for rendezvous with agencies offering higher levels of service if appropriate and available, in accordance with the regional plan.
 - (ii) The type of facility to receive the patient, as described in regional plan destination and disposition guidelines.
 - (iii) Procedures to handle types and volumes of trauma that may exceed regional capabilities, taking into consideration resources available in other regions and adjacent states.

- (b) For major trauma patients, regional patient care procedures must identify procedures to activate the trauma system.
- (7) Matching grants made under the provisions of chapter 70.168 RCW may include funding to:
 - (a) Develop, implement, and evaluate prevention programs; or
 - (b) To accomplish other purposes as approved by the department.

ARTICLE 3 - COMPOSITION AND MEMBERSHIP

3.1 The Council shall be comprised of (per RCW 70.168.120) a balance of hospital and prehospital trauma care and emergency medical services providers, local elected officials, consumers, local law enforcement representatives, and local government agencies involved in the delivery of emergency medical services and trauma care as follows:

<u>Council Position</u>	<u>Total # of Positions</u>
Hospital: Grays Harbor (1), Lewis (1), Pierce (2), Thurston (1)	5
Prehospital: Grays Harbor (1), Lewis (1), Pierce (2), Thurston (2)	6
Private Ambulance	1
Physicians: Emergency (1) & Surgeon (1)	2
Emergency Room Nurse	2*
Prevention Specialist	1
Trauma Program Manager	1
Cardiac and/or Stroke Coordinator	1
Local Elected Official: At-Large.....	1
Consumer.....	2*
Law Enforcement: At-Large	1
Local Government Agency (County Specific).....	4**
Local EMS/TC Council.....	4**
Military Prehospital/Hospital.....	1
North Pacific County	1
Fire Chief.....	4**
EMS Educating Agency	2*
County Medical Program Director.....	4**
Rehabilitation Specialist.....	1
Pediatrician	1
Local County Public Health Official.....	1
Emergency Management.....	1
Dispatch.....	1
Mason County (non-voting member).....	1
Total Number of Council Positions.....	49

**No two being from the same county.*

***One from each county. Grays Harbor and N. Pacific are counted as one county.*

- 3.2 Representatives will be recommended by each local EMS/TC council for appointment by the Department of Health. The term of membership shall not be limited, except by local EMS/TC councils or the Department of Health.
- 3.3 For each membership position, local EMS/TC councils may recommend one alternate for appointment by the Department of Health. The alternate shall have all the rights, privileges, and protections of the member during his/her absence (whether excused or unexcused). Votes cast by an alternate in the member's absence shall have the same import as if cast by the primary member. If the member is present, the alternate abstains from voting.
- 3.4 An absence is excused when a member/alternate notifies the Council chair, or designee, in advance of his/her inability to attend such meeting stating such reason for non-attendance. An alternate member is automatically excused when the member is in attendance.
- 3.5 If a member/alternate misses three consecutive regularly scheduled Council meetings, where the designated position has not been represented, and the member/alternate has not been excused by the Council for these absences, the Council may recommend to the local EMS/TC council to terminate that individual's membership, with documentation to support the request. Upon a member's termination by the Department, the alternate may take the member's place and a new alternate shall be appointed, if necessary. The Council shall call for recommendations for a replacement from the local EMS/TC council and/or other organization appropriate to the position. The replacement shall be for the unexpired term of the original alternate.

ARTICLE 4 - OFFICERS

- 4.1 The officers shall be chair, vice-chair, and secretary/treasurer, elected by a majority of the Council for a two-year term, with no more than two officers being from the same county.
- 4.2 Nominations for elections of officers shall be in May with elections in June. Newly elected officers shall begin duties in July. The nominating committee shall be composed of the non-officer positions on the Executive Board.
- 4.3 The chair shall preside at all regular and special meetings of the Council.
- 4.4 In the absence of the chair, the vice-chair, then the secretary/treasurer shall perform the duties of the chair.
- 4.5 The secretary/treasurer shall maintain accurate records of all Council meetings and be responsible for general correspondence of the Council. The secretary/treasurer shall keep charge of funds of the Council and shall report at regular meetings on the status of the funds.
- 4.6 Any vacancies in the above officers shall be filled by appointment by the chair, subject to

Council approval. A vacancy in the chair's office shall be filled by a majority vote of the Council for the unexpired term of the office.

ARTICLE 5 - EXECUTIVE BOARD

- 5.1 The Executive Board shall consist of no more than eight (8) members. The three officers shall serve on the Executive Board as representatives of their respective counties. The remaining five positions shall represent each of the four counties with the fifth position being from the county without an officer on the Executive Board. These representatives-at-large shall be selected by each county's delegation on the Council.
- 5.2 Meetings of the Executive Board shall be called by the chair or at the request of a majority of the voting membership as needed, to conduct routine or Council directed business between meetings or to develop recommendations to the full Council. Any action by the Executive Board shall be subject to review and ratification by the full Council at the next meeting.
- 5.3 A quorum must be present at an Executive Board meeting in order to conduct business. A quorum of the Executive Board shall consist of 50% or greater of appointed Executive Board members.

ARTICLE 6 - MEETINGS

- 6.1 Regular meetings of the full Council are held quarterly. Location shall be included in meeting announcement at least thirty (30) days prior to meeting date.
- 6.2 Regular Executive Board meetings are held monthly. Location shall be included in meeting announcement at least fifteen (15) days prior to meeting date.
- 6.3 Standing committee meetings will be held at least quarterly and as scheduled by the committee chair. An annual calendar of meeting dates will be published by July 1 for the committees described in 7.1.
- 6.4 The year for terms of officers shall be the fiscal year from July 1 - June 30.
- 6.5 A quorum of the Council shall consist of a majority of the members present that are appointed by the Department of Health.
- 6.6 Meetings shall be called by the chair or at the request of a majority of the voting membership with at least ten (10) days advance notice.
- 6.7 Meetings shall be open to the public and held in accordance with Chapter 42.30 RCW, the Open Public Meetings Act.

ARTICLE 7 - COMMITTEES

- 7.1 Three standing committees shall be established as follows: Prevention, Education, Joint Standards & Planning.
- 7.2 Additional committees may be appointed by the chair as needed, with the approval of Council members. The chair shall be an *ex-officio* member of all committees.
- 7.3 Committee chairs may be elected by committee members or appointed by the Council chair. Chair or designee shall, at a minimum, give oral reports to the full Council.
- 7.4 Independent committees may receive administrative support, with the approval of Council members. At least one (1) Council member must be a member of the independent committee and shall, at the minimum, give written quarterly reports on committee activities, which may be supplemented with oral reports to the full Council. Independent committee includes:
- West Region Quality Improvement Forum
- 7.5 The officers may appoint such agents or assistants as they find necessary with the advice and consent of the full Council.

ARTICLE 8 - AMENDMENTS

- 8.1 These by-laws may be repealed or amended upon recommendation of a majority of the appointed members of the Council in a formal vote.
- 8.2 Council members shall be notified in writing at least ten (10) days prior to the meeting at which the vote is to be taken.

ARTICLE 9 - RULES OF PROCEDURE

Robert's Rules of Order (latest revision) shall be the rules of procedure of the Council except as amended herein.

**West Region Emergency Medical Services
& Trauma Care System Strategic Plan**

Appendix 11

11-A = TOP 10 CAUSES OF INJURY AND DEATH IN WEST REGION – ORIGINAL DOH DATA

11-B = BY MECHANISM

11-C = BY AGE

AGE	INTENT	MECHANISM	POPULATION	COUNT	RATE	LOWER CI	UPPER CI
15-24	Self-Inflicted	Firearm	820712	87	10.6	8.49	13.08
15-24	Unintentional	Poisoning	820712	85	10.36	8.27	12.81
15-24	Self-Inflicted	Suffocation	820712	60	7.31	5.58	9.41
15-24	Assault	Firearm	820712	41	5	3.58	6.78
15-24	Unintentional	MVT_Unspecified	820712	41	5	3.58	6.78
15-24	Unintentional	MVT_Occupant	820712	37	4.51	3.17	6.21
15-24	Unintentional	Drowning	820712	14	1.71	0.93	2.86
15-24	Unintentional	MVT_Pedestrian	820712	12	1.46	0.76	2.55
15-24	Self-Inflicted	Poisoning	820712	12	1.46	0.76	2.55
25-34	Unintentional	Poisoning	854966	225	26.32	22.99	29.99
25-34	Self-Inflicted	Firearm	854966	106	12.4	10.15	15
25-34	Self-Inflicted	Suffocation	854966	69	8.07	6.28	10.21
25-34	Assault	Firearm	854966	63	7.37	5.66	9.43
25-34	Unintentional	MVT_Occupant	854966	44	5.15	3.74	6.91
25-34	Unintentional	MVT_Unspecified	854966	30	3.51	2.37	5.01
25-34	Self-Inflicted	Poisoning	854966	25	2.92	1.89	4.32
25-34	Unintentional	MVT_Motorcyclist	854966	21	2.46	1.52	3.75
25-34	Unintentional	MVT_Pedestrian	854966	19	2.22	1.34	3.47
25-34	Unintentional	Drowning	854966	14	1.64	0.9	2.75
25-34	Undetermined	Poisoning	854966	11	1.29	0.64	2.3
25-34	Unintentional	Falls	854966	10	1.17	0.56	2.15
35-44	Unintentional	Poisoning	833299	230	27.6	24.15	31.41
35-44	Self-Inflicted	Firearm	833299	92	11.04	8.9	13.54
35-44	Self-Inflicted	Suffocation	833299	60	7.2	5.49	9.27
35-44	Assault	Firearm	833299	35	4.2	2.93	5.84
35-44	Self-Inflicted	Poisoning	833299	32	3.84	2.63	5.42
35-44	Unintentional	MVT_Occupant	833299	31	3.72	2.53	5.28
35-44	Unintentional	MVT_Unspecified	833299	26	3.12	2.04	4.57
35-44	Unintentional	MVT_Motorcyclist	833299	22	2.64	1.65	4
35-44	Unintentional	MVT_Pedestrian	833299	21	2.52	1.56	3.85
35-44	Unintentional	Drowning	833299	12	1.44	0.74	2.52
35-44	Other	Firearm	833299	11	1.32	0.66	2.36
45-54	Unintentional	Poisoning	856905	246	28.71	25.23	32.53
45-54	Self-Inflicted	Firearm	856905	87	10.15	8.13	12.52
45-54	Self-Inflicted	Poisoning	856905	53	6.19	4.63	8.09
45-54	Self-Inflicted	Suffocation	856905	53	6.19	4.63	8.09
45-54	Unintentional	Falls	856905	31	3.62	2.46	5.13
45-54	Unintentional	MVT_Unspecified	856905	30	3.5	2.36	5
45-54	Assault	Firearm	856905	27	3.15	2.08	4.58
45-54	Unintentional	MVT_Motorcyclist	856905	24	2.8	1.79	4.17
45-54	Unintentional	MVT_Occupant	856905	23	2.68	1.7	4.03
45-54	Self-Inflicted	Falls	856905	17	1.98	1.16	3.18
45-54	Unintentional	Drowning	856905	16	1.87	1.07	3.03
45-54	Unintentional	MVT_Pedestrian	856905	15	1.75	0.98	2.89
45-54	Unintentional	Suffocation	856905	10	1.17	0.56	2.15

AGE	INTENT	MECHANISM	POPULATION	COUNT	RATE	LOWER CI	UPPER CI
55-64	Unintentional	Poisoning	899958	259	28.78	25.38	32.51
55-64	Self-Inflicted	Firearm	899958	118	13.11	10.85	15.7
55-64	Unintentional	Falls	899958	52	5.78	4.32	7.58
55-64	Self-Inflicted	Poisoning	899958	50	5.56	4.12	7.32
55-64	Self-Inflicted	Suffocation	899958	45	5	3.65	6.69
55-64	Unintentional	MVT_Occupant	899958	33	3.67	2.52	5.15
55-64	Unintentional	MVT_Motorcyclist	899958	22	2.44	1.53	3.7
55-64	Unintentional	Suffocation	899958	19	2.11	1.27	3.3
55-64	Unintentional	Drowning	899958	18	2	1.19	3.16
55-64	Unintentional	MVT_Unspecified	899958	17	1.89	1.1	3.02
55-64	Unintentional	Natural Environment	899958	16	1.78	1.02	2.89
55-64	Unintentional	MVT_Pedestrian	899958	14	1.56	0.85	2.61
55-64	Unintentional	Unspecified	899958	14	1.56	0.85	2.61
55-64	Assault	Firearm	899958	12	1.33	0.69	2.33
55-64	Unintentional	Fire/Burn	899958	10	1.11	0.53	2.04
55-64	Unintentional	Other Specified	899958	10	1.11	0.53	2.04
65-74	Unintentional	Falls	665526	114	17.13	14.13	20.58
65-74	Self-Inflicted	Firearm	665526	92	13.82	11.14	16.95
65-74	Unintentional	Poisoning	665526	53	7.96	5.97	10.42
65-74	Unintentional	Suffocation	665526	44	6.61	4.8	8.88
65-74	Self-Inflicted	Poisoning	665526	33	4.96	3.41	6.96
65-74	Unintentional	MVT_Occupant	665526	23	3.46	2.19	5.19
65-74	Unintentional	MVT_Unspecified	665526	18	2.7	1.6	4.27
65-74	Unintentional	Fire/Burn	665526	15	2.25	1.26	3.72
65-74	Unintentional	MVT_Pedestrian	665526	14	2.1	1.15	3.53
65-74	Self-Inflicted	Suffocation	665526	14	2.1	1.15	3.53
65-74	Unintentional	Unspecified	665526	11	1.65	0.83	2.96
65-74	Unintentional	Drowning	665526	10	1.5	0.72	2.76
65-74	Unintentional	Other Specified	665526	10	1.5	0.72	2.76
75-84	Unintentional	Falls	293072	277	94.52	83.71	106.33
75-84	Self-Inflicted	Firearm	293072	46	15.7	11.49	20.94
75-84	Unintentional	Suffocation	293072	34	11.6	8.03	16.21
75-84	Unintentional	MVT_Unspecified	293072	18	6.14	3.64	9.71
75-84	Unintentional	MVT_Occupant	293072	16	5.46	3.12	8.87
75-84	Unintentional	Unspecified	293072	16	5.46	3.12	8.87
85+	Unintentional	Falls	120017	479	399.11	364.16	436.5
85+	Unintentional	Unspecified	120017	41	34.16	24.52	46.34
85+	Unintentional	Suffocation	120017	29	24.16	16.18	34.7
85+	Self-Inflicted	Firearm	120017	25	20.83	13.48	30.75
85+	Unintentional	NEC	120017	13	10.83	5.77	18.52
TOTAL				4,384			

TOP 10 CAUSES OF INJURY DEATH - WEST REGION - 2016 - 2020 BY MECHANISM		
1	1314	POISONINGS
2	980	FALLS
3	842	FIREARMS
4	437	SUFFOCATIONS
5	207	MOTOR VEHICLE - OCCUPANT
6	180	MOTOR VEHICLE - UNSPECIFIED
7	95	MOTOR VEHICLE - PEDESTRIAN
8	89	MOTORCYCLIST
9	84	DROWNINGS
10	25	FIRE/BURNS

4253

Death Data: Washington State Department of Health, Center
for Health Statistics - Updated on 2/28/2022



Prepared by: West Region / Updated on: 3/14/2023

TOP 10 CAUSES OF INJURY DEATH - WEST REGION - 2016 - 2020 BY AGE GROUP		
0-14	xxx	Data is suppressed
15-24	87	Firearms
25-34	225	Poisonings
35-44	230	Poisonings
45-54	246	Poisonings
55-64	259	Poisonings
65-74	114	Falls
75-84	277	Falls
85+	479	Falls

1917

Death Data: Washington State Department of Health, Center for Health Statistics - Updated on 2/28/2022



Prepared by: West Region / Updated on: 3/14/2023

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 12

POPULATION DATA

West Region population

POPULATION - WEST REGION

APPENDIX - # 12

	CENSUS	ESTIMATE	% change	# change
	2020	2022		
Grays Harbor	75,636	76,400	1.0%	764
Unincorporated	28,993	29,125		
percentage of total	38%	38%		
Incorporated	46,643	47,275		
percentage of total	62%	62%		

	CENSUS	ESTIMATE		
	2020	2022		
LEWIS	82,149	83,400	1.5%	1,251
Unincorporated	49,461	50,185		
percentage of total	60%	60%		
Incorporated	32,688	33,215		
percentage of total	40%	40%		

	CENSUS	ESTIMATE		
	2020	2022		
Pierce	920,393	937,400	1.8%	17,007
Unincorporated	430,248	440,800		
percentage of total	47%	47%		
Incorporated	490,145	496,600		
percentage of total	53%	53%		

	CENSUS	ESTIMATE		
	2020	2022		
Pacific (represents 50% for WREMS)	11,683	11,800	1.0%	117
Unincorporated	7,882	7,980		
percentage of total	67%	68%		
Incorporated	3,801	3,820		
percentage of total	33%	32%		

	CENSUS	ESTIMATE		
	2020	2022		
Thurston	294,793	300,500	1.9%	5,707
Unincorporated	144,856	143,760		
percentage of total	49%	48%		
Incorporated	149,937	156,740		
percentage of total	51%	52%		

	CENSUS	ESTIMATE		
	2020	2022		
TOTALS	1,384,654	1,409,500	1.8%	24,846
Unincorporated	661,440	671,850		
percentage of total	48%	48%		
Incorporated	723,214	737,650		
percentage of total	52%	52%		

Source: Washington State Office of Financial Management Website

1 of 1

