



West Region Emergency Medical Services & Trauma Care System Strategic Plan

July 2015 - June 2017

Submitted By: West Region EMS & Trauma Care Council

Date Submitted: March 24, 2015

Table of Contents

Introduction	2
Goal 1	5
Goal 2	10
Goal 3	13
Goal 4	16
Goal 5	19
Goal 6	21
Appendix 1	23
• Approved Minimum & Maximum Numbers of Verified Prehospital Trauma Services by Level & Type by County	
Appendix 2	26
• Prehospital Trauma Response Areas by County	
Appendix 3	35
• Approved Minimum & Maximum Numbers of Designated Trauma Care Services (General Acute Trauma Services)	
• Approved Minimum & Maximum Numbers of Designated Trauma Rehabilitation Care Services	
• Emergency Cardiac & Stroke System Categorization Status of West Region Hospitals	
Appendix 4	37
• West Region Patient Care Procedures/County Operating Procedures	
Appendix 5	56
• State of WA Prehospital Cardiac Triage Destination Procedure	
• State of WA Prehospital Stroke Triage Destination Procedure	
• State of WA Prehospital Trauma Triage Destination Procedure	
• Pierce County Prehospital Trauma Triage Destination Procedure (COP)	
Appendix 6	64
• West Region Nonfatal Injury Hospitalizations, 2004-2013	
• West Region Fatal Injuries, 2004-2013	
Appendix 7	67
• West Region Quality Improvement Forum Plans:	
○ Trauma	
○ Cardiac & Stroke	

Plan Introduction

The purpose of the 2015-17 West Region Emergency Medical Services (EMS) and Trauma Care System Plan is to sustain a robust continuum of care that effectively reduces injuries and fatalities as well as treats and rehabilitates victims of trauma and medical emergencies within the five-county area of Grays Harbor, Lewis, North Pacific, Pierce and Thurston Counties.

To guarantee all 1,238,539 citizens and additional visitors appropriate and timely EMS, medical and trauma care, the West Region EMS & Trauma Care Council (WREMS) focuses its efforts toward 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, and regional quality evaluation and improvement. 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.

The West Region EMS & Trauma Care 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 one of eight regional councils statewide composed of appointed volunteer representatives and funded primarily by the Washington State Department of Health (DOH).

The West Region EMS Council accomplishes comprehensive planning through a committee structure with final approval by the Council. Fifty-three Council positions represent local healthcare providers, local government agencies, and consumers from areas as metropolitan as Tacoma and as remote as the rainforest on the Olympic Peninsula. The Council benefits from a diverse representation of dedicated decision-makers, many of whom are regular contributors at state Technical Advisory Committee (TAC) meetings where they share their expertise.

The Council includes an Executive Board and three standing committees which undertake the core work of the Council. The Executive Board is comprised of seven members who meet monthly and have financial oversight, draft policies and procedures, and provide reviews of personnel.

The Injury and Violence Prevention (IVP) Committee, which meets five times a year, engages participants from all West Region counties. Meetings provide an opportunity for networking, sharing best practices and learning about other resources and prevention programs/projects.

The IVP Committee is dedicated to preventing the leading causes of injury and death in the region which are falls, suicide, poisoning and motor vehicle crashes. Annual mini-grants are awarded to evidence based injury prevention projects that support data-driven projects in the leading causes of injury and death. There is a comprehensive mini-grant selection committee process which uses a detailed grading system and selection criteria that evaluates a project’s supporting data, objectives, strategies and evaluation plan.

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. TED is also engaged in year-long planning of an annual EMS conference which provides high quality EMS education and training opportunities to West Region and Washington State providers.

The Joint Standards and Planning Committee is currently dormant.

The WREMS Council supports local agencies in meeting the requirements of WAC to assure adequate availability of prehospital aid and ambulance services for each response area, based upon agency response time standards, geography, topography and population density. There are 83 EMS trauma verified aid and ambulance services within the West Region and a total of 2,927 EMS providers: 2,013 are paid and 914 are volunteers.

Prehospital Verified Services*

County	ALS Ambulance	ALS Aid	BLS Ambulance	BLS Aid	ILS Ambulance
Grays Harbor	6		5	10	1
Lewis	5		5	2	4
No Pacific	1			1	
Pierce	15	1	6	5	
Thurston	3		8	5	

***Numbers are current as of March 2015**

Fourteen designated trauma care services currently operate within the West Region. The current numbers and levels of services in each county provides adequate coverage for the citizens and visitors of the region. The three Adult Level V facilities are also Critical Access Hospitals.

Trauma Designation			Facility	City
Adult	Pediatric	Rehab		
II			Madigan Army Medical Center	Joint Base Lewis-McChord
II			Tacoma Trauma Center (joint)	St. Joseph Medical Center Tacoma General Hospital (joint)
	II P		Mary Bridge Children's Hospital	Tacoma
III		I R	Good Samaritan Hospital	Puyallup
III			Grays Harbor Community Hospital	Aberdeen
III		II R	Providence St. Peter Hospital	Olympia
IV			Capital Medical Center	Olympia
IV			Providence Centralia Hospital	Centralia
IV			St. Anthony Hospital	Gig Harbor
IV			St. Clare Hospital	Lakewood
V			Summit Pacific Medical Center (formerly Mark Reed Hospital)	Elma
V			Morton General Hospital	Morton
V			Willapa Harbor Hospital	South Bend
		II R	St. Joseph Medical Center	Tacoma

Trauma Designated Facilities*

Adult Level II	Adult Level III	Adult Level IV	Adult Level V	Pediatric Level II	Rehab Level I	Rehab Level II
2**	3	4	3	1	1	2

*Numbers are current as of March 2015

**One of the two Level II Adult Facilities is a shared designation between St. Joseph Medical Center & Tacoma General Hospital

Washington State's Emergency Cardiac and Stroke System is intended to save lives and reduce disability for heart attack, cardiac arrest, and stroke patients. EMS will take patients directly to hospitals that meet care requirements and choose to participate in the system. Thirteen of the hospitals in the West Region are categorized as both cardiac and stroke facilities. Please refer to Appendix 3 for Cardiac & Stroke System Categorization Status of all West Region Hospitals. You may also refer to the Washington State Department of Health's website for the most current list of West Region hospitals participating in the Cardiac and Stroke System: <http://www.doh.wa.gov/hsqa>

Cardiac & Stroke Categorized Facilities*

Cardiac I	Cardiac II	Stroke I	Stroke II	Stroke III
5	8	3	4	6

*Numbers are current as of March 2015

Goal 1 Introduction

Increase access to quality, affordable & integrated emergency care across the age continuum

The WREMS Council works to integrate all facets of the emergency care system through the development and implementation of the West Region EMS & Trauma Care System Plan. A quality Emergency Care System is maintained by facilitating the exchange of information & expertise among the West Region Council membership and system stakeholders. This cannot be accomplished without the inclusive makeup of the Council membership and its dedicated and engaged members.

The Council solicits participation in the process of reviewing the minimum and maximum numbers and levels of trauma designated services in each county from the West Region Trauma Quality Improvement Forum (QIF) where stakeholders convene from regional designated adult, pediatric and rehabilitation trauma services. Current status is adequate for the citizens and visitors of the region.

There are 14 designated trauma care services currently operating within the West Region (see Appendix 3 for Approved Minimum & Maximum Numbers of Designated Trauma Care Services). In Pierce County there are seven trauma centers serving the needs of the region: Tacoma Trauma Center, a joint Adult Level II, is shared by MultiCare Tacoma General Hospital and Franciscan St. Joseph Medical Center. Madigan Army Medical Center, located on Joint Base Lewis-McChord, also serves as an Adult Level II. MultiCare Mary Bridge Children's Hospital is a Pediatric Level II facility in Tacoma. MultiCare Good Samaritan Hospital in Puyallup is an Adult Level III trauma facility. St. Anthony Hospital in Gig Harbor and St. Clare Hospital in Lakewood are both Adult Level IV facilities.

The remaining West Region counties house seven additional adult trauma facilities. Two Adult Level III: Providence St. Peter Hospital in Olympia and Grays Harbor Community Hospital in Aberdeen. Two Adult Level IV: Capital Medical Center in Olympia and Providence Centralia Hospital in Centralia. Three Adult Level V: Summit Pacific Medical Center in Elma, Morton General Hospital in Morton and Willapa Harbor Hospital in South Bend.

There are 3 trauma rehabilitation centers in the West Region. MultiCare Good Samaritan is a Level I Adult Trauma Rehabilitation Service, and Providence St. Peter Hospital and St. Joseph Medical Center serve the West Region as Level II Adult Trauma Rehabilitation Centers.

The WREMS Council supports local 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 and distribution of verified aid and ambulance services is determined by local EMS county councils in Grays Harbor/N. Pacific, Pierce and Thurston Counties. Each council has an operations committee that is responsible for recommending the

minimum/maximum number of prehospital services for subsequent review and recommendation by the county EMS council. In Lewis County, this process is handled through collaborative discussions between the MPD, fire chiefs, and private prehospital providers. Each county's recommendations are reviewed by the WREMS Council and forwarded to DOH for approval.

County evaluation of minimum/maximum number of services is conducted every two years and is done considering the following objective criteria as outlined in the WA Department of Health's Guideline for Addressing Minimum/Maximum Levels of Trauma Verified Prehospital EMS Resources (9/22/10):

- Demand for prehospital EMS resources.
- Population.
- Increased trauma responses.
- Available prehospital EMS resources.
- 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?
- Level of verified trauma service. Is there a demonstrated (data-driven) need for another level of service?

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):

- (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 under served trauma response areas;
- (c) How the applicant's proposed service will impact existing verified services in the region.
- (5) Input from local EMS/TC councils where local councils exist.

Approved minimum/maximum numbers of verified prehospital services can be found in the Appendix 1 of this Plan. There are 83 EMS trauma verified aid and ambulance services within the West Region.

The Pierce County EMS Council (PCEMSC) noted that in August 2014, there were reports that the Department of Defense plans to cut approximately 14,459 permanent soldiers and 1,541 civilian employees on Joint Base Lewis McChord. While the PCEMSC is aware these individuals are spread throughout the Puget Sound region, the loss of this population will affect not only the Pierce County economy, but EMS service responses in Pierce County.

The PCEMSC is concerned about the capability of the present Fire Department/DSHS function to continue service to McNeil Island residents, staff and visitors if there is a reduction in force or other downsizing actions. If funding for the FD/EMS service is discontinued, that leaves the

island at risk for extended EMS response times and transport to definitive emergency care. Additionally, we are concerned about timely EMS care received by residents, staff and visitors of Mt. Rainier National Park. They are designated as an Emergency Services Supervisory Organization, but there are populated areas of the national park that should not be considered 'wilderness', especially during peak visitation/camping months. While Pierce County does not have influence on State and Federal properties, the county does recognize the need to speak for residents, staff and visitors in those areas.

Adequate financing and reimbursement are barriers in many facets of the patient care arena, from Prehospital through Rehabilitation. The 'rules' of Medicare and Medicaid reimbursement while necessary, are quickly becoming a deterrent to agencies seeking to provide service. Many private and public prehospital agencies cannot remain viable assets in the region when they cannot be reimbursed for services provided. Because of the shortage of volunteers and paid prehospital personnel at all levels of certification in the most rural areas of the region, the capability of interfacility transfers of both routine and critical patients is a gap that must be remediated. At times, prehospital fire levies are not being approved by voters for a number of reasons, yet the citizens expect an elevated level of care. The guidelines for a patient to be eligible for rehabilitation services are restrictive to some who need the service the most. The aging population trend was not and continues to not be adequately addressed by those who set the funding and access guidelines.

An EMS Council does not exist in Lewis County. The WREMS Council does agree that the Lewis County stakeholders may wish to revisit this issue. The implementation of a 'Mobile Integrated Healthcare' program may be a viable option to consider in this county.

The decline in the number of volunteers has affected not only prehospital care in rural areas of the West Region, but it has affected suburban populations as well. The reasons for this decline in volunteerism are numerous: career positions in fire departments increasing, a real or perceived belief that volunteers are not needed or are not adequate care providers, the rise in fuel costs causing volunteers to not have funds to pay for their private vehicles to respond to calls, the increased cost of training and maintenance of personnel, and various other reasons. The WREMS Council may not be able to influence this issue, but we recognize it as a changing trend.

Mental health needs are not being met within the region, state or nation. Because mental health is not well funded at any level, access to care and hospitalization is inadequate. There are plans to build a mental health focus medical facility in Tacoma within the next three years; it is likely it will be filled to capacity immediately and the problem of adequate care will still remain. When Emergency Departments are inundated with mental health patients, requiring one-on-one monitoring, it critically affects their ability to care for other acute medical and trauma patients in a timely manner.

GOAL 1 <i>Increase access to quality, affordable & integrated emergency care across the age continuum.</i>	
<p>Objective 1: Beginning in July 2015, the West Region EMS Council will implement the 2015-2017 Regional EMS and Trauma System Strategic Plan.</p>	<p>Strategy 1. Beginning in July 2015, the West Region EMS Council’s staff will begin collaborating with stakeholders to accomplish the DOH reporting process on implementing the 2015-17 Strategic Plan.</p>
	<p>Strategy 2. By August 2015, the West Region EMS Council will distribute the 2015-17 Plan to the local councils and county MPDS and post it on the Council website.</p>
	<p>Strategy 3. Beginning August 2015, the West Region EMS Council will provide bi-monthly progress reports to the Washington State Department of Health.</p>
	<p>Strategy 4. Beginning September 2015, and throughout the plan cycle, West Region EMS Council staff will provide bi-monthly progress reports to the West Region EMS Executive Board.</p>
<p>Objective 2: During the 2015-2017 plan cycle the West Region EMS Council will facilitate the exchange of information throughout the emergency care system.</p>	<p>Strategy 1. Beginning in July 2015, and throughout the plan cycle, the West Region EMS Council will provide meeting rooms for the Regional Council, Committees and workgroups.</p>
	<p>Strategy 2. Beginning in July 2015, and throughout the plan cycle meeting agendas and minutes will be provided to regional EMS stakeholders in advance of each meeting through email.</p>
	<p>Strategy 3. Beginning in July 2015, and throughout the plan cycle, West Region EMS Council members will participate in EMS stakeholder meetings including: EMS & Trauma Steering Committee, Region 3 Healthcare Coalition, Region 5 Northwest Healthcare Response Network, and various Technical Advisory Committees then share information with the West Region EMS Council at regularly scheduled meetings.</p>
	<p>Strategy 4. Throughout the plan cycle, West Region EMS Council & stakeholders will bring EMS system and patient care issues forward to the Washington State Department of Health, as necessary.</p>
<p>Objective 3: By March 2017, the West Region EMS 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 2017-2019.</p>	<p>Strategy 1. By September 2016, the West Region EMS Council will obtain and begin review of directives from the WA State Dept. of Health (DOH) for the 2017-2019 system plan components.</p>
	<p>Strategy 2. From November 2016-March 2017, 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 West Region EMS Council at regular meetings.</p>

	<p>Strategy 3. By March 2017, the designated planners will present a completed draft of the 2017-2019 West Region Strategic Plan to the West Region EMS Council, and subsequently to the State DOH.</p>
<p>Objective 4: By June 2017, the West Region EMS Council will determine minimum and maximum numbers and levels of trauma designated services (including pediatric and rehabilitation services) in each county and provide recommendations to the Washington State Department of Health.</p>	<p>Strategy 1. By November 2016, the West Region EMS Executive Board will solicit input from stakeholders regarding Regional Designated Adult, Pediatric and Rehabilitation Trauma Services needs.</p>
	<p>Strategy 2. By March 2017, the West Region EMS Executive Board will review input from stakeholders for current designated Trauma Services designations and make recommendations for minimum and maximum numbers, levels and locations to the West Region EMS Council.</p>
	<p>Strategy 3. By June 2017, the West Region EMS Council will make recommendations regarding minimum and maximum numbers, levels and locations of designated Trauma Services to the Washington State Department of Health (DOH).</p>
<p>Objective 5: By March 2017, the West Region EMS Council will utilize the Washington State Department of Health standardized methodology to determine minimum and maximum numbers and levels of verified prehospital service types in each county and provide recommendations to the Washington State Department of Health.</p>	<p>Strategy 1. By September 2016, the West Region EMS Executive Board will request local councils and MPDs review minimum and maximum numbers and levels of trauma verified prehospital services and make recommendations for any changes using the standardized methods provided by DOH to determine optimal prehospital system recommendations to the West Region EMS Council for approval.</p>
	<p>Strategy 2. By January 2017, the West Region EMS Executive Board will review input and any changes made by county councils to minimum and maximum numbers and levels of trauma verified prehospital services and make recommendations to the West Region EMS Council.</p>
	<p>Strategy 3. By March 2017, the West Region EMS Council will make recommendations for the minimum and maximum numbers and levels of trauma verified prehospital services from each county to the DOH.</p>
<p>Objective 6: By March 2017, the West Region EMS Council will review and update Regional Patient Care Procedures (PCPs) and local council County Operating Procedures (COPs) and make recommendations to the Washington State Department of Health.</p>	<p>Strategy 1. By January 2017, the West Region EMS Executive Board will review and update the Regional PCPs & COPs using input from the local councils and MPDS. The Board will verify that the Regional PCPs and COPs are aligned with current evidence-based documents and recommend updates and revisions as needed to the West Region EMS Council.</p>
	<p>Strategy 2. By March 2017, the West Region EMS Council will review recommendations from the Executive Board and solicit DOH approval for any updated PCPs and COPs.</p>

Goal 2 Introduction

Prepare for, respond to and recover from all-hazards threats

The West Region EMS Council has contracted with the Washington State Department of Health Office of Emergency Preparedness and Response (EPR) Program to receive federal funds to provide administrative support and perform planning tasks for Region 3 since 2001. Council staff plan closely with Thurston County Public Health staff to implement the work of the region. Region 3 is one of the nine Public Health Emergency Preparedness and Response Regions in WA and includes Grays Harbor, Lewis, Mason, Pacific, and Thurston Counties. Region 3's boundaries are similar to the Regional EMS & Trauma System's boundaries except that it excludes Pierce County (Region 5) and includes Mason County (Northwest EMS & Trauma Region).

The WREMS Council recognizes the need for robust dialogue within the West Region, to include both the Region 3 Healthcare Coalition and the Region 5 Northwest Healthcare Response Network (NWHRN), Emergency Managers and EMS administrators, to enable the region to fulfill this goal. Additionally, a crosswalk between the entities of Emergency Management, EMS and EPR is needed to achieve a "whole community" approach to preparing for, responding to, and recovering from an all-hazards event.

Although the West Region Council is not an operational agent in the response function of this goal, it can be an agent for collaboration and communication. The Council has positions for both an Emergency Management and a Public Health representative. The Emergency Management position is currently filled by an Emergency Manager from Pierce County. The WA State Prehospital TAC will be instituting a new Disaster Preparedness subcommittee which promises to enhance collaboration. Funding for EMS and hospital preparedness decreases every year which continues to be a challenge. WREMS will continue to build, share and nurture what we have and collectively voice the need for more funding, resources and support.

Region 3

Over the years, community and healthcare system preparedness in Region 3 counties has grown due to collaboration at the regional level. Region 3 partnerships formed the Region 3 Healthcare Preparedness Coalition ("HPC" or "Coalition") in 2007. Today the Region 3 HPC has a membership of 65 participants from all five counties who represent disciplines from hospitals, public health, tribal nations, community health clinics, local emergency management, and the military.

The Region 3 HPC is comprised of a seven member Executive Committee which monitors the budget, projects, contract deliverables, and recommends the annual work plan for approval by the Coalition membership. The HPC is governed by a charter with bylaws and has five meetings a year. There are two subcommittees that support work specific to hospital medical surge, as well as regional training and exercise development. The Coalition provides preparedness training and education, and opportunities to drill and exercise. It maintains a grant program to provide

funding for preparedness and response training to facilities and agencies to enhance their capabilities to fulfill a local and regional role during disasters.

The Region 3 HPC maintains a Healthcare System Response Plan for All Hazards Preparedness and Response. The Plan includes medical surge operations, equipment cache management and deployment, and policy and procedures for the regional Disaster Medical Control Center (DMCC) at Providence St. Peter Hospital. The DMCC conducts regional coordination between hospitals in the event of a minor or mass casualty event or disaster that threatens to overwhelm both the local and regional medical system and its services. This coordination is also done with MultiCare Good Samaritan Hospital in Region 5, Pierce County.

The Region 3 HPC has primarily focused on preparedness and response capability building over the past two years. The planning priorities in the next two years will be on building capabilities in community and healthcare system recovery, information sharing & volunteer management. The specific focus will be on enhancing situational awareness for the healthcare systems in Region 3. An additional priority will be to strengthen coordination and defined operations between EMS and hospitals during a disaster.

GOAL 2

Prepare for, respond to, & recover from all-hazards threats.

<p>Objective 1: From July 2015-June 2017, the West Region EMS Council will continue planning and collaboration with health care partners in Public Health Emergency Region 3 for emergency preparedness.</p>	<p>Strategy 1. From July 2015-June 2017, West Region EMS staff will provide administrative support to the Region 3 Healthcare Preparedness Coalition (HPC) and perform planning tasks and contract responsibilities as outlined in the Region 3 HPC Charter.</p> <p><i>*Note: this strategy is for reporting purposes only. Reimbursement for this activity is through the WA State Dept of Health Public Health Emergency Preparedness office.</i></p>
<p>Objective 2: From July 2015-June 2017, the West Region EMS Council will collaborate with emergency management to identify and plan emergency preparedness in disaster response to all-hazards.</p>	<p>Strategy 1. Beginning in July 2015, and throughout the plan cycle, West Region EMS Council members will participate in emergency preparedness/disaster response meetings including: Region 3 Healthcare Coalition, Region 5 NWHRN and various Emergency Management planning meetings, then share information with the West Region EMS Council at regularly scheduled meetings.</p>

Goal 3 Introduction

Promote programs & policies to reduce the incidence & impact of injuries, violence & illness

According to Washington State Department of Health (DOH) data, in 2013, 60 people died and another 779 people were hospitalized due to preventable traumatic injuries in the West Region. The most common cause of injury and death in the West Region is falls, followed by suicide, poisoning, motor vehicle crashes and drowning. Data is used to prioritize work, make decisions regarding prevention grant awards, and to evaluate the efficacy of prevention programs/projects. Data tables for fatal and nonfatal injuries in the West Region can be found in Appendix 6.

By supporting evidence based or promising prevention strategies and sharing information and resources on injury prevention with regional stakeholders, the number of injuries, disabilities and fatalities due to trauma can be reduced.

Note: The West Region Injury and Violence Prevention (IVP) program focuses on preventing traumatic injury. Illness is addressed through the West Region Cardiac and Stroke Quality Improvement (QI) which focuses on cardiac and stroke patient care and outcomes.

Regional Councils have strong support from DOH staff who share a wealth of expertise, information and resources. State meetings provide an opportunity to network, collaborate with other regional prevention leads in planning, and address prevention issues at the state level. The educational component of the meetings provides valuable information and training.

The West Region has a part-time IVP Coordinator on staff. The IVP Coordinator serves as a liaison between DOH and regional stakeholders, serves as a point of contact for stakeholders who are seeking information and resources, and facilitates networking and partnerships to increase capacity and reduce duplication of efforts. Information on current trends, hot topics, data, educational opportunities and safety information on a wide variety of topics is sent out to regional stakeholders via email to a distribution list of approximately 150 prevention partners.

Each year the West Region awards prevention grants. Grant funds are used to develop or strengthen prevention programs/projects in local communities, must address one of the top five causes of injury in the region, and use evidence based or promising strategies. A subcommittee reviews all prevention projects submitted for consideration. The grants are a valuable resource for rural, underserved areas and a relatively small grant can have a big impact in reducing the number of injuries, disabilities and deaths due to trauma. WREMS prevention grants make it possible for organizations to develop a successful prevention program, which can then be eligible for additional grant funds from other sources. Funding for prevention grants has been reduced in the past four years due to budget cuts.

The West Region includes many rural areas with limited resources. Prevention grants provide much needed resources to these areas. The IVP Coordinator shares information and resources with rural communities, and assists rural communities in connecting with State resources.

The West Region IVP Committee meets five times per year. Meetings include an educational component and an update report from DOH. The meetings provide an opportunity for networking, sharing best practices and learning about other resources and prevention programs/projects that participants can take back and adopt or adapt in their own community.

The annual West Region EMS Conference includes a Prevention Workshop. The workshop provides a half-day of education for EMS providers and other injury prevention professionals and volunteers in the region and across the state. The WREMS IVP Coordinator is actively involved year-round in coordinating and planning, with oversight by the IVP Committee.

County Specific Assessment

Many of the regional resources listed below were developed or strengthened by WREMS Prevention grant funds. The Washington Poison Center is available for training and resources for poisoning prevention throughout the state.

Grays Harbor & Pacific County: Top causes of injury are falls, motor vehicle crashes and poisoning. Grays Harbor County has a very robust senior falls prevention program led by Olympic Area Agency on Aging. Youth Suicide Prevention Program is in the process of hiring a Director of Services in Grays Harbor County; this position will also serve Pacific County. Much of Grays Harbor County is rural with limited resources.

Lewis County: Top causes of injury are falls, motor vehicle crashes and poisoning. Lewis County has a strong child passenger safety program through Lewis County Public Health. Newaukum Valley Fire & Rescue (NVFR) is actively involved in many public education and prevention activities including teen distracted driving and senior falls prevention. NVFR and Morton General Hospital have recently partnered and are developing a county wide prevention program. The Lewis Mason Thurston Area Agency on Aging coordinates senior fall prevention activities in Lewis County. Much of Lewis County is rural and has limited resources.

Pierce County: Top causes of injury are falls, suicide, poisoning, and motor vehicle crashes. Many fire departments in the county have mature public education and injury prevention programs that address several causes of injury. There are several organizations in Pierce County with senior falls prevention programs. Tai Ji Quan Moving for Better Balance, (an evidence based program for reducing senior falls) leader training classes will be held in spring, 2015. Mary Bridge Children's Hospital has a strong child passenger safety program. According to a recent report from DOH, Pierce County has one of the highest falls rates in the state for children. Mary Bridge Children's Hospital is actively involved in the Western Pacific Injury Prevention Network, which is using a multi-faceted approach to preventing pediatric window falls.

Thurston County: Top causes of injury are falls, poisoning and suicide. Lewis Mason Thurston Area Agency on Aging serves as a resource for senior fall prevention. Providence St. Peter Hospital is actively working to develop a senior fall prevention program. Safe Kids Thurston County has a strong coalition and several child-focused prevention programs in place including water safety and child passenger safety. Crisis Clinic has a strong youth suicide and drug misuse prevention program.

GOAL 3	
<i>Promote programs & policies to reduce the incidence & impact of injuries, violence & illness.</i>	
<p>Objective 1: Annually during the 2015-17 plan cycle, the West Region EMS Council will utilize a regional process to identify prevention needs and support promising, evidence-based and/or best practice activities.</p>	<p>Strategy 1. Annually, by August, the Injury and Violence Prevention (IVP) Committee of the West Region EMS Council will review relevant injury and mortality data from 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 projects.</p>
	<p>Strategy 2. Annually, by September, the IVP Committee of the West Region EMS Council will identify evidence-based or promising injury prevention programs and projects and provide funding to regional injury prevention partners as funding is available.</p>
	<p>Strategy 3. Throughout the grant year, funding recipients will report on the progress of their programs to the West Region EMS Council.</p>
	<p>Strategy 4. Annually, in August, the West Region EMS Council will provide bi-monthly progress reports to the Washington State Department of Health.</p>
<p>Objective 2: During the 2015-17 plan cycle, the West Region EMS Council will collaborate to educate the public, partners and policy makers on the Emergency Care System.</p>	<p>Strategy 1. Throughout the plan cycle, the West Region EMS Council will make current Emergency Care system information available to stakeholders on the West Region EMS website and by email.</p>
<p>Objective 3: During the 2015-17 plan cycle, the West Region Cardiac and Stroke Quality Improvement Forum (QIF) will review emergency cardiac and stroke care data.</p>	<p>Strategy 1. Throughout the plan cycle, the West Region EMS Council will continue to assist the West Region Cardiac and Stroke QIF in meeting preparation.</p>

Goal 4 Introduction

Promote & enhance continuous quality improvement of emergency care systems for the West Region

The Council administratively supports the independent collaborative regional quality improvement (QI) work of the region's two Quality Improvement Forums (QIF). The purpose of the Trauma QIF and the Cardiac and Stroke QIF is to improve patient outcomes, identify areas for improvement, educate providers and build coordination between services. Both QI Forums are governed by plans (see Appendix 7) which call for confidential quarterly meetings, a membership of both hospitals and EMS agencies, and the sharing of case reviews and data.

Designated trauma facilities, categorized cardiac and stroke facilities and EMS agencies participate at QI meetings and review regional data. Data for the Trauma QIF is regularly supplied through the WA State Trauma Registry. The Stroke QI utilizes "Get with the Guidelines-Stroke Registry" developed by the American Heart Association/American Stroke Association. The Cardiac QI uses the Clinical Outcomes Assessment Program (COAP) a program of the Foundation for Health Care Quality.

A meaningful review of regional EMS data is problematic due to low participation in the WA Emergency Medical Service Information System (WEMSIS), the state's prehospital data repository for electronic patient care records. Many West Region agencies have barriers to participation in the program due to lack of funds to train and employ personnel to input data. Some agencies use electronic patient care reports that do not interface with WEMSIS; a process needs to be developed whereby this data can be shared without the expense and time of entering it twice.

In an effort to enhance regional participation, the West Region actively monitors the ongoing development of WEMSIS through DOH and the WA Prehospital TAC. The Council will work with DOH, as funding is available, to provide funding opportunities and training to agencies in need. While it is not within the scope of this plan to address the issue of data exchange between prehospital agencies and hospital systems, we feel the need to list it as a concern within our region.

Current challenges to the Regional Cardiac and Stroke QI Program are a consequence of no regulation of the categorization process or QI participation. It is a voluntary system with no funding at the regional or state level, and inconsistent participation from both regional hospitals and EMS at meetings. For stroke, EMS data documentation is very inconsistent due to the lack of adoption of the WA State Initiatives tab in "Get with the Guidelines" by all participating WA hospitals. All abstraction and input of EMS data in the tab is dependent on the receiving hospital.

GOAL 4 <i>Promote & enhance continuous quality improvement of emergency care systems for the West Region.</i>	
Objective 1: During the 2015-17 plan cycle, the West Region EMS Council will review regional emergency care system performance.	Strategy 1. On a quarterly basis throughout the contract year, the West Region EMS Council will review meeting reports from the West Region Quality Improvement Forums for EMS, Trauma, Cardiac, and Stroke.
	Strategy 2. When appropriate, the West Region EMS Council will share recommended opportunities for improvement from the QIF to the Training, Education and Development Committee (TED), IVP Committee, and the West Region EMS Council. WREMS Committees will disseminate among West Region agencies/facilities.
	Strategy 3. During the 2015-17 plan cycle, the West Region EMS Council will develop guidelines for MPDs and/or local councils to report ‘lessons learned’ from prehospital case reviews back to the Council.
Objective 2: By November 2015, the West Region EMS Quality Improvement Forum (QIF) will review EMS and trauma data.	Strategy 1. Annually, in November, the voting members of the QIF will establish a yearly schedule of meetings to review regional EMS & trauma data to allow for comprehensive system evaluation.
Objective 3: During the 2015-17 plan cycle, the West Region Cardiac & Stroke Quality Improvement Forum (QIF) will review emergency cardiac and stroke care data.	Strategy 1. Throughout the plan cycle, the West Region EMS Council will continue to assist the West Region Cardiac and Stroke QIF in meeting preparation.
Objective 4: Throughout the plan cycle, the West Region Cardiac Quality Improvement Forum (QIF) will improve sensitivity and specificity of STEMI activation from all hospital admit sources, to include EMS transports and facility transfers.	Strategy 1. By September of 2016, the Cardiac QIF will collect, calculate and assess under/over activation of ST-segment elevation myocardial infarction (STEMI.)
	Strategy 2. By June 2017, the Cardiac QIF will use information gleaned from Strategy 1 to develop education for West Region hospital and prehospital providers.
Objective 5: Throughout the plan cycle, the West Region Stroke QIF will work to increase the percent of advanced notification by	Strategy 1. By June 2016, the Stroke QIF will verify data abstraction elements in Get With The Guidelines are consistent throughout all participating hospitals in the West Region.

<p>EMS for stroke patients transported by EMS from scene to 90% or greater overall for West Region hospitals.</p>	<p>Strategy 2. By January 2017, the Stroke QIF will educate West Region prehospital staff on pre-notification of stroke patients from the scene.</p>
	<p>Strategy 3. By June 2017, the Stroke QIF will identify reporting information that prehospital will provide to receiving hospitals during pre-notification, such as F.A.S.T. (Facial drooping, Arm weakness, Speech difficulties, Time) and “Last Known Well” time.</p>
<p>Objective 6: During the 2015-17 plan cycle, the West Region EMS Council will monitor regional WEMESIS participation in an effort to increase data submission.</p>	<p>Strategy 1. During the 2015-17 plan cycle, the West Region EMS Council will monitor the work of the State Prehospital TAC and the WA State DOH and respond to their suggestions regarding regional WEMESIS participation.</p>
	<p>Strategy 2. Based upon the information submitted to the West Region EMS Council from Strategy 1, and as funding is available, the Council will work with DOH to provide funding opportunities and training to agencies in need.</p>

Goal 5 Introduction

Work toward sustainable emergency care funding, enhance workforce development, & demonstrate impact on patient outcomes

The WREMS Council adheres to a timeline for developing, reviewing, approving and implementing its annual fiscal budget. Over the years, financial resources for the EMS and Trauma System have been declining. The Council's contract with DOH has been reduced by nearly half in the past 10 years. The Council has been 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 or designated representatives 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 very small portion of funds needed for training by the counties and the prehospital agencies they support.

The Council also funds its annual EMS 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 the past 30 years. Rising costs, diminishing funds, and the advent of statewide online training, threaten the sustainability of continuing the educational conference in the years ahead.

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 for more information regarding the WREMS Injury and Violence Prevention Program.)

GOAL 5

Work toward sustainable emergency care funding, enhance workforce development, & demonstrate impact on patient outcomes.

Objective 1: During the 2015-17 plan cycle, the West Region EMS Council will work to identify cost saving practices.	Strategy 1. By April of each plan year, the West Region EMS Council Executive Board will develop a draft budget which takes into consideration cost efficiencies.
	Strategy 2. Annually, at the West Region EMS Council’s Budget Meeting, the Executive Board will present the next fiscal year’s draft budget for Council member review and approval.
Objective 2: Annually, by June, the West Region EMS Council will utilize a process to identify needs and allocate available funding to support Prehospital training.	Strategy 1. Annually, at the West Region EMS Council’s Budget Meeting, Council members will review needs and approve educational funding levels for each local EMS council or designated representative.
	Strategy 2. Annually, by September, the West Region EMS Council staff will initiate contracts with local EMS councils or designated representatives to distribute funds for coordination and delivery of OTEP and CME EMS training.
	Strategy 3. Annually, by December, the West Region EMS Council’s Conference Planning Committee will select topics and secure speakers for the West Region EMS Conference.
	Strategy 4. Annually, by June, the West Region EMS Council will conduct an EMS conference which provides EMS education and training opportunities within the West Region and is available to all Washington State and out of state providers.
Objective 3: During the 2015-2017 plan cycle, the West Region EMS Council will continue to work with the WA DOH and the State Auditor’s Office to ensure the Regional Council business structure and practices remain compliant with RCW.	Strategy 1. Annually, at the beginning of the plan year, the West Region EMS Council will provide DOH with a regional budget.
	Strategy 2. Annually, in November, the West Region EMS Council will provide the Washington State Auditor’s Office with the previous year’s financial information and required schedules.

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

There are 3 trauma rehabilitation centers within the West Region. MultiCare Good Samaritan Hospital in Puyallup is a Level I Trauma Rehabilitation Service and is recognized as one the best rehab centers in the nation. Franciscan St. Joseph Medical Center in Tacoma and Providence St. Peter Hospital in Olympia both serve the West Region as Level II Adult Trauma Rehabilitation Centers.

With the advent of many small rehab facilities closing in and around the region, both MultiCare Good Samaritan and Catholic Health Initiatives (CHI) Franciscan Health's Inpatient Acute Rehabilitation Program share the common goal to become regional rehab facilities that support the smaller rehab facilities in the region. When MultiCare Auburn Medical Center's rehabilitation unit closed in 2015, Good Samaritan increased its rehab beds to 38.

Trauma Registry data presented at the January 2015 EMSTC Steering Committee showed the percentage of trauma patients discharged to acute rehabilitation centers is declining in our state. Data showed only a small percentage of the trauma patients who need rehab care will receive it. Data further shows patients who receive rehab care are almost 9 times more likely to be discharged home or to an Adult Family Home. Those that do not receive proper rehab care are often discharged to a skilled nursing facility where they experience a higher mortality rate.

Barriers to inpatient rehab care include stricter rules and criteria for Medicare and Medicaid and a limited number of available beds. The process for determining eligibility for Department of Social and Health Services (DSHS) outpatient rehab funding is protracted, resulting in trauma patients remaining in a pending status. This, in turn, limits resources available upon discharge from acute hospitalization or inpatient rehab services. There is also a continued lack of resources at the DSHS Aging and Long Term Care and Home/Community Services to conduct assessments to determine placement and level of care needed once the patient is discharged. Again, this results in limited options for discharge care and placement. The significant decrease in funding for complex trauma patients results in many patients being forced to an institutional discharge.

We are also facing payers (WA State Health Care Authority) reaching out to other rehab/sub-acute programs in other states that may charge lower rates. This makes it very difficult for family to be involved in the support which rehab patients need during their recovery. Family and caregivers often undergo extensive training to care for patients at home and will be faced with additional financial burdens if they must travel out of state.

The work outlined for the 2015-17 cycle calls for fast-tracking the eligibility process at DSHS and working with DOH and DSHS toward a systematic approach for appropriate level of funding that will enable complex trauma patients to return to the community rather than a skilled nursing facility.

<p>GOAL 6 Sustain a region-wide system of designated trauma rehabilitation services to provide adequate capacity and distribution of resources to support high quality trauma rehabilitation.</p>	
<p>Objective 1: During the 2015-2017 plan cycle, the West Region EMS Council will integrate trauma rehabilitation information/issues into Regional Council meetings.</p>	<p>Strategy 1. Quarterly during the 2015-17 plan cycle, the Trauma Rehabilitation Representative of the West Region Council will prepare regular reports and updates for the West Region EMS Council meetings.</p>
<p>Objective 2: By June 2017, the West Region EMS Trauma Rehabilitation Representative, along with other key partners, will meet with stakeholders to establish a program that allows all trauma patients immediate authorization of funding for inpatient rehab services care through the DSHS Health Care Authority (previously the Medical Assistance Administration).</p>	<p>Strategy 1. Throughout the plan cycle, the West Region Trauma Rehabilitation Representative and other stakeholders will develop a mechanism within DSHS to fast track eligibility for post-acute care for trauma patients.</p>
	<p>Strategy 2. By June 2017, the West Region Trauma Rehabilitation Representative and other stakeholders will develop a mechanism with DSHS to fast track the assessments which determine appropriate level of care and placements of trauma patients.</p>
	<p>Strategy 3. Throughout the plan cycle, the West Region Trauma Rehabilitation Representative and other stakeholders will work with DSHS and DOH toward a systematic approach for appropriate level of funding that will enable complex trauma patients to return to the community rather than a skilled nursing facility.</p>
<p>Objective 3: By June 2016, the trauma rehabilitation facilities within the West Region will explore where rehab outpatient clinic services are needed in the West Region.</p>	<p>Strategy 1. By June 2016, The West Region Trauma Rehabilitation Representative will query MultiCare and Franciscan Health Systems as well as Providence St. Peter what services they anticipate expanding to cover the rehab outpatient needs in smaller communities in the West Region.</p>
	<p>Strategy 2. By June 2016, the West Region Trauma Rehabilitation Representative will facilitate discussions on the rehab needs of the smaller communities within the West Region at QIF and WREMS Council meetings.</p>

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 1

Approved minimum & maximum numbers of verified trauma services by Level and Type by County.

County	Verified Service Type	State Approved Minimum Number	State Approved Maximum Number	Current Status (Total # verified for each Service Type within the whole county)
Grays Harbor	Aid – BLS	9	13	10
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	2	5	5
	Amb – ILS	0	3	1
	Amb - ALS	6	8	6
Lewis	Aid – BLS	8	21	2
	Aid –ILS	0	2	0
	Aid – ALS	0	2	0
	Amb –BLS	11	21	5
	Amb – ILS	1	6	4
	Amb - ALS	1	6	5
North Pacific	Aid – BLS	1	2	1
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	0	0	0
	Amb – ILS	0	0	0
	Amb - ALS	1	1	1

County	Verified Service Type	State Approved Minimum Number	State Approved Maximum Number	Current Status (Total # verified for each Service Type within the whole county)
Pierce	Aid - BLS Φ Ω	1	14	5
	Aid - ILS	0	0	0
	Aid - ALS Φ	0	10	1
	Amb-BLS Φ Ω	1	11	6
	Amb - ILS	0	0	0
	Amb - ALS Ω	1	16	15

Φ Any current BLS agency may submit a request to upgrade to ALS.

Ω Any current Fire Department which provides EMS (city, town, county) may upgrade to Amb-ALS within their own jurisdiction. Any new application from an ambulance service must serve PCFD #23 with the response time to any location within the district equal to that of a suburban service area, fifteen minutes eighty percent of the time according to the Pierce County Aid & Ambulance Rules and Regulations.

County	Verified Service Type	State Approved Minimum Number	State Approved Maximum Number	Current Status (Total # verified for each Service Type within the whole county)
Thurston	Aid - BLS	5	6	5
	Aid - ILS	0	0	0
	Aid - ALS	0	0	0
	Amb - BLS	7	9	8
	Amb - ILS	0	0	0
	Amb - ALS	1	3	3

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 2

Prehospital Trauma Response Areas by County

The type and number column of this table accounts for the level of care available in a specific trauma response area that is provided by verified services. Some verified services (agencies) may provide a level of care in multiple trauma response areas therefore the total type and number of verified services depicted in the table may not represent the actual number of State verified services available in a particular county; it may be a larger number in the table. The verified service minimum/maximum table will provide accurate verified service numbers for counties.

Key: For each level the type and number are indicated

Aid-BLS = A Ambulance-BLS = D
 Aid-ILS = B Ambulance-ILS = E
 Aid-ALS = C Ambulance-ALS = F

Pacific County* (agencies within the GHEMS system)

*Aid-BLS = A-1 Ambulance-ALS = F-1

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Grays Harbor	# 1	Encompasses the geographic boundaries of GHFD # 1, GHFD # 5, 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.	A-3 F-1
Grays Harbor	# 2	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.	D-1 F-1
Grays Harbor	# 3	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.	A-5 F-2

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Grays Harbor	# 4	Encompasses the geographic boundaries of South Beach Ambulance, Westport FD, GHFD # 3, GHFD # 11, GHFD # 14 and encompasses Pacific County FD # 5 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.	A-2 *A-1=North Pacific #05 F-1
Grays Harbor	# 5	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.	D-3 E-1 F-1
Grays Harbor	# 6	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.	D-1 E-1

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Lewis	# 1	Within the current city limits of the <i>City of Centralia and urban growth area</i>	F-2
Lewis	# 2	Within the current boundaries of the <i>City of Chehalis and urban growth area</i>	D-1 F-1
Lewis	# 3	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.	A-1 D-1 F-4
Lewis	# 4	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.	D-2 E-1 F-4
Lewis	# 5	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.	A-1 D-2 F-2
Lewis	# 6	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.	D-2 E-1 F-2
Lewis	# 7	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.	D-2 E-1
Lewis	# 8	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.	E-2

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
North Pacific	# 1	City of Raymond, City of South Bend, Pacific County 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 County in and around the community of Brooklyn in the northeast corner of Pacific County.	A-1 F-1

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Pierce	# 1	<p>Area #1 (North) Area 1 is bordered by Kitsap County in NE by an imaginary line running along 160th St east to Colvos Passage at water, then west along 160th St KPN to NW corner at Kitsap/Mason/Pierce counties border where the imaginary line goes south along 198th Ave KPN to water at Rocky Bay in Case Inlet to Thurston county 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 384th St through city of Milton to Pacific Hwy, then north to a point at 7th 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.</p>	A-4 D-6 F-7
Pierce	# 2	<p>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 260th, then west to 8th Ave E, then south along an imaginary line to Thurston county border at Nisqually River, then west along Nisqually River to Nisqually Beach.</p>	A-1 C-1 D-3 F-6

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Pierce	# 3	<p>Area #3 (East) Area #3 is bordered by Thurston County in SW at a point where an imaginary line running south along 8th 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 1st Ave E west through Auburn, then along County Line west to 384th 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 8th Ave E, then south along an imaginary line to Thurston county border at Nisqually River.</p>	A-4 D-3 F-6

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Thurston	# 1	City of Olympia jurisdictional boundaries	D-2 F-3
Thurston	# 2	City of Tumwater jurisdictional boundaries & FD# 15	D-2 F-3
Thurston	# 3	City of Lacey jurisdictional boundaries & FD# 3 jurisdictional boundaries	D-2 F-3
Thurston	# 4	SETRFA City of Yelm jurisdictional boundaries & FD# 2 jurisdictional boundaries & City of Rainer jurisdictional boundaries & FD# 4 jurisdictional boundaries	A-1 D-2 F-3
Thurston	# 5	SETRFA City of Yelm jurisdictional boundaries & FD# 2 jurisdictional boundaries & City of Rainer jurisdictional boundaries & FD# 4 jurisdictional boundaries	A-1 D-2 F-3
Thurston	# 6	FD# 17 jurisdictional boundaries	D-3 F-3
Thurston	# 7	City of Tenino jurisdictional boundaries & FD# 12 jurisdictional boundaries	A-1 D-2 F-3
Thurston	# 8	Town of Bucoda jurisdictional boundaries	A-1* D-2 F-3 *=non-verified BLS aid
Thurston	# 9	FD# 16 jurisdictional boundaries	D-3 F-3
Thurston	# 10	WTRA FD# 11 jurisdictional boundaries FD# 1 jurisdictional boundaries	D-5 F-3
Thurston	# 11	FD# 5 jurisdictional boundaries	D-5 F-3

County	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services available in each Response Areas
Thurston	# 12	FD# 6 jurisdictional boundaries	A-1 D-2 F-3
Thurston	# 13	FD# 7 jurisdictional boundaries	D-3 F-3
Thurston	# 14	FD# 8 jurisdictional boundaries	A-1 D-2 F-3
Thurston	# 15	FD# 9 jurisdictional boundaries	D-5 F-3
Thurston	# 16	WTRA FD# 11 jurisdictional boundaries FD# 1 jurisdictional boundaries	D-5 F-3
Thurston	# 17	FD# 13 jurisdictional boundaries	A-1 D-2 F-3

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 3

A. Approved Minimum/Maximum numbers of Designated Trauma Care Services
(General Acute Trauma Services)

Level	State Approved		Current Status
	Min	Max	
II	2	3	2 (1 Joint)
III	1	6	3
IV	2	8	4
V	1	1	3
II Pediatric	1	1	1
III Pediatric	0	0	0

B. Approved Minimum/Maximum numbers of Designated Rehabilitation Trauma
Care Services in the Region

Level	State Approved		Current Status
	Min	Max	
I Rehab	0	1	1
II Rehab	3	4	2
III* Rehab	1	5	0

*There are no restrictions on the number of Level III Rehab Services

C. Emergency Cardiac and Stroke System Categorization Status

Cardiac Level	Stroke Level	Hospital	City	County
II	III	Allenmore Hospital	Tacoma	Pierce
I	II	Capital Medical Center	Olympia	Thurston
II	II	Grays Harbor Community Hospital	Aberdeen	Grays Harbor
		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	I	Providence St. Peter 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	Tacoma General	Tacoma	Pierce
II	III	Willapa Harbor Hospital	South Bend	Pacific

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 4

West Region Patient Care Procedures

Who To Contact

Grays Harbor and N. Pacific Counties

Medical Program Director	Daniel Canfield, DO	(360) 533 6038
Grays Harbor County EMS Council	Sharryl Bell	(360) 532 2067

Lewis County

Medical Program Director	Patrick O'Neill, MD	(360) 330 8516
Riverside Fire Authority	Mike Kytta, Chief	(360) 736 3975

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	Stephen Romines	(360) 704 2783

Department of Health

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

To Request Additional Copies

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

TABLE OF CONTENTS

WEST REGION PATIENT CARE PROCEDURES	Page
1. Medical Branch Director or Group Supervisor at the Scene	40
2. Responders and Response Times.....	41
3. Medical Control - Trauma Triage/Transport	43
4. Air Transport Procedure	45
5. Hospital Resource – Interfacility Transfer.....	47
6. Prehospital Report Form.....	48
7. EMS/Medical Control - Communications	50
8. EMS All Hazards-Mass Casualty Incident (MCI) Response.....	51
9. Cardiac Patient Destination.....	54
10. Stroke Patient Destination.....	55

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 transport trauma patients shall:

- (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 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

Medical Control - Trauma Triage/Transport

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

Prehospital Trauma Triage-

Prehospital assessment of injured patients for triage into the trauma system and designated trauma facility team activation will be based on the current approved State of Washington Prehospital Trauma Triage (Destination) Procedures. Patients that meet trauma triage procedures criteria shall be transported to a designated facility as directed by the triage procedures (see Appendix 5). Pediatric trauma patients will be transported to designated pediatric trauma facilities as directed by the trauma triage procedures (see Appendix 5). Where appropriate the patient may be directed to the nearest appropriate designated trauma center for stabilization and physician evaluation. This may be done by ground or air.

Consider transport of unstable patients to nondesignated facilities capable of appropriately stabilizing the patient's medical needs prior to interfacility transfer of trauma patients to designated trauma facilities. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient may be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility.

Medical Control-

Medical control will be contacted when possible for all trauma patients as defined above. 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. 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.

Pre-Hospital Index (PHI) or Equivalent score-

Designated facilities will calculate PHI or an equivalent. Pediatric facilities will calculate pediatric trauma score.

Patient Care Procedure #3 (continued)

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 activation 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 controls will keep accurate recorded communications (log book or tape) 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.

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.

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.

Patient Care Procedure #4 (continued)

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

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:
 - a. 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.
 - b. 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: www.doh.wa.gov/emstrauma
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/ABLSTNow.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/>

Patient Care Procedure #8 (continued)

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 required agencies and resources including notification of the appropriate Disaster Medical Control Center (DMCC). 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.

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.

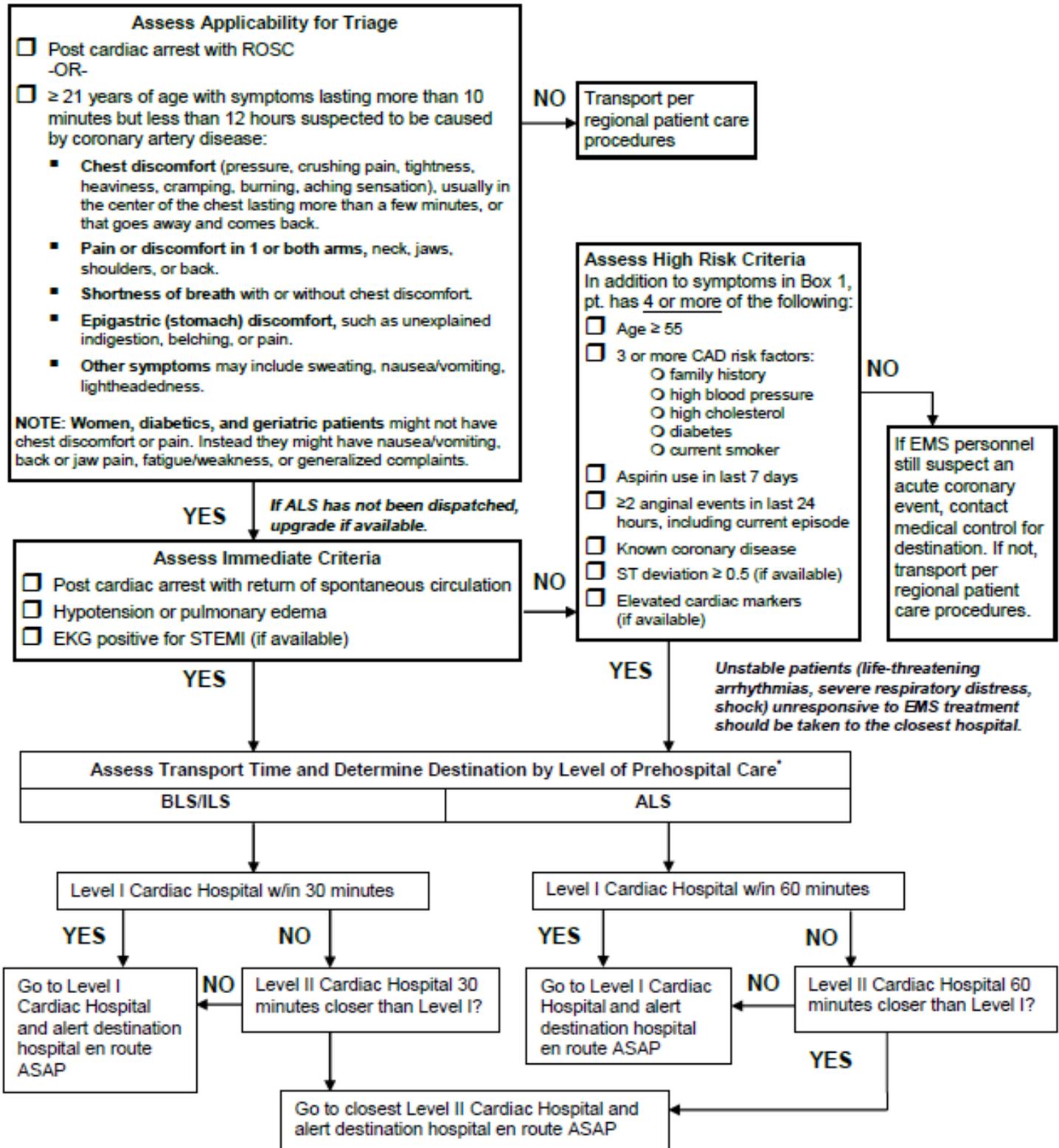
PROCEDURES

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

West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 5

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

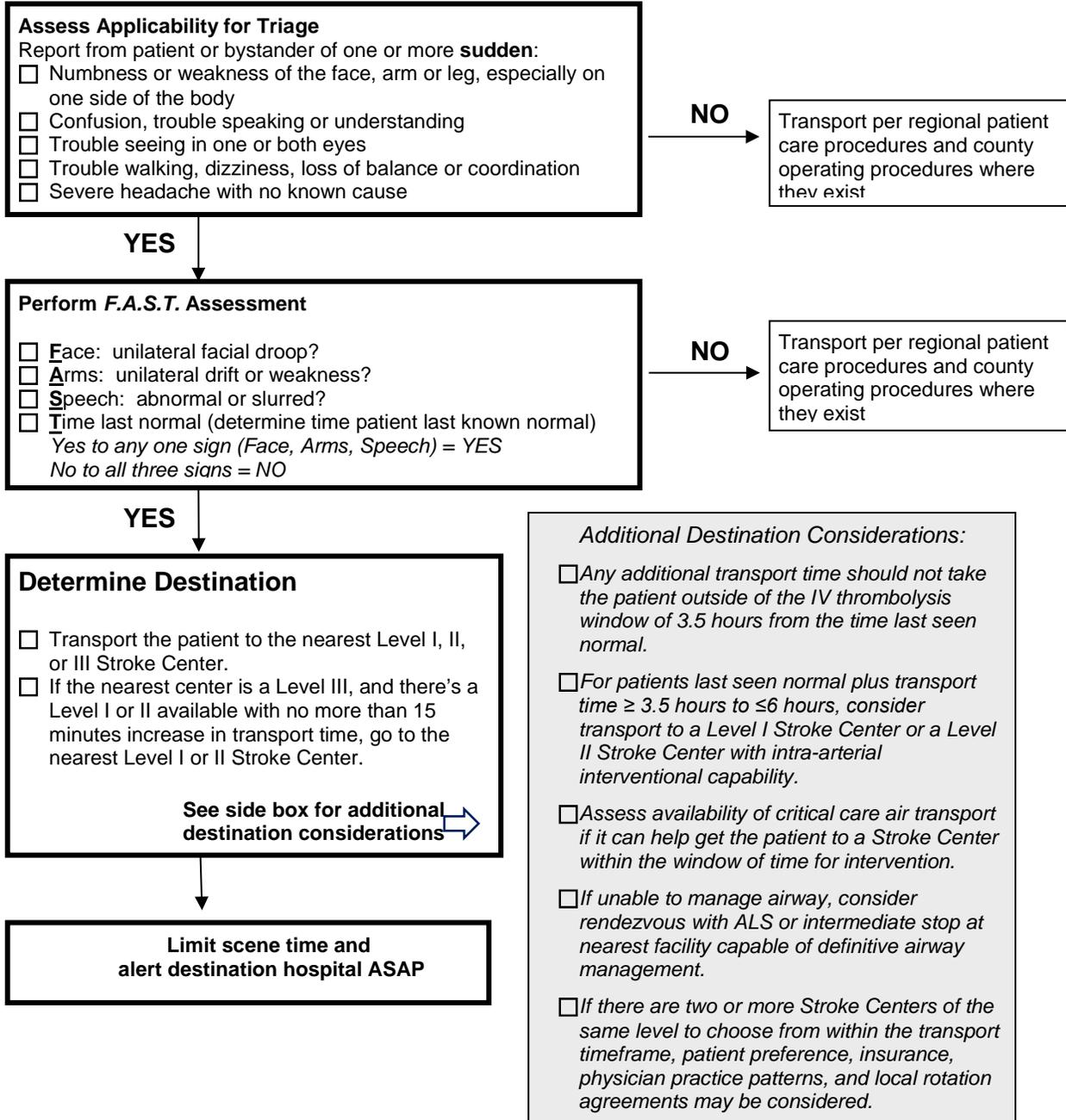
ALS examples: A) minutes to Level I minus minutes to Level II = 45: go to Level I
B) Minutes to Level I minus minutes to Level II = 68: go to Level II

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.

STATE OF WASHINGTON PREHOSPITAL STROKE TRIAGE (DESTINATION) PROCEDURES



STATE OF WASHINGTON PREHOSPITAL STROKE TRIAGE (DESTINATION) PROCEDURES

Purpose

The purpose of the Stroke Triage and Destination Procedure is to help you identify stroke patients in the field so you can take them to the most appropriate hospital. Like trauma, stroke treatment is time-critical – the sooner a patient is treated, the better their chances of survival. Fast treatment can mean less disability, too. For strokes caused by a blood clot in the brain (ischemic), clot-busting medication must be administered within 4.5 hours from the time they first have symptoms. For bleeding strokes (hemorrhagic), time is also critical. As an emergency responder, you play a crucial role in getting patients to treatment in time.

Stroke Assessment – F.A.S.T.

The F.A.S.T. assessment tool (also known as the Cincinnati Prehospital Stroke Scale + Time) is a simple but pretty accurate way to tell if someone might be having a stroke. It's easy to remember: Facial droop, Arm drift, Speech + Time. If face, arms, or speech is abnormal, it's likely your patient is having a stroke. You should immediately transport the patient to a stroke center. Regional patient care procedures and county operating procedures may provide additional guidance. Alert the hospital on the way. Transport should not be delayed for IV and ECG monitoring.

TEST	NORMAL	ABNORMAL
F acial droop: Ask the patient to show his or her teeth or smile.	 <p>Both sides of the face move equally.</p>	 <p>One side of the face does not move as well as the other</p>
A rm drift: Ask the patient to close his or her eyes and extend both arms straight out for 10 seconds. The palms should be up, thumbs pointing out.	 <p>Both arms move the same or both arms do not move at all</p>	 <p>One arm drifts down or one arm does not move at all.</p>
S peech: Ask the patient to repeat a simple phrase such as "Firefighters are my friends."	The patient says it correctly, with no slurring	The patient slurs, says the wrong words, or is unable to speak.
T ime: Ask the patient, family or bystanders the last time the patient was seen normal.		

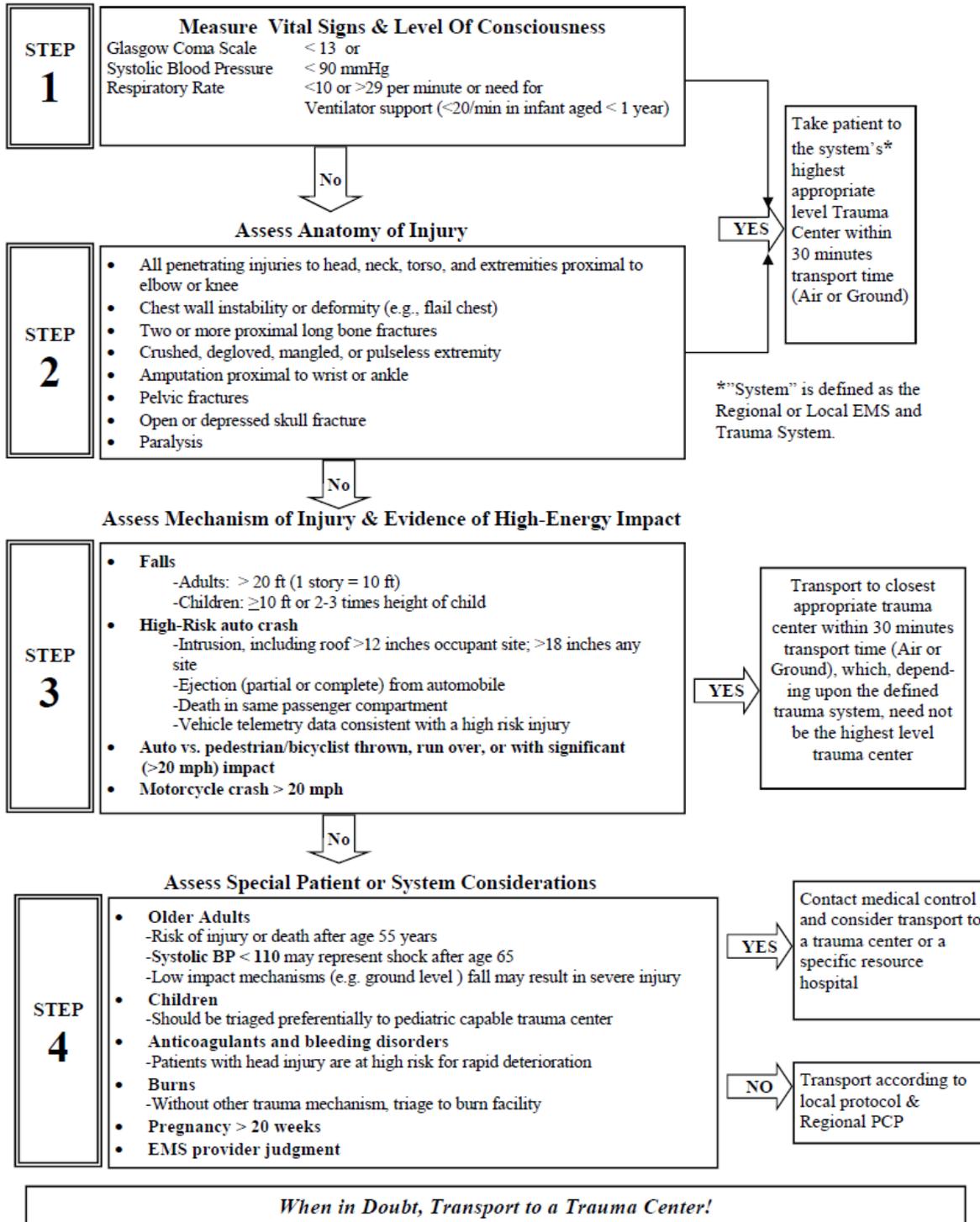
Stroke warning signs:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

Encourage family to go to the hospital to provide medical history, or obtain contact information for a person who can provide medical history.

Report to ED:

Possible IV t-PA contraindications: symptom onset more than 180 minutes • head trauma or seizure at on-set • recent surgery, hemorrhage, or heart attack • any history of intracranial hemorrhage • minor or resolving stroke • sustained BP > 185/110, but EMS do not treat!



*"System" is defined as the Regional or Local EMS and Trauma System.

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.

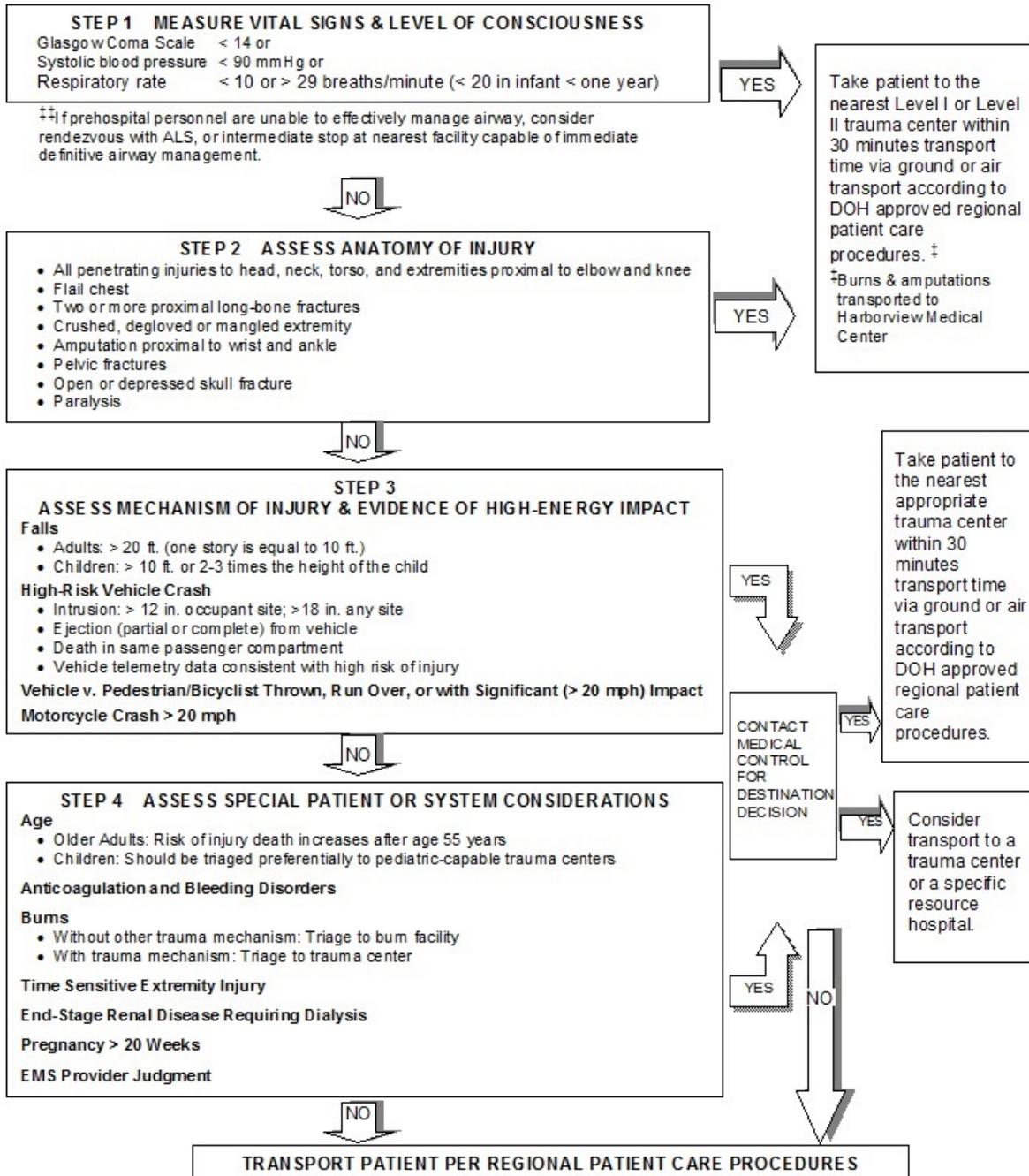
Step (3) Assess biomechanics of the injury and address other risk factors. The conditions identified are reasons for the provider to transport to a trauma center. The destination trauma center need not be the highest level trauma center. Medical control should be contacted as soon as possible.

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.

**PIERCE COUNTY
PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURES (rev 1/11/2011-adopted 1/2012)**

Prehospital triage is based on the following 4 steps: Steps 1 and 2 require prehospital EMS personnel to notify medical control and activate the Trauma System. Activation of the Trauma System in Step 3 & 4 is determined by medical control.†



West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 6

**Nonfatal Injury Hospitalizations
West**

**Cause by Year
2004-2013**

Counts	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Unintentional											
Bites/Stings	101	91	99	92	79	121	118	106	136	123	1,066
Drowning	11	4	11	8	13	8	8	8	4	7	82
Falls	3,432	3,591	3,614	3,744	3,806	4,116	3,999	4,288	4,114	4,290	38,994
Fire/Flame/Hot Object/Substance	116	136	116	126	122	129	177	170	169	136	1,397
Firearm	34	20	38	25	18	25	30	28	31	27	276
MVT-(occupant)	555	597	560	496	470	440	472	437	392	352	4,771
MVT-(motorcyclist)	138	136	170	163	162	182	124	139	158	116	1,488
MVT-(pedal cyclist)	22	23	18	13	19	19	13	21	15	14	177
MVT-(pedestrian)	66	63	80	87	93	74	102	92	78	57	792
Pedal-cyclist(Other)	87	75	66	70	74	80	81	89	106	68	796
Pedestrian(Other)	5	12	10	10	9	11	9	9	5	7	87
Poisoning	424	532	514	538	606	688	657	743	704	629	6,035
Struck by or against	182	179	200	194	201	204	184	214	203	172	1,933
Suffocation & obstructing	63	80	89	77	66	54	75	76	77	67	724
Total (including other unintentional)	7,167	7,488	7,537	7,454	7,498	7,950	7,868	8,258	8,170	7,925	77,315
Self Inflicted											
Cut/Pierce	107	89	67	49	53	56	72	45	60	62	660
Firearm	2	9	6	9	7	5	1	7	5	10	61
Poisoning	522	573	609	639	643	701	742	703	700	636	6,468
Suffocation & obstructing	6	7	4	4	13	8	12	10	8	11	83
Total (including other suicides)	684	730	714	740	752	806	866	797	789	762	7,640
Assault											
Cut/Pierce	48	59	57	32	43	42	55	29	32	33	430
Firearm	36	31	51	35	21	33	28	21	34	19	309
Struck by or against	140	137	133	136	133	136	136	132	120	98	1,301
Total (including other homicides)	326	340	385	314	293	329	330	293	314	278	3,202
Undetermined, Legal, War, Other intents	322	366	498	552	585	541	627	587	694	644	5,416
All Nonfatal Injury Hospitalizations	8,499	8,924	9,134	9,060	9,128	9,626	9,691	9,935	9,967	9,609	93,573
Rate* per 100,000 Resident Population											
Unintentional											
Bites/Stings	9.0	8.0	8.5	7.8	6.6	10.1	9.8	8.7	11.1	10.0	9.0
Drowning	1.0	*	0.9	0.7	1.1	0.7	0.7	0.7	*	0.6	0.7
Falls	307.1	315.5	310.9	316.7	318.2	341.9	331.7	353.0	336.1	347.7	328.3
Fire/Flame/Hot Object/Substance	10.4	11.9	10.0	10.7	10.2	10.7	14.7	14.0	13.8	11.0	11.8
Firearm	3.0	1.8	3.3	2.1	1.5	2.1	2.5	2.3	2.5	2.2	2.3
MVT-(occupant)	49.7	52.4	48.2	42.0	39.3	36.6	39.2	36.0	32.0	28.5	40.2
MVT-(motorcyclist)	12.3	11.9	14.6	13.8	13.5	15.1	10.3	11.4	12.9	9.4	12.5
MVT-(pedal cyclist)	2.0	2.0	1.5	1.1	1.6	1.6	1.1	1.7	1.2	1.1	1.5
MVT-(pedestrian)	5.9	5.5	6.9	7.4	7.8	6.1	8.5	7.6	6.4	4.6	6.7
Pedal-cyclist(Other)	7.8	6.6	5.7	5.9	6.2	6.6	6.7	7.3	8.7	5.5	6.7
Pedestrian(Other)	0.4	1.1	0.9	0.8	0.8	0.9	0.7	0.7	0.4	0.6	0.7
Poisoning	37.9	46.7	44.2	45.5	50.7	57.2	54.5	61.2	57.5	51.0	50.8
Struck by or against	16.3	15.7	17.2	16.4	16.8	16.9	15.3	17.6	16.6	13.9	16.3
Suffocation & obstructing	5.6	7.0	7.7	6.5	5.5	4.5	6.2	6.3	6.3	5.4	6.1
Total (including other unintentional)	641.4	657.8	648.4	630.5	627.0	660.4	652.7	679.8	667.4	642.4	650.9
Self Inflicted											
Cut/Pierce	9.6	7.8	5.8	4.1	4.4	4.7	6.0	3.7	4.9	5.0	5.6
Firearm	*	0.8	0.5	0.8	0.6	0.4	*	0.6	0.4	0.8	0.5
Poisoning	46.7	50.3	52.4	54.1	53.8	58.2	61.6	57.9	57.2	51.6	54.5
Suffocation & obstructing	0.5	0.6	*	*	1.1	0.7	1.0	0.8	0.7	0.9	0.7
Total (including other suicides)	61.2	64.1	61.4	62.6	62.9	67.0	71.8	65.6	64.5	61.8	64.3
Assault											
Cut/Pierce	4.3	5.2	4.9	2.7	3.6	3.5	4.6	2.4	2.6	2.7	3.6
Firearm	3.2	2.7	4.4	3.0	1.8	2.7	2.3	1.7	2.8	1.5	2.6
Struck by or against	12.5	12.0	11.4	11.5	11.1	11.3	11.3	10.9	9.8	7.9	11.0
Total (including other homicides)	29.2	29.9	33.1	26.6	24.5	27.3	27.4	24.1	25.7	22.5	27.0
Undetermined, Legal, War, Other intents	28.8	32.2	42.8	46.7	48.9	44.9	52.0	48.3	56.7	52.2	45.6
All Nonfatal Injury Hospitalizations	760.6	783.9	785.8	766.4	763.3	799.6	803.9	803.9	814.2	778.9	787.8

Rate not calculated for values <5. "" represents categories for which there are no values.

Note: Injury counts are tabulated by location of residence.

Data source: Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS - 2014 release)

Population source: Washington State Office of Financial Management

For questions and/or additional information, email injury.data@doh.wa.gov



DOH 689-149
3/23/2015

Fatal Injuries West **Cause by Year 2004-2013**

Counts	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Unintentional											
Bites/Stings	1	1	1	-	1	-	1	-	1	2	8
Drowning	20	21	21	17	22	15	15	12	27	13	183
Falls	100	100	103	109	130	120	118	139	125	159	1,203
Fire/Flame/Hot Object/Substance	9	12	13	2	6	7	8	8	6	12	83
Firearm	4	-	1	-	1	-	2	3	3	-	14
MVT-(occupant)	83	90	87	89	89	64	65	56	45	45	713
MVT-(motorcyclist)	22	11	23	16	22	17	17	16	23	14	181
MVT-(pedal cyclist)	1	3	-	1	1	1	-	-	2	2	11
MVT-(pedestrian)	12	16	18	11	16	9	10	15	8	8	123
Pedal-cyclist(Other)	-	1	-	4	3	2	1	-	1	-	12
Pedestrian(Other)	9	8	3	3	7	2	8	2	4	3	49
Poisoning	104	118	114	147	163	169	145	169	144	162	1,435
Struck by or against	5	4	6	4	-	5	2	3	2	6	37
Suffocation & obstructing	21	21	21	19	22	25	15	26	37	32	239
Total (including other unintentional)	420	442	467	462	527	483	460	488	463	494	4,706
Suicide											
Cut/Pierce	3	2	1	3	1	4	5	2	6	2	29
Firearm	84	74	97	76	109	100	93	104	104	98	939
Poisoning	29	35	22	31	37	23	41	28	39	50	335
Suffocation & obstructing	25	24	25	30	33	35	31	48	56	45	352
Total (including other suicides)	146	146	155	145	191	178	181	196	220	205	1,763
Homicide											
Cut/Pierce	8	6	2	6	3	2	2	7	11	4	51
Firearm	27	32	26	27	23	30	22	26	38	18	269
Struck by or against	1	-	-	1	-	-	1	-	2	-	5
Total (including other homicides)	47	42	41	44	43	41	36	43	67	31	435
Undetermined, Legal, War, Other intents	20	27	28	34	27	34	26	16	19	17	248
All Fatal Injuries	633	657	691	685	788	736	703	743	769	747	7,152

Rate* per 100,000 Resident Population	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Unintentional											
Bites/Stings	*	*	*	-	*	-	*	-	*	*	0.1
Drowning	1.8	1.8	1.8	1.4	1.8	1.2	1.2	1.0	2.2	1.1	1.5
Falls	8.9	8.8	8.9	9.2	10.9	10.0	9.8	11.4	10.2	12.9	10.1
Fire/Flame/Hot Object/Substance	0.8	1.1	1.1	*	0.5	0.6	0.7	0.7	0.5	1.0	0.7
Firearm	*	-	*	-	*	-	*	*	*	-	0.1
MVT-(occupant)	7.4	7.9	7.5	7.5	7.4	5.3	5.4	4.6	3.7	3.6	6.0
MVT-(motorcyclist)	2.0	1.0	2.0	1.4	1.8	1.4	1.4	1.3	1.9	1.1	1.5
MVT-(pedal cyclist)	*	*	-	*	*	*	-	-	*	*	0.1
MVT-(pedestrian)	1.1	1.4	1.5	0.9	1.3	0.7	0.8	1.2	0.7	0.6	1.0
Pedal-cyclist(Other)	-	*	-	*	*	*	*	-	*	-	0.1
Pedestrian(Other)	0.8	0.7	*	*	0.6	0.7	0.7	*	*	*	0.4
Poisoning	9.3	10.4	9.8	12.4	13.6	14.0	12.0	13.9	11.8	13.1	12.1
Struck by or against	0.4	*	0.5	*	-	0.4	*	*	*	0.5	0.3
Suffocation & obstructing	1.9	1.8	1.8	1.6	1.8	2.1	1.2	2.1	3.0	2.6	2.0
Total (including other unintentional)	37.6	38.8	40.2	39.1	44.1	40.1	38.2	40.2	37.8	40.0	39.6
Suicide											
Cut/Pierce	*	*	*	*	*	*	0.4	*	0.5	*	0.2
Firearm	7.5	6.5	8.3	6.4	9.1	8.3	7.7	8.6	8.5	7.9	7.9
Poisoning	2.6	3.1	1.9	2.6	3.1	1.9	3.4	2.3	3.2	4.1	2.8
Suffocation & obstructing	2.2	2.1	2.2	2.5	2.8	2.9	2.6	4.0	4.6	3.6	3.0
Total (including other suicides)	13.1	12.8	13.3	12.3	16.0	14.8	15.0	16.1	18.0	16.6	14.8
Homicide											
Cut/Pierce	0.7	0.5	*	0.5	*	*	*	0.6	0.9	*	0.4
Firearm	2.4	2.8	2.2	2.3	1.9	2.5	1.8	2.1	3.1	1.5	2.3
Struck by or against	*	-	-	*	-	-	*	-	*	-	*
Total (including other homicides)	4.2	3.7	3.5	3.7	3.6	3.4	3.0	3.5	5.5	2.5	3.7
Undetermined, Legal, War, Other intents	1.8	2.4	2.4	2.9	2.3	2.8	2.2	1.3	1.6	1.4	2.1
All Fatal Injuries	56.6	57.7	59.4	57.9	65.9	61.1	58.3	58.3	62.8	60.5	60.2

*Rate not calculated for values < 5. "-" represents categories for which there are no values.
 Note: Injury counts are tabulated by location of residence.

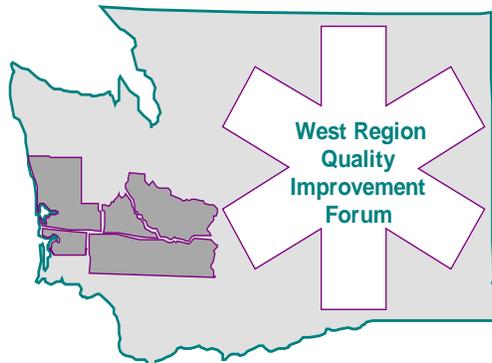
Data source: Washington State Department of Health, Center for Health Statistics, Death Records (2014 release)
 Population source: Washington State Office of Financial Management
 For questions and/or additional information, please email injury.data@doh.wa.gov



West Region Emergency Medical Services & Trauma Care System Strategic Plan

Appendix 7

WEST REGION QUALITY IMPROVEMENT PLANS



Administrative Support Provided by
West Region Emergency Medical Services & Trauma Care Council, Inc.
Proudly Serving Grays Harbor, Lewis, N. Pacific, Pierce and Thurston Counties
2646 RW Johnson Blvd, Suite 112, Tumwater, WA 98512
360-705-9019 • FAX: 360-705-9676 • www.wrems.com

I. **West Region QI – Trauma**
4th Revision: 3/21/13

Mission Statement

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

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 categorized 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.

WEST REGION QUALITY IMPROVEMENT PLAN

PRINCIPLES

- **Trauma Center Leadership**
As described in WAC 246-976-910 (2) and RCW 70.168.090 (2): Levels II, and III trauma care facilities shall establish and participate in regional EMS/TC systems quality improvement programs. 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 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.

WEST REGION QUALITY IMPROVEMENT PLAN

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 (6) (a) 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: 5 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 at 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.

WEST REGION QUALITY IMPROVEMENT PLAN

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

WEST REGION QUALITY IMPROVEMENT PLAN

ATTACHMENT A

WEST REGION QUALITY IMPROVEMENT FORUM

QI FORUM MEMBERS AND GUESTS
CONFIDENTIALITY AGREEMENT
in accordance with RCW 70.168.090(3) and (4)

The undersigned attendees of the QI Forum meeting held (date) , agree to hold in strict confidence all information, data, documentation, and discussions resulting from this meeting, and subsequently documented in meeting minutes. No information will be disclosed to parties outside this QI Forum, except as agreed to by the attendees for the purposes of follow-up, resolution or systems design changes. Failure to observe this agreement will result in dismissal from the Forum and possible personal liability.

First Name	Last Name	Title	Job Title	Agency	Signature

ATTACHMENT B

**West Region Quality Improvement Plan
Confidentiality and Exemption from Discoverability
Policy and Procedures
Revised 3/21/13**

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

Attachment B

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*

II. West Region QI – Cardiac & Stroke QI
Approved 10/15/12

Mission Statement

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

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, 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.

WEST REGION QUALITY IMPROVEMENT PLAN

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 Clinical Outcomes Assessment Program (COAP) and Outcomes Science Get With The Guidelines (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

WEST REGION QUALITY IMPROVEMENT PLAN

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 Emergency Cardiac and Stroke (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

- **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

WEST REGION QUALITY IMPROVEMENT PLAN

ATTACHMENT A

WEST REGION CARDIAC & STROKE QUALITY IMPROVEMENT FORUM

**QI FORUM MEMBERS AND GUESTS
CONFIDENTIALITY AGREEMENT**
in accordance with RCW 70.168.090(3) and (4)

The undersigned attendees of the QI Forum meeting held (date) , agree to hold in strict confidence all information, data, documentation, and discussions resulting from this meeting, and subsequently documented in meeting minutes. No information will be disclosed to parties outside this QI Forum, except as agreed to by the attendees for the purposes of follow-up, resolution or systems design changes. Failure to observe this agreement will result in dismissal from the Forum and possible personal liability.

First Name	Last Name	Title	Job Title	Agency	Signature

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.

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*

III. 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 performed*
- *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*