# Northwest Region
# Emergency Medical Services
# & Trauma System

## S T R A T E G I C   P L A N

## July 1, 2 0 2 1 - June 30, 2 0 2 3

Submitted by:
Northwest Region EMS and Trauma Care Council
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# Introduction

The Northwest Region's Strategic EMS & Trauma Care System Plan is made up of goals adapted from the State Strategic EMS & Trauma Care System Plan. (RCW 70.168.015) The objectives and strategies are developed by our local councils and then approved by the Regional Council and its stakeholders to meet the goals of Northwest Region.

The Regional Council has adopted the following:

Mission: It is the Mission of NWREMS to promote and support a coordinated system for local Emergency Medical Services.

Core Values: Accountability, Honesty/Integrity/Trustworthy, Diligence, High Quality Patient Care, Fortitude, Unity, Respect, Focus, Service before self, While Services are unique all are imperative to ***mission.***

Vision: Excellence thru integrity and honesty, Leader in the state for patient care delivery

In accordance with statutory authority RCW 70.168.00 – RCW 70.168.130 and Washington Administrative Code (WAC 246.976.960) the Northwest Region Emergency Medical Services and Trauma Care Council is the lead agency in the continued development, improvement, and sustainability of the trauma system in Clallam, Jefferson, Kitsap and Mason counties.

The Northwest Region is located on the Olympic Peninsula of Washington State. 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 Region is comprised of the following Counties: Kitsap, Mason, Clallam, and Jefferson. Due to demographics Northwest Region recognizes the West Olympic Peninsula - which includes West Clallam County and West Jefferson counties as a separate Council and they operate as such. As a result, we recognize 5 local EMS councils; Mason, Clallam, Jefferson, Kitsap, and West Olympic Peninsula. NW Region recognized that the unique demographics of the Region with one road leading in and out to some counties, one bridge that crosses Hood Canal, and a National Forest in the NW Corner of the Region can cause some struggles in transport of patients.

- Kitsap County is located on the eastern side of the Region and is classified as Urban. Comprised of 566sq. miles, 30% of which is water, Kitsap County has 250 miles of saltwater shoreline and 2 islands, Bainbridge Island and Blake Island, which is a Marine State Park with 1,127 acres and 5 miles of saltwater beach shoreline. Blake Island is an unserved area. Kitsap County is connected to the

eastern shore of Puget Sound by Ferry routes and Highway routes connect Kitsap to the mainland via the Tacoma Narrows Bridge to the I-5 corridor, and to the neighboring Olympic Peninsula via the Hood Canal Bridge. The population of Kitsap county is 271,473 with approximately 19.8% rural population. Since 2010 Kitsap County has seen a growth of 9.61%. This average would project Kitsap County population growth to be at 283,282 by 2026. Located in Silverdale is St. Michael Medical Center with an Adult Level 3 Trauma Designation, a Cardiac Level 1 and Stroke Level 2 Categorization. Kitsap County has 8 Verified Pre-hospital Services, 1 BLS Ambulance and 7 ALS Ambulance.

- Mason County is located on the south-eastern side of the Region and is classified as Rural. Comprised of 1,051sq. miles, 9% of which is water. Mason County encompasses the southern reach of Hood Canal and many bays and inlets of southern Puget Sound. The population of Mason County is 66,768 with approximately 74.7% rural population. Since 2010 Mason County has seen a growth of 14.51%. This average would project Mason County population growth to be at 71,175 by 2026. Located in Shelton is Mason General Hospital with an Adult Level 4 Trauma Designation, a Cardiac Level 2 and Stroke Level 3 Categorization. Mason County has 12 Verified Pre-hospital Services, 3 BLS Aid, 6 BLS Ambulance and 3 ALS Ambulance.
- Clallam County is located on the north side of the Region and is classified as Rural. Comprised of 2,671sq. miles, 65% of which is water. Clallam County is the westernmost point in both Washington and the US. Clallam County shares borders with Canada, the Pacific Ocean, and the Strait of Juan de Fuca. The population of Clallam county is 77,331 with approximately 47.6% rural population. Clallam County now has a Life Flight Base located in Port Angeles. Since 2010 Clallam County has seen a growth of 10.33%. This average would project Clallam County population growth to be at 78,050 by 2026. Located in Port Angeles is Olympic Medical Center with an Adult Level 3 Trauma Designation, a Cardiac Level 2 and stroke Level 3 Categorization. Located in Forks is Forks Community Hospital with an Adult Level 4 Trauma Designation, a Cardiac Level 2 and a Stroke Level 3 Categorization. Clallam County has 8 Verified Pre-hospital Services, 3 BLS Ambulance, 1 ILS Ambulance and 4 ALS Ambulance.
- Jefferson County is in the middle of the Region, just below Clallam County and is classified as Rural. Comprised of 2,183sq. miles the Olympic Mountains and Olympic National Park/Forest make up 60% of the county. The population of Jefferson County is 32,221 with approximately 55.3% rural population. Since 2010 Jefferson County has seen a growth of 10.94%. This average would project Jefferson County population growth to be at 33,816 by 2026. Located in Port

Townsend is Jefferson Healthcare Hospital with an Adult Level 4 Trauma Designation, a Cardiac Level 2 and a Stroke Level 3 Categorization. Jefferson County has 5 Verified Pre-hospital Services, 3 BLS Ambulance and 2 ALS Ambulance.

The chart below shows the variance of population by county/age:

| County | Population | % of population 65 years and over* |
|---|---|---|
| Kitsap | 271,473 | 18.4% |
| Mason | 66,768 | 23.3% |
| Clallam | 77,331 | 30.5% |
| Jefferson | 32,221 | 37.9% |
| **NWREGION** | **447,793** | **27.3%** |

https://www.census.gov/quickfacts

NW Region recognizes that we have a high percentage of aging Community-dwelling older adults well in excess of the State average. Washington State overall percent of people 65 years and older is 16.5%.

https://www.doh.wa.gov/Portals/1/Documents/Pubs/609003.pdf

https://www.census.gov/quickfacts/fact/table/US/PST045219

https://en.wikipedia.org/wiki

https://worldpopulationreview.com/us-counties/wa/

**Regional Council Members**

Represent private and public healthcare providers across the EMS and Trauma Care System. The Northwest Region EMS and Trauma Care Council structure is composed of thirty-five representatives and thirty-one alternates. Each local council has: Two local council member representatives, One pre-hospital representative, One healthcare facility representative, One communications representative. Also: Four Medical Program Directors, and Regional positions with One Local Elected Official Representative, One Consumer Representative, One National Park Service/Forest Service Representative, One Coast Guard Representative, One Navy Region NW Representative One Law Enforcement Representative; and One Emergency Management Representative. As of 1/6/21 we have 33 active members. The Council meets 5 times per year on the 2nd Thursday in January, March, May, September and November in Sequim, Washington which is approximately the middle of the Region, or via virtual meeting platforms.

**Executive Committee**

Regional Council consists of the present Chairperson, Vice-Chairperson, Secretary/Treasurer, most recent past Chairperson and two At-Large members. The Committee has representatives from each of the local councils. They fulfill a decision-making process on behalf of the Northwest Region EMS Council to help meet the goals

and objectives of the Regional Plan. The Executive Committee meets in the off months of the Council meetings when necessary and there is pressing business to discuss.

**Training/Education/Development (TED) Committee**

The Regional Councils TED Committee members are representatives from prehospital agencies located within the Northwest Region and Regional Medical Program Directors. They assist in the development and revisions of Northwest Region Protocols, Ongoing Training and Education Program (OTEP) and Patient Care Procedures, makes recommendations to the Council on the use of available EMS grant training funds; as well as other training related matters, addressing areas of need and future direction of prehospital training for the region. Training opportunities are posted on the Region's website and are frequently updated. The Committee meets prior to the Regional Council meetings in May and September or when necessary.

**QI Committee**

This committee membership consists of representatives from each of the five trauma designated hospitals located within the Northwest Region. This group also includes MPD's and pre-hospital providers and is the core of a group that conducts Quality Improvement reviews and participates in the ongoing process of updating Patient Care Procedures. This group also includes Cardiac & Stroke QI, and the members from the hospitals that make up Northwest Region. This committee is organized and run by the highest level of designated trauma centers and Categorized Cardiac and Stroke Facilities in the Region. The QI Committee holds an annual conference where information from various data sources may be shared to inform and promote quality improvement. The Committee meets prior to the Regional Council meetings and the Executive Director acts as Administrator for this Committee.

**Injury & Violence Prevention (IVP) Committee**

The IVP Committee is dedicated to preventing the leading causes of injury and death in the region which have consistently been Unintentional Falls, Unintentional Poisoning, Suicide by Firearm, and Unintentional Motor Vehicle crashes. When funds allow, Annual mini-grants are awarded to evidence-based injury prevention projects in Northwest Region that support data-driven projects in the leading causes of injury and death. The committee meets prior to the Regional Council meetings 3 times per year or when necessary.

**Funding Committee**

Regional Council Funding Committee members, in conjunction with the Executive Committee members, are tasked with the review of annual training requests and office operations budgets and to form a recommendation for the Northwest Region EMS and Trauma Care Council to help meet the goals and objectives of the prehospital portion of the Regional Plan. The committee meets annually, or as needed, to formulate an operating budget prior to the May Regional Council meeting.

**Protocol Committee**

Committee made up of the NW Regions' MPD's and designated providers tasked with the review and updating of our Regional Protocols. They make recommendations for improvements and submit for approval. The committee meets whenever Protocol review is open and is done as needed.

## EMERGENCY CARE SYSTEM RESOURCES

### EMS & Trauma Hospital Designations & Response Areas

**https://fortress.wa.gov/doh/ems/index.html**

### Verified Pre Hospital Services

There are thirty-three (33) EMS licensed & trauma verified aid and ambulance services within the Northwest Region as of 2/2/21 (appendix 4):

| County | AID BLS | AID ILS | AID ALS | AMB BLS | AMB ILS | AMB ALS |
|---|---|---|---|---|---|---|
| Kitsap | 0 | 0 | 0 | 1 | 0 | 7 |
| Mason | 3 | 0 | 0 | 6 | 0 | 3 |
| Clallam | 0 | 0 | 0 | 3 | 1 | 4 |
| Jefferson | 0 | 0 | 0 | 3 | 0 | 2 |
| **NWREGION** | **3** | **0** | **0** | **13** | **1** | **16** |

https://www.doh.wa.gov/Portals/1/Documents/Pubs/emslic.pdf

**Pre Hospital Providers**

There are a total of 1,183 EMS providers and 399 of which are volunteers as of November 3, 2020 (appendix 4):

| County | # of Paid Personnel | # of Volunteer Personnel | # of Non Medically Trained Drivers | # of Advanced First Aid Personnel | PERCENT VOLUNTEER |
|---|---|---|---|---|---|
| Kitsap | 452 | 59 | 0 | 0 | 11.5% |
| Mason | 149 | 119 | 28 | 72 | 44.4% |
| Clallam | 125 | 149 | 4 | 21 | 54.3% |
| Jefferson | 58 | 72 | 16 | 1 | 55.3% |
| **NWREGION** | **784** | **399** | **48** | **94** | **33.7%** |

NW Region recognizes that we have a large percentage of Volunteers in our Region. This can be a challenge to properly train and maintain skills, and transport in a timely manner. We had a 9% increase in EMS providers and an 8.5% increase in volunteers.

**Senior EMS Instructors (SEI), EMS Evaluators (ESE), Approved Training Programs**

There are 12 SEI's, 2 SEIC's, 242 ESE's and 5 Approved Training Programs within the Northwest Region as of February 9, 2021 (appendix 8C):

| County | SEI | SEIC | ESE | Training Programs |
|---|---|---|---|---|
| Kitsap | 5 | 0 | 92 | 1 |
| Mason | 4 | 2 | 45 | 1 |
| Clallam | 2 | 0 | 76 | 2 |
| Jefferson | 1 | 0 | 29 | 1 |
| **NW REGION** | **12** | **2** | **242** | **5** |

**Designated Trauma Facilities**

There are five (5) trauma services designated within the Northwest Region as of June, 2020 (appendix 1):

| Adult Level III | Adult Level IV |
|---|---|
| 2 | 3 |

https://www.doh.wa.gov/Portals/1/Documents/Pubs/530101.pdf

**Categorized Cardiac and Stroke Facilities**

There are five (5) Emergency Cardiac and Stroke System Hospitals within the Northwest Region as of December 2018 (appendix 2):

| County | Cardiac Level I | Cardiac Level II | Stroke Level I | Stroke Level II | Stroke Level III |
|---|---|---|---|---|---|
| Kitsap | 1 | | | 1 | |

| | | | | | |
|---|---|---|---|---|---|
| Mason | | 1 | | | 1 |
| Clallam | | 1 | | | 1 |
| Jefferson | | 1 | | | 1 |
| West Olympic Peninsula | | 1 | | | 1 |

https://www.doh.wa.gov/Portals/1/Documents/Pubs/345299.pdf

**Historical Snapshot**

Accomplishments and outcomes from 2019-2021 strategic plan are as follows but not limited to;

- We have successful transitioned in 2 new MPD's that have replaced 2 long standing MPD's. This transition has been very smooth and both new MPD's have been active within their counties. Support came from fellow MPD's, and Region Executive Board members that helped collaborate in the hiring and transition process.
- Successfully funded our full amount in Program Grants despite Covid challenges including Initial EMT Classes, Training equipment, ALS/ILS OTEP, Web based ALS training, and Regional Protocol revision.
- NW Region also had a successful Hospital merge as Harrison Bremerton, and Harrison Silverdale merged to form 1 new hospital in Silverdale. Now known as St. Michael Medical Center – Silverdale. Kitsap County EMS council and stakeholders participated with inner agency collaboration. Communication was disseminated from the Region (air ambulance, Cath labs, rural health communication). NW Region had the CEO of St. Michaels attend a Region meeting to discuss move to Silverdale.
- The Region has successful formed an operating budget that fits within DOH standards and restrictions.
- The Region successfully welcomed and trained with an additional Air Medical resource- LifeFlight. LifeFlight offered ACLS, PALS, Landing zone, and Advanced Airway training to pre-hospital providers within the Region.
- Regionwide collaboration continues to be one of our strengths as we continue to have a large active Regional Council.
- The region MPD's collaborated and successfully updated our Regionwide Protocols.
- Covid Accomplishments include writing new COP's to address changes in Advanced Airway Management, Bacterial Filters and Covid specific adjustments. New training was conducted on these topics. The Regional also began conversations to build up Emergency Operation Plans and shared information from DOH and NWHCRNW. EOC's were stood up. NW Region adapted to the changes quickly and only missed 1 Meeting during this Pandemic.

**Challenges and Priorities**

Challenge and Priorities are as follows but not limited to;

- In the wake of the Covid NW Region is working with emergency preparedness partners to develop a DMCC network and plan for the Region. This is now a standing agenda item and discussed at every meeting.
- In NW Region there is a lack of clinical ride sites. This creates challenges within the Region. We will encourage and/or develop a Regional standard. The programs need to collaborate and develop a best practice to standardize field internship student participation.
- EMS calls and other healthcare activities due primarily to substance use disorders can result in the inefficient use of emergency resources and contribute to EMS provider burnout. The lack of adequate facilities and resources to address this population continues to be a challenge in the region.
- Covid Challenges included coordination to hospital shift when St. Michaels had a hospital outbreak. Struggled with initial PPE shortages. Local Agencies along with the Councils helped to coordinate Immunization to County and internal EMS providers. Workplace monitoring and keeping crew safe and staffed was also a challenge. Agencies also had to make last minute adjustments to modify and continue their training.
- In NW Region there is a shortage of Paramedics. This is due to promotions within merging agencies, retirement, and not enough training programs available to them. The training programs are too limited to the number of providers it can hold thus making it challenging to fulfill openings within the Region.

# Regional System
# Goals – Objectives – Strategies
# July 2021 – June 2023

## - Goal 1 -

Northwest Region will use DOH Needs Assessment guidance to determine the need for minimum and maximum numbers and levels of designated trauma, pediatric and rehabilitation services, and categorized cardiac and stroke for system development.

The Regional Council recommends the minimum and maximum numbers and levels of EMS verified trauma services. Recommendations from the Local Councils and county MPDs are utilized as well as the method developed by the DOH to standardize identifying Prehospital system resource needs. The Local Councils and county MPDs also assist in identifying trauma response areas in each County and developing trauma response area maps.

| **- Goal 1 -**<br>Maintain, assess and increase emergency care resources. | |
|---|---|
| **Objective 1: By May 2022 Determine min/max numbers for verified prehospital services.** | **Strategy 1.** By **March 2022**, the Regional Council will request each county council review the verified prehospital services min/max numbers. |
| | **Strategy 2.** By **March 2022**, The Regional Council will guide the county councils through the process of evaluating and/or making changes by providing DOH guidance and training as needed. |
| | **Strategy 3.** By **May 2022**, the Regional Council will review and consider any recommendation to change the min/max numbers at a region council meeting. |
| | **Strategy 4. Throughout the plan cycle**, the Regional Council will review current verified prehospital services min/max numbers in the region plan for accuracy and help resolve any found discrepancies. |
| | **Strategy 5. Annually**, Staff will ensure that county councils inform the region council when there is a change in a prehospital service (merger, closure, or addition) by conducting a survey after receiving Agency Resource Report from DOH. |

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| **Objective 2: By January 2022, Determine min/max #s for designated trauma services.** | **Strategy 1.** By **September 2022**, the Regional Council will request the Region QI committee review designated trauma services min/max numbers. |
| | **Strategy 2.** By **November 2022**, the Regional Council will review and consider recommendations by the QI committee to make any changes to the designated trauma services min/max numbers at a Regional Council meeting. |
| | **Strategy 3.** By **January 2023**, the Regional Council will review current designated trauma services min/max numbers in the region plan for accuracy and help resolve any discrepancies. |
| | **Strategy 4. Annually**, Staff will ensure that Hospitals inform the Regional Council when there is a change in designation by conducting a survey. |
| **Objective 3: By September 2021, Review and document categorized cardiac and stroke facilities.** | **Strategy 1.** By **September 2021**, the Regional Council will review current categorized cardiac and stroke facilities in the region plan for accuracy and help resolve any discrepancies. County councils or hospital representatives will be asked to immediately inform the region council any time there is a change in categorization. |
| **Objective 4: By January 2022, Review and document designated rehabilitation services and levels.** | **Strategy 1.** By **September 2021**, the Regional Council will request the Region QI committee review designated rehabilitation services min/max numbers. |
| | **Strategy 2.** By **November 2021**, the Regional Council will review and consider recommendations by the QI committee to make any changes to the designated rehabilitation services min/max numbers at a Regional Council meeting. |
| | **Strategy 3.** By **November 2021**, the Regional Council will review current designated trauma services min/max numbers in the region plan for accuracy and help resolve any found discrepancies. |
| **Objective 5: By May 2023, Conduct a needs assessment for trauma, EMS, cardiac, stroke.** | **Strategy 1.** By **January 2022**, the Regional Council will start a workgroup to develop a Needs assessment process. |
| | **Strategy 2.** By **May 2022**, The Region will conduct the needs assessment for trauma, Prehospital EMS, cardiac, stroke. |
| | **Strategy 3.** By **September 2022**, the Region will report the findings of the needs assessment for trauma, |

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| | Prehospital EMS, cardiac, stroke, to DOH and the Regional Council. |
| **Objective 6: By January 2023, Identify unserved and underserved areas.** | **Strategy 1.** By **September 2022**, the Region will collaborate with the county councils and DOH to develop an effective method to review the trauma response area maps and revise as needed. |
| | **Strategy 2.** By **November 2022** the Regional Council requests each county council review and revise the trauma response area maps, as needed. |
| | **Strategy 3.** By **January 2023**, the Regional Council will work with each county council to update the trauma response area maps as needed and report any necessary changes to DOH. |

# - Goal 2 -

The Northwest Region participates in continued collaborative planning processes as needed to ensure that key stakeholders remain informed of system issues and have the opportunity to be involved in resolving both local and regional system concerns.

The Regional Council, as the lead organization, will work closely within the 5 Local EMS & Trauma Care Councils, MPDs, EMS providers, trauma services, public health, emergency management, and other EMS and trauma stakeholders to assure a multi-disciplinary approach to EMS and trauma care system development. The Region staff will disseminate emergency preparedness information with the Council by partnering with emergency management programs.

| **- Goal 2 -**<br>Support emergency preparedness activities. | |
|---|---|
| **Objective 1: By November 2021, Coordinate with and participate in emergency preparedness and response to all hazards incidents, patient transport, and plan initiatives to the extent possible of existing resources.** | **Strategy 1: Throughout the plan cycle**, the Regional Council will invite emergency preparedness representatives to participate on county and region councils. |
| | **Strategy 2. Throughout the plan cycle**, the Regional Council will encourage participation in disaster planning & training opportunities by sharing information on upcoming events. (training classes, full scale drills, tabletop exercises) |
| | **Strategy 3. Throughout the plan cycle**, the Region staff will distribute pre-hospital Emergency Preparedness information on the Region website |
| **Objective 2: By May 2022, work with emergency preparedness partners to develop a DMCC network and plan for the Region.** | **Strategy 1.** By **March 2022**, the Region will compile each of county MCI plans and inventory of county assets for disaster response. |
| | **Strategy 2.** By **May 2022**, the Region will coordinate with emergency preparedness partners to complete a DMCC plan for the Region. |
| | **Strategy 3.** By **May 2022**, the Region will incorporate the DMCC plan into the Regional Plan and patient care procedures. |
| **Objective 3: By May 2022, coordinate with county public health departments and emergency preparedness** | **Strategy 1.** By **March 2022,** the Region will compile each of the county pandemic disease plans. |
| | **Strategy 2.** By **May 2022**, Regional staff will work with emergency preparedness partners to facilitate a pandemic disease plan for the Region. |

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| **partners to facilitate a regional pandemic disease plan.** | **Strategy 3.** By **May 2022,** the Region will identify mechanisms to coordinate patient flow during a pandemic within the Region and maximize critical care resources. |

# - Goal #3 -

The Northwest Region of EMS is currently working to establish programs to reduce the incidence and impact of injuries, violence and illness in the Region. The programs that are being established and used are; the community paramedic program, which is currently being piloted in Clallam County, and the fall prevention program which is currently operating in many EMS agencies in the region now. The fall prevention program is targeting a specific demographic of patients. This program is tailored for the community-dwelling older adults who may suffer from just the inability to move around as well as they once did. NW Region recognizes a challenge with a high percentage of older adults in our area. With the objectives and specific strategies that are in place the region would like to reduce the number of falls. This would lower the amount and frequency of 911 calls and thereby lower the number of patients that would frequent the local emergency rooms. Falls is the leading cause of unintentional deaths. With the fall prevention program in place we are striving to lower these numbers and lower the numbers of repeat falls. Nonfatal Injury Hospitalization and Fatal Injuries reports shown in Appendix 8B.

| **- Goal #3 -** Plan, implement, monitor and report outcomes of programs to reduce the incidence and impact of injuries, violence and illness in the region. | |
|---|---|
| **Objective 1: By May Annually, Promote best available or promising practices and programs.** | **Strategy 1.** By **January annually**, the Regional Council shall conduct a survey to identify all activities and programs provided by member agencies that impact the occurrence of and/or reduce the incidence of injuries, violence and illness within the region. |
| | **Strategy 2.** By **throughout the plan cycle**, The Regional Council will request IVP best practices information and links from the IVP TAC to post on the Region Website. |
| | **Strategy 3.** By **March annually**, The Regional Council Staff will request fatal and non-fatal hospitalization data from DOH to share at the IVP meeting and will post on the Region Website. |
| **Objective 2: Annually, Document interventions and outcomes and provide a report of the findings to the EMS and Trauma Steering Committee.** | **Strategy 1. Annually,** once activities and programs have been identified quantitative and qualitative approaches shall be employed to define the impact those activities and programs have on patient outcomes. This report shall be widely distributed amongst member agencies and WA DOH. |
| **Objective 3: Throughout the plan, Build sustainable prevention partnerships with pre-hospital** | **Strategy 1.** By **throughout the plan cycle**, Activities and programs with measurable positive impacts shall be promoted within the region through the implementation of ongoing educational activities. |

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| **providers, hospitals, public health and for-profit and non-profit organizations.** | **Strategy 2.** By **December 2022**, each county will survey with their respective mental health, crisis services, and case management partners in their counties for outcome data for mental health and substance abuse patients. |
| | **Strategy 3. Throughout the plan cycle,** a Regional Council member or staff will participate in the IVP TAC meetings and report back to the Regional Council. |
| **Objective 4: Identify and explore emerging concepts for Mobile Integrated Health Care (MIH)/Community Paramedicine.** | **Strategy 1. Annually** a literature review shall be performed to identify emerging technologies, strategies and activities that involve Mobile Integrated Health Care/Community Paramedicine programs to impact the incidence and occurrence of injuries, violence and illness encouraging the Region to move to Records Management. collection, platform to communicate better, and pull consistent data. |
| | **Strategy 2. Annually**, each Mobile Integrated Health Care/Community Paramedicine program will provide outcome data for all patients serviced in that program. Share best practices with other agencies, give pros/cons, collaboration momentum and education. |
| | **Strategy 3. Annually**, each Mobile Integrated Health Care/Community Paramedicine program will provide outcome data for all mental health and substance abuse patients serviced in that program. Share best practices with other agencies, give pros/cons, collaboration momentum and education. |
| | **Strategy 4.** Biannually assess prehospital burden of Behavioral health and substance Use Disorder. Identify non-EMS agencies to collaborate for solutions and report findings. |

# - Goal #4 -

The Northwest Region participates in a collaborative planning processes as needed to ensure that key stakeholders remain informed of system issues and are afforded an opportunity to be involved in resolving local, regional and state system concerns.

The Regional Council, as the lead organization, works closely with the Clallam, Jefferson, Kitsap, Mason, and West Olympic county EMS & Trauma Care Councils, their respective MPDs, and other EMS and trauma stakeholders to assure a multi-disciplinary approach to EMS and trauma care system development and data collection. These activities improve the widespread availability of trusted, complete, and accurate data for member seeking to use it for performance improvement.

| **- Goal #4 -**<br>Assess weaknesses and strengths of quality improvement programs in the region. | |
|---|---|
| **Objective 1: Identify and implement strategies to increase prehospital services reporting to and participation in prehospital data sources, e.g., WEMSIS, CARES, etc.** | **Strategy 1.** By **July 2021,** the Region will work with DOH Research and Data Analysis section on receiving reports specific to the region and work to develop improvement strategies for WEMSIS data. |
| | **Strategy 2.** By **July 2021**, the Region will survey all non-submitting prehospital trauma agencies that have been identified by WA DOH (Strategy 1) within the region to determine their current ability to submit EMS data and any challenges/barriers they are encountering. |
| | **Strategy 3.** By **August 2021**, the Regional Council through the Local County EMS and Trauma Care Councils will provide educational and training opportunities to non-submitting prehospital trauma agencies to encourage the submission and utilization of data within those specific organizations. |
| | **Strategy 4**. By **November 2021**, Utilizing the existing QI Committee the regional council will develop a standing prehospital Quality Improvement sub-committee. The sub-committee utilizing WEMSIS data shall develop regional KPIs, such as average response times, medications administered, procedures performed, and runs per month/year. |
| **Objective 2: By September 2021, the Region will conduct a survey of QI programs and asses/identify any gaps.** | **Strategy 1.** By **July 2021**, the Region and county councils will compile a list of QI programs in the region. and create a summary report. |
| | **Strategy 2. By September 2021**, the Regional Council will use the results of the findings to assess the state of |

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|---|---|
| | QI programs and develop recommendations to enhance overall EMS system quality improvement. |

# - Goal #5 -

Northwest Region together with the local councils conducts and annual pre-hospital training needs assessment. To assist the local councils, and meet the requirements of our contract, Northwest Region provides grant funding support to supplement quality EMS training, equipment and Injury Prevention activities. Program funding was used in the previous plan to support Initial EMT Classes, Training equipment, ALS/ILS OTEP, Web based ALS training and its development, Regional Protocol revision and Falls prevention activities.

Northwest Region together with all County MPD's, Navy Region NW and the Protocol Committee work together to develop Regional Patient Care Procedures (PCP's) and Protocols that have been developed to provide specific direction for how the trauma system and patient care should function within Northwest Region. In addition to Northwest Region Patient Care Procedures (PCP's), Local Councils have developed County Operating Procedures (COPs) with their MPDs. These provide details on how County specific EMS agencies will carry out the Regional PCPs, Northwest Region Protocols, PCP's and COP's in line with the standardized methods from DOH.

Northwest Region reviews and updates their Region wide protocols every 2 years, or as necessary. Together with a Protocol Committee and all MPDs this process begins 6 months to a year prior to submission to DOH for approval.

| **- Goal #5 -**<br>Promote regional system sustainability. | |
|---|---|
| **Objective 1: Manage the business work of the Regional Council, including:**<br>• **budgeting,**<br>• **financial reports,**<br>• **contract deliverables, meeting coordination, communications** | **Strategy 1. By May annually**, the Regional Council will create and approve an annual budget for the following fiscal year. |
| | **Strategy 2.** By **September annually**, the Council will review actual year end numbers and make any necessary revisions to the budget for the new fiscal year. This will be submitted to the DOH. |
| | **Strategy 3. Monthly** the Regional Council financial transactions will be conducted in accordance with the council fiscal accounting policies and procedures Manual. |
| | **Strategy 4. Monthly**, Financial activity reports and bank statements will be provided for review to the Executive Committee and bi-monthly for approval at each Regional Council meeting. |
| | **Strategy 5.** By **November annually**, the BARS report will be submitted to the State Auditor's Office as required. |

| | |
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| | **Strategy 6. Biennially**, the Regional Council will cooperate with the State Auditor's Office to facilitate the audit process. |
| | **Strategy 7. Biennially**, at the DOH timeline, the Regional Council will renew the contract with DOH for implementation of the System Plan and maintain ongoing contractual compliance oversight. |
| | **Strategy 8. Throughout the plan period**, the Region Staff, will coordinate and hold regularly scheduled meetings for the Council, subcommittees and workgroups. |
| | **Strategy 9. Throughout the plan period**, the Region will ensure that County Councils coordinate and hold regularly scheduled meetings. Region staff or Executive Board member will attend meetings in person or send a Region report prior to the scheduled council meeting. |
| | **Strategy 10. Throughout the plan period**, the Regional Council will maintain a website with pertinent Regional and county council information per DOH requirements and beyond. |
| | **Strategy 11. Throughout the plan period**, a Regional Council representative will participate in EMS & Trauma related meetings, committees, and workgroups and TACS including; County Council meetings, State EMS Steering Committee, Regional Advisory Committee (RAC), DOH Office of Community Health meetings, WAC revision, and Regional QI meeting, Regional IVP, etc |
| **Objective 2: Manage Regional Council membership to ensure all medical, and other partners and stakeholders, are represented.** | **Strategy 1. Throughout the plan period**, the Regional Council will provide new council members orientation information including the region council handbook, bylaws, etc. |
| | **Strategy 2.** By **May annually**, the Regional Council will work with council members to ensure reappointment applications are submitted to the DOH prior to the September expiration. |
| | **Strategy 3. Throughout the plan period** as needed region staff will ensure that Council members are current with required OMPA training. |

| | |
|---|---|
| | **Strategy 4. Throughout the plan period,** the region council will work with the Region Stakeholders to identify gaps in membership. |
| **Objective 3: Enhance workforce development and support training and education for prehospital providers.** | **Strategy 1**. By **September 2021**, each county councils will conduct a county wide training needs assessment to identify training needs of all county EMS agencies within their county. |
| | **Strategy 2.** By **September 2021,** the Training and Education Committee will review the submitted requests and make a recommendation to the Region Council for approval. |
| | **Strategy 3.** By **November 2021**, the Regional Council will establish prehospital training grant contracts with each County Council. |
| | **Strategy 4.** By **May annually**, the Region will review and reallocate grant funds when grant awarded planned training does not occur within the grant period. |
| | **Strategy 5.** By **June 30, 2023**, grant funds are distributed throughout the contract as the training occurs and complete reimbursement and course outcome documentation is submitted to the region council office. |
| **Objective 4: Review and update Patient Care Procedures (PCPs), as needed; and, work toward statewide standardization of PCPs.** | **Strategy 1.** By **March 2023**, the Regional Council will continue to collaborate with the RAC TAC and DOH to standardize and improve PCPs as directed and make revisions as necessary. |
| | **Strategy 2. As needed**, the Regional Council along with the MPD's will review and update the Regional Protocols as necessary. |
| | **Strategy 3. As needed**, the Regional Council will maintain the PCPs & Protocols and make available electronically on the region's website. |
| | **Strategy 4.** By **May 2022**, the Regional Council will provide training on the development and purpose of COPs with DOH guidance. |
| **Objective 5: Explore opportunities for sustainable practices for rural EMS systems** | **Strategy 1. Throughout the plan cycle,** the Region will work with the DOH/RAC to support sustainable practices as available. |
| | **Strategy 2. As needed,** staff will continue to communicate information and opportunities from the DOH Rural EMS Workgroup with the Membership and throughout the Region. |

# APPENDICES

**Appendix 1. Approved Minimum/Maximum (Min/Max) numbers of Designated Trauma Care Services in the Region (General Acute Trauma Services) by level.**

| Approved Minimum/Maximum of Designated Trauma Care Services (General Acute Trauma Services) | | | |
|---|---|---|---|
| Level | State Approved | | Current Status |
| | Min | Max | |
| II | 1 | 1 | 0 |
| III | 2 | 2 | 2 |
| IV | 2 | 3 | 3 |
| V | 3 | 4 | 0 |
| II P | 0 | 0 | 0 |
| III P | 1 | 1 | 0 |
| II R | 0 | 0 | 0 |

Numbers are current as of February 2020
https://www.doh.wa.gov/Portals/1/Documents/Pubs/689163.pdf

| Trauma Designation | | | Facility | City |
|---|---|---|---|---|
| Adult | Pediatric | Rehab | | |
| III | | | St. Michael Medical Center | Silverdale |
| III | | | Olympic Medical Center | Port Angeles |
| IV | | | Forks Community Hospital | Forks |
| IV | | | Jefferson Healthcare Hospital | Port Townsend |
| IV | | | Mason General Hospital | Shelton |

http://www.doh.wa.gov/Portals/1/Documents/Pubs/530101.pdf

**Appendix 2. Washington State Emergency Care Categorized Cardiac and Stroke System Hospitals.**

| Washington State Emergency Care Categorized Cardiac and Stroke System Hospitals | | | | |
|---|---|---|---|---|
| Categorization Level | | Hospital | City | County |
| Cardiac | Stroke | | | |
| I | II | St. Michael Medical Center | Silverdale | Kitsap |
| II | III | Olympic Medical Center | Port Angeles | Clallam |
| II | III | Forks Community Hospital | Forks | Clallam |
| II | III | Jefferson Healthcare Hospital | Port Townsend | Jefferson |
| II | III | Mason General Hospital | Shelton | Mason |

Numbers are current as of December 2018.
http://www.doh.wa.gov/Portals/1/Documents/Pubs/345299.pdf

**Appendix 3. Approved Minimum/Maximum (min/max) numbers of Designated Rehabilitation Trauma Care Services.**

| Approved Minimum/Maximum of Designated Rehabilitation Trauma Care Services | | | |
|---|---|---|---|
| Level | State Approved | | Current Status |
| | Min | Max | |
| II | 0 | 0 | 0 |
| III* | 0 | 0 | 0 |

**(There** are no restrictions on the number of Level III Rehab Services.)
Numbers are current as of February 2020.
https://www.doh.wa.gov/Portals/1/Documents/Pubs/689163.pdf

**Appendix 4. EMS Resources, Prehospital Verified Services, Prehospital Non-Verified Services.**

| Credential # | Credential Status | Agency Name | City | Expiration Date | Agency Type | Care Level | Ground Vehicle | | Personnel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Clallam County** *Indicates West Olympic Peninsula | | | | | | | # AMB | # AID | # BLS | # ILS | # ALS |
| AID.ES.60704710 | ACTIVE | Norpoint Medical | Port Angeles | 3/31/202 | AID | BLS | 0 | 2 | 2 | 0 | 1 |
| AMBV.ES.00000055 | ACTIVE IN RENEWAL | Clallam 2 Fire Rescue and Clallam County Fire District No. 2 | Port Angeles | 3/31/2021 | AMBV | ALS | 3 | 0 | 33 | 2 | 4 |
| AMBV.ES.00000056 | ACTIVE IN RENEWAL | Clallam County Fire District #3 | Sequim | 3/31/2021 | AMBV | ALS | 6 | 3 | 58 | 0 | 25 |
| AMBV.ES.00000057 | ACTIVE IN RENEWAL | Clallam County Fire Protection District No.4 | Joyce | 3/31/2021 | AMBV | BLS | 2 | 0 | 13 | 2 | 3 |
| AMBV.ES.00000058 | ACTIVE IN RENEWAL | *Clallam County Fire District 5 | Clallam Bay | 3/31/2021 | AMBV | BLS | 2 | 0 | 8 | 0 | 0 |
| AMBV.ES.00000060 | ACTIVE | Port Angeles Fire Department | Port Angeles | 5/31/2021 | AMBV | ALS | 3 | 2 | 17 | 0 | 14 |
| AMBV.ES.00000066 | ACTIVE | *Clallam County Hospital District #1 | Forks | 5/31/2022 | AMBV | ILS | 4 | 2 | 15 | 9 | 0 |
| AMBV.ES.00000067 | ACTIVE | Olympic Ambulance Service Inc. | Sequim | 5/31/2022 | AMBV | ALS | 13 | 0 | 30 | 0 | 10 |
| AMBV.ES.00000068 | ACTIVE | *Neah Bay Ambulance Service | Neah Bay | 5/31/2021 | AMBV | BLS | 3 | 0 | 2 | 7 | 1 |
| ESSO.ES.60295051 | ACTIVE | Port Angeles Police Department | Port Angeles | 5/31/2021 | ESSO | | 0 | 0 | 3 | 0 | 0 |
| **Jefferson County** | | | | **Clallam County totals** | | | | | **181** | **20** | **58** |
| AMBV.ES.00000209 | ACTIVEIN RENEWAL | East Jefferson Fire and Rescue | Port Townsen d | 2/28/2021 | AMBV | ALS | 9 | 5 | 40 | 4 | 15 |
| AMBV.ES.00000211 | ACTIVE IN RENEWAL | Port Ludlow Fire and Rescue | Port Ludlow | 2/28/2021 | AMBV | ALS | 4 | 6 | 20 | 0 | 3 |
| AMBV.ES.00000212 | ACTIVE | Brinnon Fire Department | Brinnon | 2/28/2022 | AMBV | BLS | 2 | 4 | 11 | 4 | 1 |
| AMBV.ES.00000213 | ACTIVE IN RENEWAL | Discovery Bay Volunteer Fire and Rescue | Port Townsen d | 2/28/2021 | AMBV | BLS | 2 | 1 | 7 | 1 | 0 |
| AMBV.ES.60404294 | ACTIVE | Quilcene Fire Rescue | Quilcene | 2/28/2022 | AMBV | BLS | 2 | 0 | 15 | 1 | 1 |
| | | | | **Jefferson County totals** | | | | | **93** | **10** | **20** |

| Credential # | Credential Status | Agency Name | City | Expiration Date | Agency Type | Care Level | Ground Vehicle | | Personnel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Kitsap County** | | | | | | | **# AMB** | **# AID** | **# BLS** | **# ILS** | **# ALS** |
| AMB.ES.60708087 | ACTIVE | Falck Northwest | Mountlake Terrace | 3/31/2022 | AMB | BLS | 1 | 0 | 0 | 0 | 0 |
| AMBV.ES.00000320 | ACTIVE | Central Kitsap Fire and Rescue | Silverdale | 7/31/2022 | AMBV | ALS | 10 | 0 | 80 | 0 | 23 |
| AMBV.ES.00000321 | ACTIVE | Bainbridge Island Fire Department | Bainbridge Island | 7/31/2021 | AMBV | ALS | 4 | 0 | 47 | 0 | 9 |
| AMBV.ES.00000324 | ACTIVE | South Kitsap Fire and Rescue | Port Orchard | 10/31/2021 | AMBV | ALS | 4 | 5 | 62 | 0 | 23 |
| AMBV.ES.00000326 | ACTIVE | North Kitsap Fire and Rescue | Kingston | 10/31/2021 | AMBV | ALS | 6 | 0 | 38 | 0 | 8 |
| AMBV.ES.00000330 | ACTIVE | Bremerton Fire Department | Bremerton | 9/30/2021 | AMBV | ALS | 5 | 0 | 45 | 1 | 18 |
| AMBV.ES.00000332 | ACTIVE | Poulsbo Fire Department | Poulsbo | 9/30/2022 | AMBV | ALS | 6 | 20 | 35 | 1 | 19 |
| AMBV.ES.00000342 | ACTIVE | Olympic Ambulance | Bremerton | 4/30/2021 | AMBV | BLS | 8 | 0 | 20 | 0 | 11 |
| AMBV.ES.00000343 | ACTIVE | Bremerton Ambulance | Bremerton | 4/30/2021 | AMBV | BLS | 3 | 0 | 18 | 0 | 3 |
| ESSO.ES.60421581 | ACTIVE | Kitsap County Sheriff's Office | Port Orchard | 10/31/2022 | ESSO | | 0 | 0 | 0 | 0 | 1 |
| **Mason County** | | | | **Kitsap County totals** | | | | | **345** | **2** | **115** |
| AIDV.ES.00000421 | ACTIVE | Mason County Fire Protection District 1 | Hoodsport | 08/31/2022 | AIDV | BLS | 0 | 1 | 2 | 0 | 0 |
| AIDV.ES.00000430 | ACTIVE | Mason County Fire Dist #12 | Matlock | 01/31/2023 | AIDV | BLS | 0 | 1 | 4 | 0 | 0 |
| AIDV.ES.00000431 | ACTIVE | Mason County Fire District #13 | Elma | 01/31/2023 | AIDV | BLS | 0 | 3 | 5 | 0 | 0 |
| AIDV.ES.00000434 | ACTIVE | Mason County Fire District #17 | Lilliwaup | 01/31/2021 | AIDV | BLS | 0 | 2 | 5 | 0 | 0 |
| AMBV.ES.00000423 | ACTIVE | Mason County FPD #3 | Grapeview | 08/31/2022 | AMBV | BLS | 2 | 0 | 5 | 1 | 0 |
| AMBV.ES.00000424 | ACTIVE | Mason County Fire 4 | Shelton | 08/31/2021 | AMBV | BLS | 2 | 3 | 20 | 1 | 0 |
| AMBV.ES.00000425 | ACTIVE | Central Mason Fire and EMS | Shelton | 08/31/2022 | AMBV | ALS | 8 | 0 | 25 | 1 | 23 |
| AMBV.ES.00000426 | ACTIVE | Mason County Fire District #6 | Union | 01/31/2023 | AMBV | BLS | 1 | 5 | 11 | 0 | 0 |
| AMBV.ES.00000435 | ACTIVE | Mason County Fire District #18 | Hoodsport | 01/31/2023 | AMBV | BLS | | 2 | 4 | 1 | 1 |
| AMBV.ES.60231480 | ACTIVE | West Mason Fire | Shelton | 01/31/2023 | AMBV | BLS | 1 | 1 | 15 | 0 | 0 |
| AMBV.ES.60437165 | ACTIVE | North Mason Regional Fire Authority | Belfair | 08/31/2022 | AMBV | ALS | 5 | 0 | 21 | 0 | 8 |
| AMBV.ES.60453257 | ACTIVE | Mason County Fire District #11 | Shelton | 01/31/2023 | AMBV | BLS | 0 | 4 | 6 | 0 | 0 |
| AMBV.ES.60920474 | ACTIVE IN RENEWAL | Olympic Ambulance Service In | Lacey | 1/30/21 | AMBV | | 1 | 0 | 0 | 0 | 4 |
| ESSO.ES.60336509 | ACTIVE | Mason County Sheriff's Office | Shelton | 1/31/22 | ESSO | | 0 | 0 | 0 | 0 | 1 |
| | | | | **Mason County totals** | | | | | **124** | **4** | **37** |

Numbers are current as of 2/2/21

| Total Prehospital Verified Services by County* | | | | | | |
|---|---|---|---|---|---|---|
| County | AMBV-ALS | AMBV-ILS | AMBV-BLS | AIDV-ALS | AIDV-ILS | AIDV-BLS |
| Clallam | 4 | 1 | 3 | 0 | 0 | 0 |
| Jefferson | 2 | 0 | 3 | 0 | 0 | 0 |
| Kitsap | 7 | 0 | 1 | 0 | 0 | 0 |
| Mason | 3 | 0 | 6 | 0 | 0 | 3 |

Numbers are current as of 2/2/21

| Total Prehospital Non-Verified Services by County* | | | | | | | |
|---|---|---|---|---|---|---|---|
| County | AMB-ALS | AMB-ILS | AMB-BLS | AID-ALS | AID-ILS | AID-BLS | ESSO |
| Clallam | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Jefferson | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kitsap | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Mason | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Numbers are current as of 2/2/21

**Appendix 5. Approved Min/Max numbers of Verified Trauma Services by Level and Type for each County.**

| Approved Minimum/Maximum of Verified Trauma Services by Level and Type in each County | | | | | |
|---|---|---|---|---|---|
| **County** | **Verified Service Type** | **Care Level** | **State Approved Minimum #** | **State Approved Maximum #** | **Current Status (total # verified for each service type)** |
| **Clallam** | AIDV | BLS | 1 | 2 | 0 |
| | | ILS | 0 | 0 | 0 |
| | | ALS | 1 | 2 | 0 |
| | AMBV | BLS | 5 | 6 | 3 |
| | | ILS | 0 | 0 | 1 |
| | | ALS | 3 | 4 | 4 |
| **Jefferson** | AIDV | BLS | 1 | 2 | 0 |
| | | ILS | 0 | 1 | 0 |
| | | ALS | 0 | 0 | 0 |
| | AMBV | BLS | 5 | 5 | 3 |
| | | ILS | 1 | 2 | 0 |
| | | ALS | 2 | 2 | 2 |
| **Kitsap** | AIDV | BLS | 2 | 4 | 0 |
| | | ILS | 0 | 1 | 0 |
| | | ALS | 0 | 0 | 0 |
| | AMBV | BLS | 5 | 6 | 1 |
| | | ILS | 0 | 1 | 0 |
| | | ALS | 5 | 7 | 7 |
| **Mason** | AIDV | BLS | 6 | 7 | 3 |
| | | ILS | 0 | 0 | 0 |
| | | ALS | 1 | 1 | 0 |
| | AMBV | BLS | 6 | 8 | 6 |
| | | ILS | 0 | 0 | 0 |
| | | ALS | 3 | 3 | 3 |

Numbers are current as of 2/27/21

**APPENDIX 6. Trauma Response Areas (TRAs) by County**

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Clallam | #1 | Port Angeles Fire Department | The current city limits of Port Angeles | 1 AMBV-ALS |
| Clallam | #2 | Clallam County Fire District #2 | Area surrounding the City of Port Angeles on three sides, South, West and East. Bordered to south by Olympic National Park | 1 AMBV-LS |
| Clallam | #3 | Clallam County Fire District #3 | Bordered on the west by response area 2, north by the Strait of Juan De Fuca, to the east by Jefferson County, to the south by Olympic National Park. Includes the City of Sequim | 2 AMBV-ALS |
| Clallam | #4 | Clallam County Fire District #4 | Along Highway 112 between Port Angeles and Clallam Bay. Bordered by the Strait of Juan De Fuca, south by Olympic National Park | 1 AMBV-BLS |
| Clallam | #5 | Clallam County Fire District #5 | Clallam Bay area. From mile marker 7 on Highway 112 on the west side, to mile marker 34 on the east | 1 AMBV-BLS |
| Clallam | #6 | Clallam County Hospital District #1 | Forks township and surrounding rural/wilderness area | 1 AMBV-ILS |
| Clallam | #7 | Neah Bay Ambulance | The Makah Indian Nation and surrounding wilderness | 1 AMBV-BLS |
| Clallam | #A | | Olympic National Park | 1 AIDV-BLS |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Clallam | #B-O | Clallam County Fire District #2 | All areas included in trauma Response Area Number 2 | 1 AMBV-BLS |
| Clallam | #B | | All other areas in Clallam County | 4 AIDV-BLS |
| Jefferson | #1 | Jefferson County Fire District #1 | The area between Port Ludlow and Port Townsend and Marrowstone Island | 1 AMBV-ALS |
| Jefferson | #2 | | Quilcene area bordered on the west by Olympic National Park, north by Highway 104, to the east at mile marker 3 on Coyle Road | 1 AMBV-BLS<br>1 AMBV-ALS |
| Jefferson | #3 | Jefferson County Fire District #3 | Easternmost part of County including Port Ludlow, a long stretch of Highway 104, and Hood Canal Bridge response | 1 AMBV-ALS |
| Jefferson | #4 | Jefferson County Fire District #4 | Southeastern portion of the County bordering Mason County to the south and Olympic National Park to the east. Includes long stretch of Highway 101 along Hood Canal | 1 AMBV-BLS<br>1 AMBV-ALS |
| Jefferson | #5 | Jefferson County Fire District #5 | Northwestern Portion of County including Discovery Bay inlet. Bordered on the west by Clallam County | 1 AMBV-BLS<br>1 AMBV-ALS |
| Jefferson | #7 | | Northern part of the County including the City of Port Townsend. Bordered on the east by Discovery Bay, and the | 1 AMBV-BLS<br>1 AMBV-ALS |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| | | | west by the Port of Port Townsend. | |
| Jefferson | #8 | | Ranges from the Coyle Peninsula to Quilcene Bay at mile marker 3 on Coyle Road. | 1 AMBV-BLS<br>1 AMBV-ALS |
| Jefferson | #A | | Olympic National Park | 1 AIDV-BLS |
| Jefferson | #B | | Fort Warden – Federal land, South and West of the Strait of Juan de Fuca | |
| Jefferson | #C | | Indian Island – Federal land surrounded by the Straight of Juan de Fuca | |
| Jefferson | #D | | Ft. Flagler – Federal park land, Northern tip of Marrowstone Island | |
| Kitsap | #1 | Central Kitsap Fire and Rescue | The Central portion of the county including the City of Silverdale, bordered on the west by the Hood Canal, the east by Port Orchard Bay, to the South by Mason County and has Subbase Bangor to the north. | 1 AMBV-ALS |
| Kitsap | #1A | Central Kitsap Fire and Rescue | Now to be included in Trauma Response area #1. | 1 AMBV-ALS |
| Kitsap | #2 | Bainbridge Island | Bainbridge Island | 1 AMBV-BLS<br>1 AMBV-ALS |
| Kitsap | #3 | Bremerton Fire | The City of Bremerton | 2 AMBV-BLS<br>1 AMBV-ALS |
| Kitsap | #3A | | Surrounded by Dyes Inlet to the North and East up to and including the City of Bremerton | 2 AMBV-BLS<br>1 AMBV-ALS |
| Kitsap | #5 | Navy Region NW | Navy Base Bangor | 1 AMBV-BLS |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Kitsap | #7 | South Kitsap Fire and Rescue) | The South Eastern Portion of the County bordered on the east by Colvos Passage and the Hood Canal, to the north Dyes Inlet and The City of Bremerton, and to the south and east by Mason County | 1 AMBV-ALS |
| Kitsap | #10 | North Kitsap Fire and Rescue | The northern portion of the County and the Kitsap Peninsula including Kingston, The S'Klallam Indian Nation Reservation, the east half of The Port Madison Indian Reservation and Hansville on the northernmost point of the Kitsap Peninsula | 1 AMBV-ALS |
| Kitsap | #18 | Poulsbo Fire Department | The City of Poulsbo and surrounding areas from Liberty Bay to the Hood Canal on the west | 1 AMBV-ALS |
| Kitsap | #18A | Poulsbo Fire Department | South of Puget Sound, west of Bangor Airforce Base Trauma Response area #5 and South to Mt. View Road. Includes the West portion of Pt. Madison Indian Reservation. Up to and including the Trauma Response area #18 | 1 AMBV-ALS |
| Kitsap | #A | | Keyport Federal Military Base with Puget Sound to the North and East. North of Trauma | |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| | | | Response area #1 and south of #10 | |
| Kitsap | #B | | Department of Natural Resources land | |
| Kitsap | #C | | Department of Natural Resources land | |
| Kitsap | #D | | State Land | |
| Kitsap | #E | | Blake Island, Tribal Land | |
| Mason | #1 | Mason County Fire District #1 | The Hoodsport area, bordered on the West by Olympic National Park and the Lake Cushman area, to the east by the Hood Canal, to the north at Lilliwaup and to the south at Potlatch | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #2 | North Mason Regional Fire Authority | Northeastern portion of the county, bordered on the west by the Hood Canal, to the north and east by Kitsap County. Also covers a portion of 106 along the Hood Canal | 1 AMBV-ALS |
| Mason | #3 | Mason County Fire District #3 | The Grapeview area bordered to the east and south by case inlet, to the north and west by Highway 3 | 1 AMBV-BLS<br>1 AMBV-ALS<br>AIDV-ILS |
| Mason | #4 | Mason County Fire District #4 | The southeastern portion of the county. Bordered on the North by Hammersly Inlet, to the west by the City of Shelton to the south by Thurston County and to the east by Totten Inlet | 1 AMBV-BLS<br>1 AMBV-ALS |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Mason | #5 | Mason County Fire District #5 | The large central portion of the county, bordered to the south by the City of Shelton and Hammersly Inlet. Covers a long portion of Highway 3 and also contains Harstene Island | 1 AMBV-ALS |
| Mason | #6 | | Union area along the Hood Canal to the north and bordered by the Skokomish Tribal Reservation on the west. | 1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #8 | Mason County Fire District #8 | The Tahuya area bordered on 3 sides by the Hood Canal | 1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #9 | Mason County Fire District #9 | Covers the west-central portion of the county, from Potlatch to the southern end of the Skokomish Tribal Reservation. Bordered on the west by Olympic National Forest | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #11 | Mason County Fire District #11 | Northwest of the City of Shelton, includes a portion of Highway 101 and Sanderson Field | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #12 | Mason County Fire District #12 | Matlock area, large southwestern portion of the County. Bordered to the west and south by Grays Harbor County. Also shares border with Olympic National Forest to the North and Northeast | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Mason | #13 | Mason County Fire District #13 | South-central area of the County, southern border to Grays Harbor County, northern at Lost Lake. Small northeastern area borders the City of Shelton | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #16 | | Dayton Area. Borders Shelton to the east. Ends at Mile 1 on airport Road to the north, mile 9 of Shelton-Matlock Road to the west. | 1 AIDV-BLS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #17 | Mason County Fire District #17 | Northwestern area along Highway 101. Borders Jefferson County to the North, Hood Canal to the east, Olympic National Park to the West and Lilliwaup to the south | 1 AIDV-ALS<br>1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #18 | Mason County Fire District #18 | Lake Cushman Area. Surrounded on all sides By Olympic National Park and Forest areas, except small access area which abuts Hoodsport | 1 AMBV-BLS<br>1 AMBV-ALS |
| Mason | #15 | Mason County Fire District #5 | City of Shelton | 1 AIDV-BLS<br>1 AMBV-ALS |
| Mason | #A | | Olympic National Park North of Fire District #12, Surrounding Fire District #18 | 1 AIDV-BLS |
| Mason | #B | | Olympic National Park | |
| Mason | #C | | Department of Natural Resources Land. South of Fire District #6, East of Fire District #9 and North of Fire District #5 | |

| Trauma Response Area by County | | | | |
|---|---|---|---|---|
| County | Trauma Response Area Number | Name of Agency Responding in Trauma Response Area | Description of Trauma Response Area's Geographic Boundaries | Number of Verified Services in the response area |
| Mason | #D | | McNeil Island Prison | |

Interactive Emergency Medical Care Map
https://fortress.wa.gov/doh/eh/maps/EMS/index.html

## APPENDIX 7. Approved Training Programs

| Credential # | Status | Expiration Date | Facility Name | Site City | Site County |
|---|---|---|---|---|---|
| TRNG.ES.60119539-PRO | APPROVED | 05/31/2022 | Clallam County EMS | Port Angeles | Clallam |
| TRNG.ES.60765973-PRO | APPROVED | 05/31/2023 | West Olympic Peninsula EMS Council | Clallam Bay | Clallam |
| TRNG.ES.60101345-PRO | APPROVED | 05/31/2023 | Jefferson County EMS and Trauma Care Council | Port Townsend | Jefferson |
| TRNG.ES.60113452-PRO | APPROVED | 05/31/2023 | Kitsap County EMS and Training Care Council | Silverdale | Kitsap |
| TRNG.ES.60126227-PRO | APPROVED | 05/31/2022 | Mason County EMS and Trauma Care Council | Shelton | Mason |

**Appendix 8. Patient Care Procedures (PCPs)**

# *PATIENT CARE PROCEDURES*

## Northwest Regional Emergency Medical Services & Trauma Care Council

Post Office Box 5179

Bremerton, WA 98312

*Effective: 5/14/15*

REVISED By:
Northwest Region EMS & Trauma Care Council Training Education & Development Committee

***ADOPTED By:***

***Northwest Region EMS & Trauma Care Council***

______________________________________________
Keith Bogues, Chairperson

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## INTRODUCTION

The Northwest Region's Patient Care Procedures are designed to serve as a guide to Medical Program Directors, trauma verified EMS agencies, 9-1-1 centers and EMS personnel as to how and when to activate the Northwest Region's Trauma System. These procedures apply to Clallam, Jefferson, Kitsap and Mason Counties.

The following Regional Patient Care Procedures are intended as an approach toward the rapid treatment of major trauma patients in the Northwest Region.

## OBJECTIVE OF THE TRAUMA SYSTEM

The objective of the Northwest Region EMS & Trauma System is to identify and transport patients, based on medical need, to the most appropriate hospital facility in an expedient manner.

Major trauma patients from the following categories are considered at high risk for morbidity and mortality therefore need immediate transfer or transport to the appropriate Level I or Level II trauma center.

**Central Nervous System Injuries**

Head injury with any of the following:

- Open, penetrating, or depressed skull fracture
- CSF leak
- Severe coma
- Deterioration in Glasgow Coma Score of 2 or more points
- Lateralizing signs
- Unstable spine
- Spinal cord injury

**Chest**

Suspected great vessel or cardiac injuries
Major chest wall injury
Patient who may require positive pressure ventilation

**Pelvis**

Pelvic ring disruption with shock requiring more than 5 units transfusion
Evidence of continued hemorrhage
Compound/open pelvic injury with head injury

**Multiple System Injury**

Severe facial injury with head injury
Chest injury with head injury
Abdominal or pelvic injury with head injury
Burns with head injury

**Specialized Problems**

Burns over 20 percent of the patient's body surface area involving airway
Carbon monoxide poisoning
Barotrauma

**Secondary Deterioration (Late Sequelae)**

Patient requiring mechanical ventilation

Sepsis

Organ system(s) failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation system(s)

Osteomyelitis

EMT's and/or Paramedics shall use the State of Washington's Prehospital Trauma Triage (Destination) Procedures [Addendum 1] and be knowledgeable of the steps required to activate the Trauma System. In general, major trauma patients who meet the major trauma criteria listed above should be immediately transported or transferred to Harborview Medical Center in Seattle.

## ACTIVATION OF TRAUMA SYSTEM

Upon evaluation of the patient(s) and determination of the need for a trauma team, the Paramedic, EMT, or appropriate medical personnel shall contact medical control at the nearest or most appropriate designated trauma center and request the activation of the Trauma System.

Once identified, trauma patients should be treated, transported and trauma data collected as quickly as possible. In all cases, the goal of the Northwest Region Trauma System is to have all trauma patients delivered to the most appropriate medical receiving facility within 60 minutes from the time of arrival of EMS on scene of the trauma incident.

## PATIENT CARE PROCEDURE – Dispatch

### *Standard*

Provide timely care to all trauma patients so major trauma patients are provided appropriate medical treatment within the "golden hour" of trauma treatment.

As outlined in the Regional Trauma System Plan, "Dispatch Time" is defined as "the time from when the call is received by dispatch to the time the agency is notified" (WAC 246-976-010) [See Definitions].

As outlined in the Regional Trauma System Plan, "Response Time" is measured from "the time the call is received by the trauma verified service to the time of arrival on-scene".

For major trauma patients, the following time guidelines are to be used (measured from the time the call is received by the trauma verified service to the time of arrival on-scene):

First Response (80 percent of the time)

| | |
|---|---|
| Urban Areas | 8 minutes |
| Suburban Areas | 15 minutes |
| Rural/rural-suburban | 45 minutes |
| Wilderness/Marine/Frontier | As soon as possible |

Transport Response Time (80 percent of the time)

| | |
|---|---|
| Urban Areas | 10 minutes |
| Suburban Areas | 20 minutes |
| Rural/rural-suburban | 45 minutes |
| Wilderness/Marine/Frontier | As soon as possible |

### *Procedure*

A verified licensed ambulance and/or aid service shall be dispatched to all emergency and trauma incidents in the Northwest Region.

The highest level trauma verified ambulance in the response area should be dispatched to transport all known or suspected major trauma patients who meet, or are suspected to meet, the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1].

## PATIENT CARE PROCEDURE – Response Times

### *Standard*

All verified licensed ambulance and aid services shall respond to emergency medical and trauma incidents in a timely manner in accordance with the Northwest Region Plan and State WAC 246-976-390(10) [Addendum 4] and WAC 246-976-390(11) - Verification of Trauma Care Services [Addendum 5].

The Northwest Region EMS Council has identified the following urban, suburban, rural-suburban, rural and wilderness/marine/frontier areas response times in the Northwest Region Trauma Plan.

| First Response (80 percent of the time) | |
|---|---|
| Urban Areas | 8 minutes |
| Suburban Areas | 15 minutes |
| Rural/rural-suburban | 45 minutes |
| Wilderness/Marine/Frontier | As soon as possible |

| Transport Response Time (80 percent of the time) | |
|---|---|
| Urban Areas | 10 minutes |
| Suburban Areas | 20 minutes |
| Rural/rural-suburban | 45 minutes |
| Wilderness/Marine/Frontier | As soon as possible |

### *Procedure*

In all major trauma cases, the Golden Hour shall be a dispatch/response/transport goal whenever possible.

A trauma verified service should proceed in an emergency mode to all suspected major trauma incidents until which time they have been advised of injury status to the patients involved.

## PATIENT CARE PROCEDURE – Triage and Transport

### *Standard*

All verified licensed ambulance/transport and aid services shall comply with the Northwest Region EMS & Trauma System Plan, Simple Triage and Rapid Treatment (START Triage) Protocol [Appendix 6] and the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1] and transport trauma patients to the most appropriate designated trauma center.

When a destination facility is placed on divert status, field personnel shall transport to the next closest – equal or higher designated trauma facility.

### *Procedure*

The first trauma care providing agency to determine that the patient needs definitive medical care or meets the State of Washington Trauma Triage (Destination) Procedures [Addendum 1] criteria, shall ensure immediate contact with a Level I or Level II trauma designated facility or the agency's on-line medical control.

The receiving facility must be provided with the following information, as outlined in the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1]:

1. Identification of the EMS agency;
2. Patient's age, if known (or approximate age);
3. Patient's chief complaint(s) or problem;
4. Identification of the biomechanics and anatomy of the injury;
5. Basic vital signs (palpable pulse, where palpable, and rate of respiration;
6. Level of consciousness (Glasgow Coma Score or other means);
7. Other factors that require consultation with the base station;
8. Number of patients (if known); and
9. Estimated time of transport of the patient(s) to the nearest and highest level of trauma designated facility.
10. Estimated time of transport of the patient(s) from the scene to the nearest Level I or II facility

The first EMS person to determine that a patient meets the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1].

An air ambulance transport should be considered for transport by agencies in the Northwest Region when transport by ground will be greater than 30 minutes, unless weather conditions do not allow for such use, as outlined in the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1].

## PATIENT CARE PROCEDURE – Transport guidelines

### *Standard*

All EMS Agencies should follow their Medical Program Director's patient care protocols and /or guidelines for the care and transport of medical and non-major trauma patients. If it is unclear as to where a medical or non-major trauma patient should be transported, contact medical control at your nearest resource hospital for directions; otherwise follow off-line medical control of patients as outlined in your standing orders, patient care protocols, and/or guidelines provided by your Medical Program Director. For the care and transport of identified Major trauma patients EMS Agencies should use the most current State of Washington Prehospital Trauma Triage (Destination) Procedures according to the Department of Health [Addendum 1].

### *Procedure*

MPD's, in the development of their patient care protocols and/or guidelines for the care and transport of medical and non-major trauma patients, who do not meet State of Washington Prehospital trauma Triage (Destination) Procedures shall consider:

A. Patient's desire or choice of medical facility within the region as to where they want to be transported and/or treated. Or, In the case of an unconscious patient, the wishes of the patient's family or personal physician.
B. The type of treatment and the ability of a receiving hospital to treat such medical or non-major trauma (i.e., high risk OB patients, potential ICU/CCU patients, unstable co-morbid medical patients, etc.).
C. Level, severity, and type of injuries.
D. Ability of the receiving hospital to adequately treat the medical or non-major trauma patient.

In all cases, unless proper medical care and resources dictate otherwise, the choice of the patient is paramount in the development of standing orders, patient care protocols, and/or guidelines for EMS transport agencies.

### *DATA COLLECTION*

Trauma verified ambulance and aid services shall collect and leave documentation in the form of Northwest Region approved MIR forms or approved electronic computer submission to the Hospital the patient was transported.

## PATIENT CARE PROCEDURE – Interfacility Transport

### *Standard*

All designated trauma facilities shall have transfer agreements for the identification and transfer of trauma patients.

All interfacility transfers shall be in compliance with current OBRA/COBRA and EMTALA regulations and must be consistent with RCW 70.170.060(2) [Addendum 7].

### *Procedure*

This is part of the Trauma Center Designation process and is addressed in the designation application process. The Northwest Region will use the procedures outlined by each facility in their designation application.

### Interfacility transfer of A major Trauma Patient

When a major trauma patient must be transferred from a lower level Trauma Center to a higher level center (Level IV to Level I, for example), the transferring physician must contact the receiving physician who must accept the transfer of the patient prior to the patient leaving the sending facility.

The transferring physician and facility will ensure the appropriate level of care during transport of the major trauma patient to the receiving Trauma Center.

The receiving facility must accept or be available to accept the major trauma patient prior to the patient leaving the sending facility.

The receiving facility will be given the following information on the patient by fax, phone, or other appropriate means:

a. Brief History
b. Pertinent physical
c. Summary of any treatment done prior to the transfer
d. Response to therapy and current condition

All appropriate documentation must be available at the receiving facility upon arrival of the patient to the receiving facility (it may be sent with the patient, faxed to the hospital, or relayed by other appropriate means).

The transferring physician's orders shall be followed during transport. Should the patient's condition change during transport the pre-determined on-line or off-line medical control for the transporting agency shall be utilized.

Further orders may be given by the receiving physician.

MPD approved protocols should be followed during transport, unless direct medical orders by the sending or receiving physician are given to the contrary.

All ground interfacility transports must be conducted by a trauma-verified service for trauma system patients.

## PATIENT CARE PROCEDURE – Transport of Patients Outside of Base Area

### *Standard*

All verified licensed ambulance and aid services shall comply with the Northwest Region EMS & Trauma System Plan and the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1] and transport trauma patients to the most appropriate designated trauma center or facility.

### *Procedure*

Patients transferred out of any local base coverage area (from either the base hospital or the field) are initially the responsibility of local on-line medical control. Prehospital personnel will follow local prehospital protocols. Initial orders, which are consistent with local prehospital protocols, will be obtained from base station on-line medical control.

When the transport service crosses into destination jurisdiction, the destination on-line medical control shall be contacted and given the following information:

1. Brief history
2. Pertinent physical findings
3. Summary of treatment (per protocols and per orders from base medical control)
4. Response to treatment
5. Current condition

The destination medical control physician may add further orders provided they are within the capabilities of the transport personnel.

The nearest trauma center base station will be contacted during the transport should the patient'' condition deteriorate and/or assistance is needed. The transport unit may divert to the closest trauma center as dictated by the patient's condition.

## PATIENT CARE PROCEDURE – Activation of Air Ambulance for Field Response to Major Trauma

### *Standard*

All verified licensed ambulance and aid services shall comply with the Northwest Region EMS & Trauma System Plan and the State of Washington Prehospital Trauma Triage (Destination) Procedures as defined in WAC 246-976-390 - and transport trauma patients to the most appropriate designated trauma center or facility.

### *Procedure*

The decision to activate air ambulance service for field response to major trauma shall be made by the highest certified responder from the scene with on-line medical control consultation. Where Incident Command System (ICS) is used, the commander shall be an integral part of this process.

Air ambulance services requested to respond into the Northwest Region will follow their policies for accepting a field mission and their Rotary Wing Primary Service Area criteria

## REGIONAL CARE OF THE CRITICALLY ILL AND INJURED CHILD - Triage and Transfer Guidelines

(Adopted by the Governor's EMS & Trauma Care Steering Committee on July 19, 1995)

Consideration should be given to early transfer of a child to the regional pediatric trauma center when required surgical or medical subspecialty care of resources are unavailable. These include, but are not limited to the following:

1. Hemodynamically stable children with documented visceral injury being considered for "observational" management. Although the efficacy of this approach in selected cases has been well documented, two significant caveats always apply:
    a) Hemodynamic instability mandates immediate operative intervention, and
    b) Non-operative care is safe only in an environment that provides both close clinical observation by a surgeon experienced in the management of childhood trauma and immediately available operative care.
2. Children with abnormal mental status. In all but the infant, outcome from closed head injury has been shown to be significantly better for the child than for the adult. Although the quality and timeliness of initial resuscitation are the most important determinants of outcome from brain injury, continued comprehensive management in specialized units with multi-disciplinary pediatric critical care teams may provide a more rapid and complete recovery.
3. Infants and small children. Severely injured infants and small children are the most vulnerable and, frequently, the least stable trauma victims, because they require the special resources and environment of a regional pediatric trauma center, transfer should occur as soon as safely feasible.
4. Children with injuries requiring complex or extensive reconstruction. These services are traditionally most available in hospitals capable of functioning as a regional pediatric trauma center. It is especially important that children with impairments requiring long-term follow-up and supportive care have this provided or at last coordinated by the regional pediatric trauma center. Longitudinal follow-up of the injury-related disability is an essential requirement of the regional pediatric trauma center's trauma registry.
5. Children with polysystem trauma requiring organ system support. This is especially important for those patients requiring ventilatory, cardiovascular, renal, or nutritional support. Because these problems usually occur synchronously and require precise interdisciplinary coordination, they are best managed in comprehensive facilities such as regional pediatric trauma centers.

After airway management and primary resuscitation, consider the following points for transfer guidelines. A collaborative discussion is required between the transferring and receiving attending physicians.

1. Altered level of consciousness, mental status or declining trauma score (after primary resuscitation and airway management);
2. Head injury requiring CT Scan and/or neurosurgical consultation, for example: with lateralizing signs, seizures, loss of consciousness;
3. Major thoracic injury, e.g.: hemothorax, pulmonary contusion, possible great vessel injury, cardiac tramponade, flail chest;
4. Inability to evaluate abdomen due to mental status or lack of resources such as CT or peritoneal lavage;
5. Suspicion of foreign body in lower airway or main stem bronchi;
6. Unstable spinal fracture, suspected or actual spinal cord injury;
7. Primary accidental hypothermia with core temperature of 32 degrees C or less; or hypothermia with multi-system injury and core temperature of 34 degrees C or less;
8. High risk fractures such as: pelvic fracture, long bone injuries with neurovascular involvement (compromise);
9. Significant penetrating injuries to head, neck, thorax, abdomen or pelvis;
10. Need for mechanical ventilation;
11. Evidence of onset of organ failure, for example: acute respiratory distress syndrome, cardiac, renal or hepatic failure;
12. Cardiac dysrhythmias, cardiac pacing, superventricular tachycardia, or continuous infusion of one or more inotropic or cardiovascular agents, need for invasive monitoring;
13. Near drowning or asphyxiation with deteriorating mental status or progressive respiratory distress;
14. Burns of greater than 15% of the body (20% of age 10 or greater), 2nd degree or greater involving:
    - a. The face, mouth and throat;
    - b. Singed nasal hair;
    - c. Brassy or sooty cough;
    - d. Deep or excessive burns of the hands, feet, joints and/or perineum;
    - e. Electrical injury (including lightening); and/or
    - f. Chemical burns with threat of functional or cosmetic compromise.

    Should be transferred to a Regional Burn Center.

Referral to these centers must be protocol-driven and continuously monitored by the quality improvement process. Access to such care must be expeditious and must reflect ONLY medical need.

Adopted from: Resources for Equal Care of the Injured Patient: 1993

Committee on Trauma: American College of Surgeons

# 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.

# Washington State Trauma Triage Destination Procedures

**STEP 1**

**Measure Vital Signs & Level Of Consciousness**

| | |
|---|---|
| Glasgow Coma Scale | < 13 or |
| Systolic Blood Pressure | < 90 mmHg |
| Respiratory Rate | <10 or >29 per minute or need for Ventilator support (<20/min in infant aged < 1 year) |

**YES** → Take patient to the system's* highest appropriate level Trauma Center within 30 minutes transport time (Air or Ground)

**No** ↓

**STEP 2**

**Assess Anatomy of Injury**

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
- Chest wall instability or deformity (e.g., flail chest)
- Two or more proximal long bone fractures
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

**YES** → Take patient to the system's* highest appropriate level Trauma Center within 30 minutes transport time (Air or Ground)

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

**No** ↓

**STEP 3**

**Assess Mechanism of Injury & Evidence of High-Energy Impact**

- **Falls**
  - -Adults: > 20 ft. (1 story = 10 ft.)
  - -Children: ≥10 ft. or 2-3 times height of child
- **High-Risk auto crash**
  - -Intrusion, including roof >12 inches occupant site; >18 inches any site
  - -Ejection (partial or complete) from automobile
  - -Death in same passenger compartment
  - -Vehicle telemetry data consistent with a high risk injury
- **Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact**
- **Motorcycle crash > 20 mph**

**YES** → Transport to closest appropriate trauma center within 30 minutes transport time (Air or Ground), which, depending upon the defined trauma system, need not be the highest level trauma center

**No** ↓

**STEP 4**

**Assess Special Patient or System Considerations**

- **Older Adults**
  - -Risk of injury or death after age 55 years
  - -Systolic BP < 110 may represent shock after age 65
  - -Low impact mechanisms (e.g. ground level ) fall may result in severe injury
- **Children**
  - -Should be triaged preferentially to pediatric capable trauma center
- **Anticoagulants and bleeding disorders**
  - -Patients with head injury are at high risk for rapid deterioration
- **Burns**
  - -Without other trauma mechanism, triage to burn facility
- **Pregnancy > 20 weeks**
- **EMS provider judgment**

**YES** → Contact medical control and consider transport to a trauma center or a specific resource hospital

**NO** → Transport according to local protocol & Regional PCP

**When in Doubt, Transport to a Trauma Center!**

http://www.doh.wa.gov/Portals/1/Documents/Pubs/346050.pdf

# 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 ≥ 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: ≥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.
   - ☐ ≥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 ≥ 0.5 mm (if available): ST depression ≥ 0.5 mm is significant; transient ST elevation ≥ 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

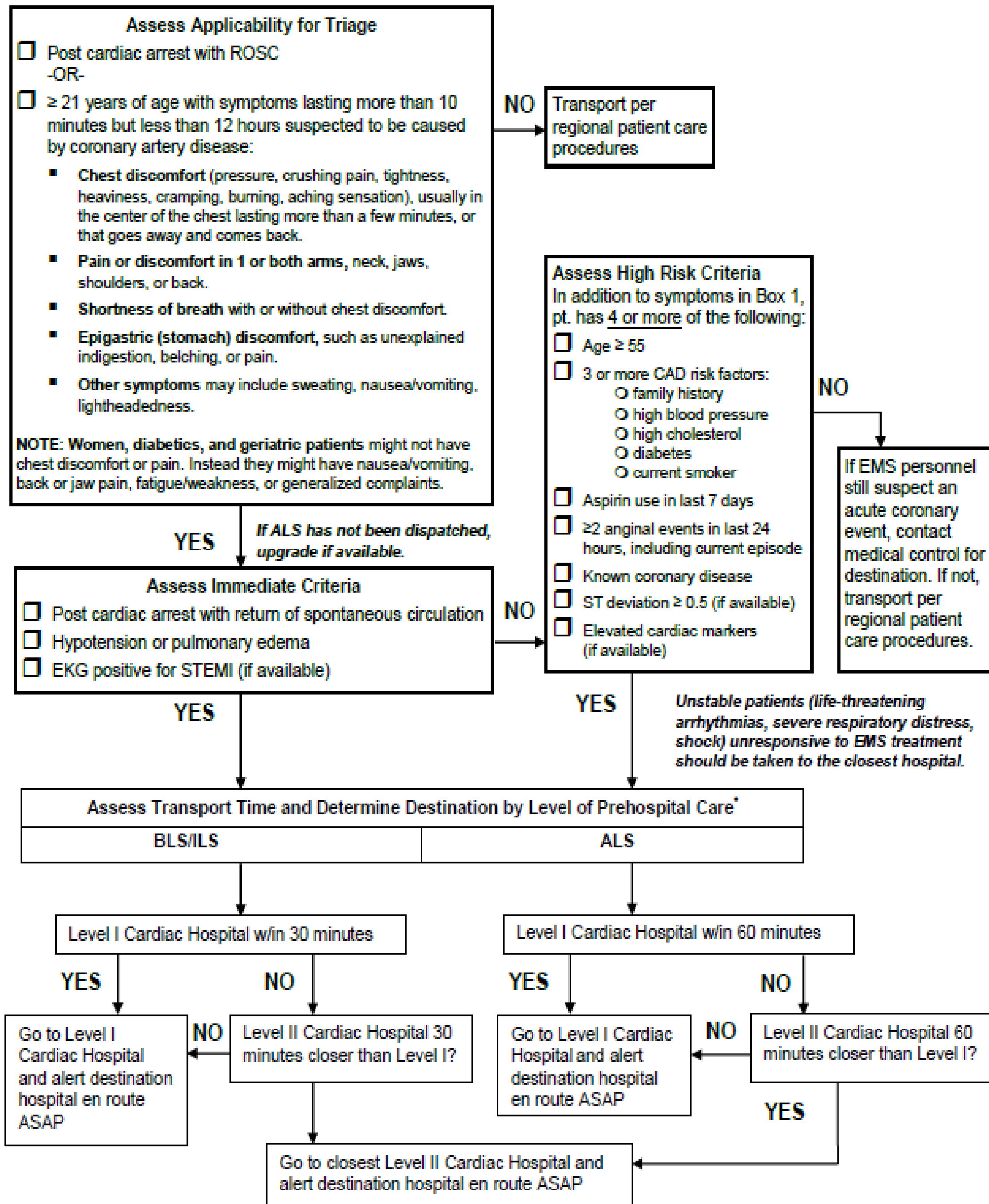
**NOTE:** We recommend ALS use a fibrinolytic checklist to determine if a patient is ineligible for fibrinolysis. If ineligible, transport to closest Level I hospital even if it's greater than 60 minutes or rendezvous with air transport.

## 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.

Washington State Department of Health

# 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.**

April 2011

https://www.doh.wa.gov/Portals/1/Documents/Pubs/530182.pdf

## State of Washington
## Prehospital Stroke Triage Destination Procedure

**STEP 1: Assess Likelihood of Stroke**

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

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

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

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

***If FAST negative, transport per regional/county operating procedures***

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

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

**STEP 4: Determine Destination: Time Last Known Well + Stroke Severity Score** - ***See Back Page***

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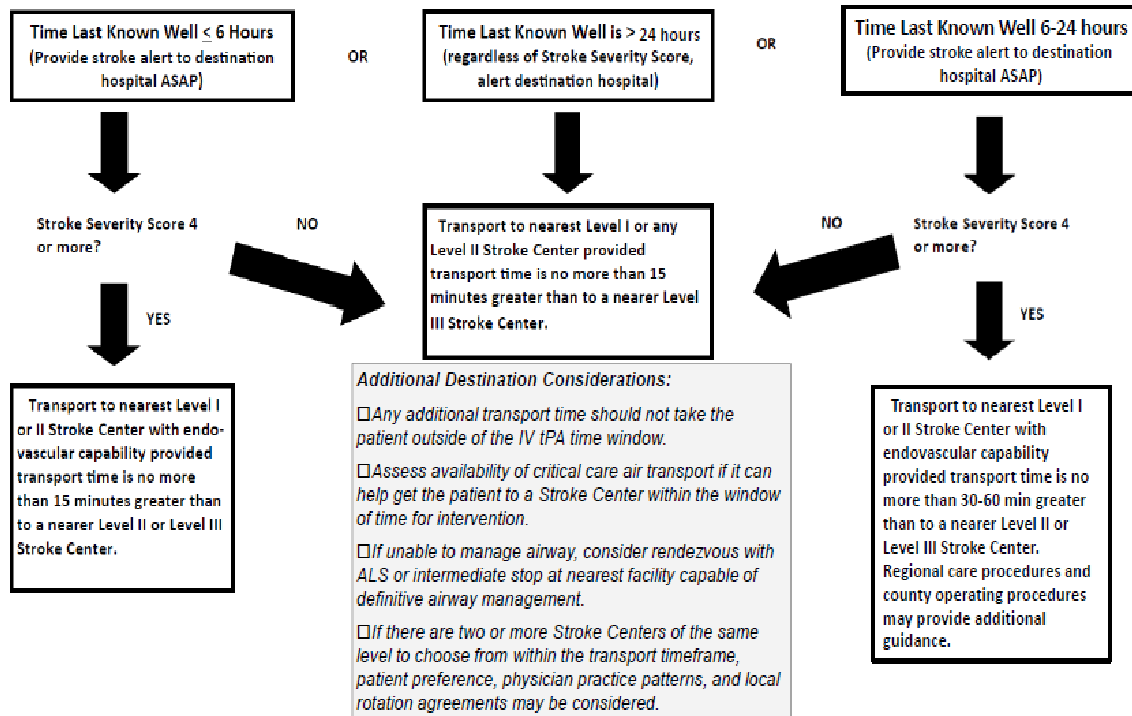

The purpose of the Prehospital Stroke Triage and Destination Procedure is to identify stroke patients in the field and take them to the most appropriate hospital, which might not be the nearest hospital. Stroke treatment is time-critical – the sooner patients are treated, the better their chances of survival and recovering function.
For strokes caused by a blocked blood vessel in the brain (ischemic, the majority of strokes), clot-busting medication (tPA) must be administered within 4.5 hours from the time the patient was last known well, a treatment that can be given at WA DOH Level 1, 2 or 3 stroke centers (for a list of categorized hospitals, please click here).
If a patient presents to EMS with a severe stroke, they are more likely to have blockage of a large vessel and can benefit from mechanical clot retrieval (thrombectomy). Thrombectomy must begin by 24 hours since last known well, and is a more complex intervention, only available in Level I and a small number of Level II stroke centers.
There are 3 key elements to determine the appropriate destination hospital:
FAST stroke screen to identify a patient with a high probability of stroke.
Stroke Severity Score to determine if a patient meets criteria for "severe" stroke.
Time since Last Known Well (LKW) which helps determine eligibility for tPA and thrombectomy.

STEPS to determine destination:
Do a FAST Stroke Screen Assessment: (Facial droop, Arm drift, Speech changes, Time since LKW) is a simple way to tell if someone might be having a stroke. If FAST is negative, stroke is less likely, and standard destination procedures apply. If FAST is positive (face or arms or speech is abnormal), it's likely the patient is having a stroke and the EMS provider moves on to assessing stroke severity.
Assess severity: The stroke severity assessment scores the FAST stroke screen. Patients get points for deficits:
Facial droop gets 1 point if present, 0 points if absent;
Arm drift (have patient hold arms up in air) gets 2 points if an arm falls rapidly, 1 point if slowly drifts down and 0 points if the arms stay steady;
Grip strength gets 2 points if no real effort can be made, 1 point if grip is clearly there but weak, and 0 points if grips seem of full strength.
Add up the points: A score > 4 is interpreted as "severe."
Determine time since LKW: It is important to use the LKW time as opposed to when symptoms were first noticed. If a patient woke up in the morning with symptoms and was well when they went to bed, time LKW is the time they went to bed. If stroke symptoms occur when the patient is awake, LKW could be the same time the symptoms started if the patient or a bystander noticed the onset. LKW time could also be prior to symptoms starting if a patient delays reporting symptoms or, for example, someone discovers a patient with symptoms but saw them well 2 hours prior.

Determine Destination:
Time since LKW < 6 hours and “Severe” (score > 4): This group benefits from preferential transport to a thrombectomy stroke center. The patient should be taken directly to the nearest thrombectomy stroke center provided it is no more than 15 extra minutes travel compared to the nearest stroke center.
Time since LKW is > 24 hours (regardless of severity score): These patients should be taken to nearest Level I or II stroke center provided it is no more than 15 minutes greater than to a nearer Level III stroke center.
Time since LKW 6-24 hours but NOT “Severe”: These patients should be taken directly to the nearest Level I or Level II stroke center provided it is no more than 15 extra minutes travel compared to a nearer Level 3 stroke center.

Time since LKW 6-24 hours AND “Severe”: Transport to nearest Level I or II Stroke Center with endovascular capability provided transport time is no more than 30-60 min greater than to a nearer Level II or Level III Stroke Center. Regional care procedures and county operating procedures may provide additional guidance.
Notification: Immediately notify the destination hospital of incoming stroke. If the patient is within 6 hours LKW, call a stroke alert according to county operating procedures or locally determined protocol.
Document: key medical history, medication list and next of kin phone contacts; time on scene; FAST assessment and results (or reason why not); blood glucose level; LKW time (including unknown); and whether the hospital was notified from the field and if it was a stroke alert.

https://www.doh.wa.gov/Portals/1/Documents/Pubs/530182.pdf

**Appendix 9.**

A. County Operating Procedures (COPs) - website links to the individual COP's can be found below:

Mason County - http://www.masoncountyems.com/
Clallam County - https://www.nwrems.org/clallam
Jefferson County - https://www.nwrems.org/jefferson
Kitsap County - http://www.kitsapcountyems.org/
West Olympic Peninsula - https://www.nwrems.org/west-olympic-peninsula

B: Non-fatal Injury Hospitalization

https://www.doh.wa.gov/Portals/1/Documents/Pubs/689149.pdf

Fatal Injuries Data

https://www.doh.wa.gov/Portals/1/Documents/8390/140-205-NorthwestRegionEMST-InjuryDataTableFatality(1).pdf

https://www.doh.wa.gov/Portals/1/Documents/Pubs/689147.pdf