

**Central Region EMS & Trauma Care System Plan
July 2009 - June 2012**



**Submitted by
Central Region EMS and Trauma Care Council
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Executive Summary

The Central Region has a mature and robust EMS system dating back to 1969. In planning for EMS and trauma services for Central Region (King County), it is important to consider the role King County occupies and the forces which affect it across the jurisdictional boundaries of Kitsap, Pierce & Snohomish counties. King County holds 52% (1.861M/1.721M) of the population in the four-county Puget Sound area and 67% (1.176M/.597M) of the jobs. Workers from Kitsap, Pierce, and Snohomish counties, combined with an aging population and financial limitations, continue to stress the strength of the EMS system in the region. Hospital diversions are common, leading to increased out-of-service times for ambulances, and if not remedied, will ultimately erode the high-quality of emergency medical services currently offered.

Vision Statement

Central Region has an efficient, well-coordinated statewide EMS & Trauma System which reduces death, disability, human suffering and costs due to injury and medical emergencies.

Mission Statement

The Central Region EMS and Trauma Care Council's mission is to provide leadership and coordination of EMS community partners to reduce injury and to ensure provision of high-quality emergency medical and trauma care.

System Leadership

Many public and private agencies are involved in the planning and evaluation of emergency medical care in the Region. Most EMS stakeholders are represented on the Regional Council. However, gap analysis of the leadership component of this Plan indicated that some stakeholders are absent from the planning process and that communication between Regional Council representatives and their affiliated agency administrators is sometimes lacking. Key stakeholders need to be informed of issues and actively participate in resolution of these issues in order to ensure the success of the EMS system planning in the Region.

System Development

The King County EMS Division of Public Health Seattle & King County is the lead agency for coordination, planning, funding, and development of the prehospital component of the EMS system. The Central Region EMS & Trauma Care Council is the lead agency in hospital EMS planning and provides system-wide planning of the prehospital and hospital components. Regional Council membership and EMS partner agency representatives participate on a number of regional and state EMS planning committees. Maintenance of this cooperative planning process is needed to ensure that the EMS community remains informed and involved in resolving issues surrounding the delivery of emergency medical care in the Region. Additional methods of distributing information needs to be developed and implemented in order to inform the regional EMS system on emerging issues identified by the Governor's Steering Committee.

System Public Information & Education

Currently, public information and education efforts in the region are conducted by individual agencies and are agency specific. There exists no integrated public message regarding the EMS system in the region; how it functions, how it is funded, how and when to use it, or how the health of the EMS system affects the health of the population it serves.

In a world of increased competition for scarce funding, it is imperative to the health of the EMS system and to the health of the populace that this message be received and understood. The Regional Council and EMS stakeholders need to develop and implement an EMS publication education campaign.

System Finance

Hospital and prehospital trauma services in the Region currently receive adequate funding but are at risk. Trauma rehabilitation services, primary care, and specialty care are under funded and are often unavailable. Prevention, early diagnosis, and treatment saves money, yet funding of healthcare continues to decline. Regional EMS stakeholders need to remain involved in and participate in regional and State EMS system financial planning efforts to ensure stable funding of the EMS and trauma system and access to specialty medical care.

Injury Prevention and Control

Central Region public and private agencies offer a wide range of injury prevention and education programs. While the Region has access to injury data, a definitive means of proving the effectiveness of many of the existing injury programs is not available. The region needs to develop and implement a process to identify and support injury prevention programs which use evidence based, and best-practice interventions.

Prehospital Care

The EMS Division of Public Health – Seattle & King County is responsible for development and provision of prehospital training and oversight of the prehospital recertification process. The Division is also responsible for collecting and managing EMS data for quality assurance activities and for the development of new service options. The Division facilitates development of six-year Medic One/EMS strategic plans to provide prehospital services to the Region, and as such, needs to be appended to this Central Region EMS & Trauma Care System Plan upon final approval by the King County Council.

Prehospital emergency medical services in King County are among the Nation's most highly regarded. Research and evaluation of prehospital data by individual EMS agencies, the Medical Program Director, and the King County EMS Division are important to the success of this system. This system-wide research and data evaluation component guides the development of prehospital training programs, prehospital protocols and guidelines, and the need & distribution of prehospital services. King County EMS prehospital agencies are involved in regional and statewide planning efforts through participation on regional committees and state technical advisory committees. Maintenance of these processes is needed.

Acute Hospital

Central Region hospital resources provide health care to 1.86 million residents of King County as well as a large number of workers from neighboring counties. There are fifteen acute care hospitals in the Region. Nine hospitals are designated trauma facilities including Harborview Medical Center. Harborview Medical Center is the sole level 1 facility for the state and serves as the major referral destination for patients from Idaho, Alaska, and Montana. Central Region has the lowest bed capacity in the State. The burden of one-on-one care for boarded psychiatric patients strains the Region's limited emergency department capacity. Hospital diversion is common in Central Region indicating lack of surge capacity.

The Region needs to address and resolve critical issues impacting hospital care and determine if current trauma designated services are adequate.

Pediatric Care

Central Region has a robust hospital pediatric care system provided by Harborview Medical Center/University of Washington Medical Center & Children's Hospital and Regional Medical Center. These pediatric acute care resources serve all of Washington State, Alaska, Montana and Idaho. Because of the availability of pediatric acute care hospitals in the Region, staff at some hospitals has limited exposure to pediatric emergencies which may place pediatric patients at risk in a disaster when pediatric focused resources are not available. Regional healthcare stakeholders need to develop and implement a plan to address this issue. In addition, the Region needs to be aware of newly developed pediatric guidelines and incorporate those guidelines into patient care protocols and procedures.

Trauma Rehabilitation

Currently Children's Hospital and Regional Medical Center is the Region's level I pediatric rehabilitation facility. Harborview Medical Center is the Region's level I adult rehabilitation facility and Northwest Medical Center is the Region's level II adult rehabilitation facility. Trauma Rehabilitation facilities in the Central Region have never met the recommended min/max number of services. Regional rehabilitation stakeholders need to determine if present resources are adequate.

System Evaluation

In the Central Region, prehospital data is collected and managed by the King County EMS Division of Public Health Seattle & King County. The Division uses this data for long-term quality program evaluation and for the development of new service options. The EMS Division is responsible for uploading prehospital WEMIS data to the Washington State Trauma Registry.

Hospital system performance data is collected by WATrac and evaluated by the Central Region Hospital Committee for hospital system quality improvement. Individual hospitals provide patient data directly to the state Trauma Registry. The Regional Council contracts annually with HIPRC (Harborview Injury Prevention and Research Center) to manage trauma patient data for the Region's trauma quality assurance/quality improvement program. In fiscal year 2008, the Regional Council paid \$95,169 for this service. HIPRC obtains regional trauma patient data through a data sharing agreement with the Washington State Department of Health, Office of Community Health Services. Trauma rehabilitation data is not collected.

Prehospital, hospital and rehabilitation data needs to be available for trauma system quality assurance activities and to accurately make recommendations for number & level of services. It is equally important and necessary that regional stakeholders be involved in the development of standardized outcomes measurements through participation in appropriate state committees and workgroups.

System Leadership

The Central Region EMS & Trauma Care Council was established by the Washington EMS and Trauma Care System Act of 1990, RCW 70.168.100 to RCW 70.168.130 and WAC 246-976-960. As mandated by the Act, the Central Region EMS and Trauma Care Council’s mission is to provide leadership and coordination of EMS community partners to reduce injury and to ensure provision of high-quality emergency medical and trauma care. Many public and private agencies are involved in the planning and evaluation of emergency medical care in the Region including Public Health – Seattle & King County, EMS Division, hospitals, public and private prehospital agencies, E-911 dispatch, county and city government, emergency management, and law enforcement. While most of these agencies are represented on the Regional Council, dispatch, emergency management and law enforcement positions historically have remained unfilled. The consensus of the Regional Council is that these unrepresented agencies, especially law enforcement, find attendance at the Regional Council and/or Hospital Committee meetings to be of no value. Further discussion at Regional Council and Hospital Sub-committee meetings indicate that communication between some agency representatives and their respective agency Administrators may be lacking. In addition, review of Regional Council and Hospital Committee meeting attendance records have shown that some agency representatives are frequently absent.

It is the desire of the Regional Council to be an all inclusive forum for planning and evaluation of the emergency medical service system in the Region. Key stakeholders need to be informed of issues and actively participate in resolution of these issues in order to ensure the success of the EMS system planning in the Region.

Goal 1	
There are viable, active regional EMS and trauma care councils comprised of multi-disciplinary, EMS and trauma system representatives	
<p style="text-align: center;">Objective 1</p> <p>By January 2010, the Regional Council will develop and implement processes that encourage representation of key stakeholders necessary to advise the Council and sub-committees.</p>	<p>Strategy 1: By October 2009, the Regional Council and/or Regional Council Board will develop and implement a process to determine which stakeholders, in addition to Regional Council appointed members, need to be represented at regional meetings.</p>
	<p>Strategy 2: By November 2009, the Regional Council Board will develop a method of notifying identified stakeholders of the need to be represented at specific regional meetings.</p>
	<p>Strategy 3: By November, 2009, the Regional Council will review the Regional Council Bylaws and determine if a member attendance requirement should be added.</p>
	<p>Strategy 4: By January 2010, the Regional Council Board will develop and implement a process to review meeting attendance records and notify members of attendance requirements if established in the Bylaws.</p>

Goal 2
Multi-disciplinary coalitions of private/public health care providers are fully engaged in regional and local EMS and trauma systems.

<p align="center">Objective 1</p> <p>By September 2009, the Regional Council will implement and maintain information sharing practices with other EMS agencies and committees that are involved in region-wide EMS system issues & planning.</p>	<p>Strategy 1: By August 2009 Regional Council staff will ensure that EMS stakeholders have access to Regional Council and sub-committee meeting dates through email alert and by annual meeting date calendars to the Regional Council Website. .</p>
	<p>Strategy 2: By September 2009, Regional Council staff will email meeting agendas and approved meeting minutes in advance of each meeting date to the membership and meeting attendees.</p>
	<p>Strategy 3: By September 2009, the Regional Council staff will post meeting agendas and approved minutes on the Regional website in advance of each meeting date.</p>
	<p>Strategy 4: By September 2009, the Regional Council or subcommittee will maintain hospital &/or prehospital representation at King County EMS Advisory Council, Medical Directors Committee meetings, Region 6 Healthcare Coalition, EMS & Trauma Steering Committee, associated Technical Advisory Committees and workgroups.</p>
	<p>Strategy 5: By September 2009, Regional Council and subcommittee members who participate in related coalitions and meeting will provide relevant reports and presentations to Regional Council and sub-Committees meetings.</p>
	<p>Strategy 6: By September 2009, the Regional Council staff will maintain links to other agency websites on the Regional Council website.</p>
<p align="center">Objective 2</p> <p>By December 2009, the Regional Council will provide a communications tool for agency representatives to use to keep their agency’s administrators informed on Regional Council activities</p>	<p>Strategy 1: By October 2009, the Regional Council will develop a tool for agency representatives to use to routinely inform their administrators on Regional Council activity.</p>
	<p>Strategy 2: By December 2009, the Regional Council will provide the communications tool to agency representatives for use in keeping their agency’s administrators informed on Regional Council activities.</p>

Goal 3
Each of the services under the EMS and Trauma System has active, well trained and supported leadership.

<p align="center">Objective 1</p> <p>By January 2010, the Regional Council Board will identify & implement a targeted EMS system leadership training plan.</p>	<p>Strategy 1: By October 2009, the Regional Council Board will identify EMS Leadership audience and training needed.</p>
	<p>Strategy 2: By January 2010, the Regional Council will offer training tools & training evaluation to the targeted EMS Leadership audience.</p>

System Development

The Central Region is a resource rich single county region (King County). King County holds 52% (1.861M/1.721M) of the population in the four-county Puget Sound area and 67% (1.176M/.597M) of the jobs. The Region is served by fifteen hospitals, six paramedic agencies, thirty-one fire department based EMS agencies, five private ambulance providers, and three dispatch agencies. The King County EMS Division of Public Health Seattle & King County has been the lead agency for coordination, planning, funding and development of the prehospital component of the EMS system since 1973. The Central Region EMS & Trauma Care Council, which was established in 1990 by RCW 70.168, is the lead agency in hospital EMS planning and provides system-wide planning between the prehospital component and hospital EMS services.

Regional Council membership and EMS partner agency representatives participate on a number of regional, and state EMS planning committees, presenting plans, ideas, and issues for discussion; forming a “crosswalk” between the various EMS planning groups. The chart below outlines each regional committee, coalition, department, and council that is involved in the development of each component of the regional EMS system. Through these connections, the EMS system remains informed and involved in solving issues that threaten to diminish the high-level of EMS care that King County residents and visitors currently rely upon. Maintenance of this cooperative planning process is needed to ensure that the EMS community remains informed and involved in solving issues surrounding the delivery of emergency medical care in the Region. Additional methods of distributing information needs to be developed and implemented in order to inform the regional EMS system on emerging issues identified by the Governor’s Steering Committee.

Injury Prevention	E-911 Public Access	Prehospital Patient Care	Hospital Services	Rehabilitation Services
King County Fire & Life Safety Association	Seattle Fire Department	Public & private ambulance agencies	Regional Hospital Sub-Committee	Regional Council
King County EMS	King County EMS	King County EMS	Regional Council	
Local hospitals	Dispatch Centers	Medical Program Director	Region 6 Healthcare Coalition	
Public Health – Injury & Violence Prevention	Region 6 Healthcare Coalition	Regional Prehospital Sub-Committee		
Region 6 Healthcare Coalition	King County Advisory Committee	Regional Council		
Non-profit organizations		King County Advisory Committee		
Regional Council		King County Fire Chiefs		

Goal 4

There is a strong, efficient, well-coordinated region-wide EMS and Trauma System to reduce the incidence of inappropriate and inadequate trauma care and emergency medical services and to minimize the human suffering and costs associated with preventable mortality and morbidity.

<p align="center">Objective 1</p> <p>At quarterly Regional Council meetings, the Regional Council will identify and discuss issues which may threaten the current robust EMS system.</p>	<p>Strategy 1: By August 2009, and throughout the Plan cycle, the Regional Council will continue to provide venues for discussion of EMS issues that affect the region.</p>
	<p>Strategy 2: By October 2009, and throughout the Plan cycle, the Hospital Committee Chair will continue to provide reports at quarterly Regional Council meetings, identifying issues which may affect patient care in the region.</p>
	<p>Strategy 3: Annually, the EMS Division of Public Health Seattle & King County will provide a report to the Regional Council, identifying issues which may affect prehospital care in the region.</p>
	<p>Strategy 4: By October 2009, and throughout the Plan cycle, the MPD will provide minutes of quarterly Medical Directors meetings to the Regional Council Board.</p>
	<p>Strategy 5: By October 2009, the Regional Council will add a Fire Chief's report to the standing Regional Council meeting agenda.</p>
<p align="center">Objective 2</p> <p>Bi monthly, Regional Council membership and staff will provide information to the Office of Community Health Systems on emerging issues in the Central Region.</p>	<p>Strategy 1: Regional Council staff will provide written notification of emerging/hot issues in the Central Region, as needed, in bi-monthly reports to the Office of Community Health Systems.</p>
	<p>Strategy 2: Regional Council staff will provide verbal and written reports on emerging/hot issues in the Central Region at Regional Advisory Council meetings.</p>
	<p>Strategy 3: Regional Council membership, through participation on various technical advisory committees, will provide reports regarding emerging/hot issues in Central Region.</p>

Goal 5 The Regional Plan is congruent with the statewide strategic plan and utilizes standardized methods for identifying resource needs.	
<p style="text-align: center;">Objective 1</p> <p>By May 2012, the Regional Council will update the Central Region EMS & Trauma Care System Plan to address inconsistencies with the State Strategic Plan (SSP).</p>	<p>Strategy 1: By January 2011, the Regional Council will review updates to the State of Washington EMS & Trauma System Strategic Plan 2007-2012 (SSP) and conduct a gap analysis to determine inconsistencies with the SSP.</p>
	<p>Strategy 2: By September 2011, the Regional Council will revise the Regional EMS & Trauma Care System Plan based on the October 2010 gap analysis results.</p>
	<p>Strategy 3: By September 2011, the Regional Council will submit any revised Regional EMS & Trauma System Care Plan to the Washington State Department of Health Office of Community Health Systems for review.</p>
	<p>Strategy 4: By May 2012, the Regional Council, if necessary, will present any revised Regional EMS & Trauma System Care Plan to the Governor’s Steering Committee for approval.</p>
<p style="text-align: center;">Objective 2</p> <p>By July 2011, the Regional Council will use standardized methods including analysis of regional data to determine the need and distribution of EMS & trauma services in the Region.</p>	<p>Strategy 1: By October 2009, the Regional Council and Hospital Sub-Committee, using standardized methods and data elements, will determine designated trauma hospital resource needs and recommend the numbers and levels of designated trauma facilities in the Region.</p>
	<p>Strategy 2: By July 2011, the Regional Council and Prehospital Sub-Committee, using standardized methods and data elements, will determine the number of verified trauma services and recommend the min/max numbers of trauma verified services.</p>

Goal 6 The Regional EMS and trauma care system has multiple distribution channels (methods, routes etc.) for timely dissemination of information on emerging issues that have been identified by the Steering Committee	
<p style="text-align: center;">Objective 1</p> <p>By January 2010, the Regional Council will identify existing distribution channels for use in timely distribution of Steering Committee & TAC information to regional stakeholders on emerging issues and will develop and implement an information distribution process.</p>	<p>Strategy 1: By October 2009 Regional Council representatives will identify <i>or</i> form a group to determine existing information distribution channels.</p>
	<p>Strategy 2: By November 2009 the identified group will develop a process for timely distribution of information on emerging issues.</p>
	<p>Strategy 3: By January 2010, the Regional Council will implement the emerging issues information dissemination process.</p>

Goal 7 The Regional EMS and Trauma System interfaces with emergency preparedness/disaster planning, bioterrorism and public health.	
<p style="text-align: center;">Objective 1</p> <p>By October 2009, the Regional Council will maintain processes that ensure key stakeholders remain involved in regional emergency preparedness & disaster planning activities.</p>	<p>Strategy 1: By September 2009, the Regional Council will maintain hospital presence at Region 6 Healthcare Coalition meetings and hospital disaster planning meetings.</p>
	<p>Strategy 2: By September 2009, the Public Health membership position on Regional Council will be filled.</p>
	<p>Strategy 3: By October 2009, a healthcare coalition report will be added to the Regional Council or Hospital Committee agenda.</p>
<p style="text-align: center;">Objective 2</p> <p>By June 2012, regional EMS prehospital and hospital agencies will participate in 3 disaster drills or exercises.</p>	<p>Strategy 1: By June 2010, 2011, 2012, regional EMS prehospital and hospital agencies will conduct and participate in a minimum of one disaster planning drill or exercise.</p>
	<p>Strategy 2: By January 2011 and 2012, regional EMS prehospital and hospital agencies will provide an after action report for a minimum of one disaster planning drill or exercise conducted in 2010 and 2011.</p>

Goal 8: Region-wide interoperable communications are in place for emergency responders and hospitals.	
<p style="text-align: center;">Objective 1</p> <p>By May 2012, King County Government will develop an interoperable communications plan to mitigate emergency response and hospital communications gaps within the Region.</p>	<p>Strategy 1: By May 2012, the Regional Council and EMS stakeholders will review any draft of the region-wide interoperable communications plan that is developed by King County government.</p>

System Public Information & Education

Currently public information and education efforts in the region are conducted by individual agencies. Each agency defines the purpose of the message and its intended audience. Some of these messages are advertisements for services; for example, joint replacements. Some of these messages are public service announcements, such as flu vaccine availability and hand washing techniques. Some of these messages voice support for levy funded programs like the King County Medic One/EMS levy which voters passed in November 2007. Currently, there exists no integrated public message regarding the EMS system in the region, how it functions, how it is funded, how and when to use it, or how the health of the EMS system affects the health of the population it serves and vice versa. In a world of increased competition for scarce funding, it is imperative to the health of the EMS system and to the health of the populace that this message be received and understood. It is equally important for the populace to understand what role they play in keeping themselves whole and healthy. The Regional Council and EMS stakeholders need to develop and implement an EMS public education campaign.

Goal 9	
There is a regional public information plan consistent with the state public information plan to educate the public about the EMS and Trauma Care System. The purpose of this plan is to inform the general public, decision-makers and the health care community about the role and impact of the Regional EMS and Trauma Care System.	
Objective 1	Strategy 1: By October 2009, the Regional Council will review the State Public Information Plan and develop a regionalized public information plan which is consistent with State Public Information Plan.
By March 2010, the Regional Council will develop and implement a 2-year (March 2010-July 2011) regional public information campaign to educate the public about the EMS and Trauma System.	Strategy 2: By January 2010, the Regional Council will identify topics, and talking points which the public should know about the EMS system.
	Strategy 3: By March 2010 and March 2011 The Regional Council Board will develop 1 pre-packaged public information message to send to media.

System Finance

Prehospital Care Funding:

The Central Region public prehospital EMS system is supported through a combination of EMS dedicated property tax levy funds, city/county allocations, and fire district funds. The EMS levy provides full financial support for paramedic services. Basic Life Support (BLS) services receive approximately 17% - 20% of their funding through the EMS levy. The remaining 80% of BLS operating costs is funded through local jurisdiction levies and tax dollars. The current EMS levy provides funding through 2013. The EMS Division and EMS stakeholders will need to develop a new EMS levy package to present to the voters in 2013.

At the present time, public prehospital services in the County are adequately funded. Tax payer fatigue over frequent levy requests combined with anger over increased property tax valuations at a time of declining real estate values may affect future passage of local fire department levies which fund the bulk of basic life support service. Private ambulance companies, on the other hand are presently at risk. The 2007 Navigant Trauma Cost Study concluded that private ambulance companies are not adequately reimbursed for ambulance transport of Medicare and Medicaid patients. Because some jurisdictions in King County rely on private ambulance for transport of basic life support patients, non-critical patient transport capacity within those jurisdictions may be affected.

Hospital Patient Care Funding

The 2007 Navigant Trauma Cost Study found that hospitals in the region are receiving adequate funding for trauma care. However, only a fraction of hospital patients are trauma patients. Fewer still, suffer injuries severe enough to qualify for trauma reimbursement. The bulk of emergency department and hospital patients are medical patients. Many of these patients are elderly Medicare patients or patients with no or little insurance coverage. Hospitals in the Region, as well as statewide, walk a fine line between solvency and closure.

Rehabilitation Patient Care Funding

Rehabilitation funding has been historically lacking. The 2007 Navigant Trauma Cost Study found that rehabilitation facilities are reimbursed for only 88.9% of the cost of providing services to trauma patients. Rehabilitation facilities are unwilling to apply for trauma rehabilitation designation primarily due to low reimbursement rates.

Physician Services and Specialty Surgeons

Primary care physicians and specialty surgeons are increasingly unwilling to be on call or to take patients who lack adequate insurance. A number of factors contribute to a shortage of physician and specialty services in the region as well as statewide. The 2007 Navigant Trauma Cost Study cited low reimbursement for services, high malpractice insurance costs and lifestyle issues to be the main reasons for lack of on-call and specialty care statewide. Hospital Sub-committee meeting discussions support the Navigant Study findings.

Lack of public funding for healthcare including medical, dental, vision, mental health services, and drug/alcohol treatment continues to be the single most significant factor in granting access to healthcare. Prevention, early diagnosis, and treatment saves money, yet funding of healthcare continues to erode as the price for healthcare continues to escalate. The result is sicker people being funneled into a shrinking pool of healthcare providers and institutions. EMS stakeholders need to remain involved and participate in regional and State EMS system financial planning efforts to ensure stable funding of the EMS trauma system and access to specialty medical care.

Goal 11	
There is consistent and sustainable funding to ensure a financially viable regional EMS and trauma care system.	
<p>Objective 1</p> <p>By October, 2009 the Regional Council will maintain a process that ensures key stakeholders remain involved in and participate in State EMS system financial planning efforts.</p>	<p>Strategy 1: By July 2009, Regional Council will develop listing of State Department of Health, Office of Community Health Systems financial planning committees and advisory groups</p>
	<p>Strategy 2: By September 2009, The Regional Council will determine which State Department of Health, Office of Community Health Systems financial planning committees and advisory groups are not represented by Council and/or sub-committee members and will assign representatives to those planning committees and advisory groups.</p>
	<p>Strategy 3: By October 2009, Regional Council and/or sub-committee representatives will present relevant reports to the Office of Community Health Systems financial planning` committee.</p>
	<p>Strategy 4: By October 2009 and through the Plan cycle, assigned representatives will present relevant reports to the Regional Council.</p>
<p>Objective 2:</p> <p>By June 2012, the EMS Division and EMS stakeholders will develop a 2014-20XX EMS Levy proposal.</p>	<p>Strategy 1: By March 2011, the King County EMS Division will hold a minimum of three EMS stakeholder meetings to develop recommendations for the 2014-20XX EMS levy.</p>
	<p>Strategy 2: By June 2012, the EMS Division, using EMS stakeholder recommendations, will draft a preliminary 2014-20XX levy proposal for presentation to additional EMS stakeholder groups.</p>

Injury Prevention & Control

Central Region public and private agencies offer a wide range of injury prevention and education activities. Below is a list of known injury prevention programs in Central Region.

- DUI (Last Call – Bar Patrons, DUI Victim’s Panel – judicial system & impaired driving sentencing, Brief Intervention – hospital based alcohol abuse intervention, Think Again – High School drivers, seatbelt usage & impaired driving, emphasis patrols – law enforcement & impaired driving)
- Seatbelt usage (The Force is With You – High school drivers & seatbelt usage, Think Again – High School Drivers)
- Suicide Prevention (Crisis Clinic, Teen Link, Youth Suicide Prevention Program)
- Gun safety (Lok it Up – firearm safety, Harborview Medical Center, Public Health Seattle & King County, Children’s Hospital)
- Child safety (Fireflies/Smart Kids – child safety skills (King County EMS, Northwest Fireflies and local fire departments)
- Bike Helmets (Auburn Regional Medical Center, Bike Works, Cascade Bicycle Club, Children’s Hospital, Federal Way Helmet Coalition, UW, Valley Medical Center, Redmond Community Custom Fit Helmet, Virginia Mason Federal Way Pediatrics, Head Injury Hotline, Helmets R Us, Injury Free Coalition, Multicare Clinic Covington & Kent, Odessa Brown Clinic, Pediatrics Northwest – Federal Way)
- Bike Safety (Cascade Bicycle Club, Bicycle Alliance)
- Drowning Prevention (Public Health – Seattle & King County, Children’s Hospital)
- Violence Prevention (King County Department of Community Health Services)
- Senior Falls (Fall Factors - in home senior fall risk assessment & fall prevention devices, King County EMS Division; Safe Steps – senior fitness and fire protection outreach campaign, King County Fire & Life Safety Association; Project Enhance – senior fitness and nutrition)
- Child Safety Restraints (Car Safe Kids & various coalitions throughout King County)
- Pedestrian Safety – Feet First

The Regional Council has access to prehospital, hospital, and Medical Examiners death data to determine mechanisms of injury and injury rates, but data or other definitive means of determining the effectiveness of many injury prevention programs, such as those programs listed above remains elusive. The region needs to develop and implement a process to identify and support injury prevention programs which use evidence based, and best-practice interventions.

Goal 12 Preventable/premature death and disability due to injury is reduced through targeted injury prevention activities and programs.	
<p style="text-align: center;">Objective 1</p> <p>By September 2009, the Regional Council Board will continue sharing of injury prevention information with EMS and other injury prevention stakeholders in the Region.</p>	<p>Strategy 1: By September 2009, Regional Council staff will continue to participate on the State IPPE TAC</p>
	<p>Strategy 2: By September 2009, Regional Council staff will post information on injury prevention programs, training opportunities, injury prevention strategies and links on the IPPE page of the Regional Council website.</p>
<p style="text-align: center;">Objective 2:</p> <p>By June 2010, the Regional Council, EMS stakeholders and injury prevention partners will develop and implement a regional injury prevention media outreach project which incorporates elements described in the Washington State Department of Health, Office of Community Health Systems, Injury & Violence Prevention Program.</p>	<p>Strategy 1: By January 2010, the Regional Council will meet with EMS stakeholders and injury prevention partners and develop a regional injury prevention and education media outreach plan.</p>
	<p>Strategy 2: By May 2010, the Regional Council, EMS stakeholders and injury prevention partners will implement the regional injury prevention and education media outreach plan and provide a report to the State IPPE TAC</p>

Prehospital

The King County EMS prehospital system is one of the most highly regarded EMS systems in the world. The Region is served by approximately 4,000 fire-department based emergency medical technicians, 200 paramedics and 150 dispatchers. Fire department based BLS and publicly funded ALS services are augmented by 329 full-time and 51 part-time EMTs/RNs based at five private ambulance agencies. Private ambulance services contract directly with fire departments to provide BLS transport, or in the case of Airlift Northwest, provide aero-medical ALS transport.

The EMS Division of Public Health – Seattle & King County is responsible for development and provision of prehospital training, including dispatcher training, and oversight of the prehospital recertification process. The Division is also responsible for collecting and managing EMS data for long-term prehospital quality program management and evaluation, and the development of new service options.

One of the key components in the success of the King County EMS prehospital system is the Medic One/EMS 2008-2013 Strategic Plan. Development of Medic One/EMS Strategic Plan was facilitated by the EMS Division of Public Health – Seattle & King County. Participants in the planning process included elected officials, city and county financial planners, fire chiefs, paramedic providers, medical directors, private ambulance, dispatch, and labor management. Central Region EMS & Trauma Care Council members were among those participating agency representatives. The Medic One/EMS 2008-2013 Strategic Plan reflects the perspectives of the communities served by the Medic One/EMS system, and as such, needs to be appended to this Central Region EMS & Trauma Care System Plan upon final approval by the King County Council.

A second key component in the success of the King County EMS prehospital system is constant research and evaluation of prehospital data at the individual agency level, Medical Program Director level, and the King County EMS Division level. This system-wide research and data evaluation component guides the development of prehospital training programs, prehospital protocols and guidelines, and need & distribution of prehospital services.

The third key component in the success of the King County EMS prehospital system is participation on regional and state planning committees. Participation in these processes enables EMS system stakeholders to remain involved in the development and implementation of standardized procedures and performance measures. These three components need to be maintained to ensure that the King County EMS system remains on the forefront of EMS prehospital care.

Goal 13
There is a sustainable region-wide prehospital EMS system utilizing standardized, evidence-based procedures and performance measures that address both trauma and medical emergencies.

<p style="text-align: center;">Objective 1</p> <p>By January, annually, the EMS Division of Public Health Seattle & King County will provide a minimum of one new EMS Online training course which incorporates standardized, evidence-based procedures and performance measures as determined by the State Department of Health Office of Community Health Systems</p>	<p>Strategy 1: By January, annually, the EMS Division Training staff will develop and publish the new EMS Online training courses based on requirements established by the Education Committee</p>
<p style="text-align: center;">Objective 2</p> <p>By January 2010, Regional Council staff will inform EMS stakeholders of opportunities for participation in Statewide prehospital EMS system planning.</p>	<p>Strategy 1: By December 2009, the Regional Council staff will notify the membership and EMS agencies of any vacancies on the respective TACs along with information on the duties and Bylaws of the TAC.</p> <p>Strategy 2: By January 2010, the Regional Council staff will post TAC information on the Regional Website.</p>
<p style="text-align: center;">Objective 3</p> <p>By June annually, the Regional Council and Medical Program Director (MPD) will update regional Patient Care Procedures (PCPs) to include newly required procedures developed by the Dept of Health, Office of Community Health Systems.</p>	<p>Strategy 1: By October annually, the Regional Council Board or workgroup and the MPD will review newly required state prehospital procedures developed by the State Department of Health, Office of Community Health Systems and revise or update the Region Patient Care Procedures as necessary.</p> <p>Strategy 2: By January, annually, the Regional Council will review and approve any proposed revisions to the Regional PCPs as necessary</p>

	<p>Strategy 3: By March annually, the Regional Council will present any revised Patient Care Procedures to the State of Washington Department of Health, Office of Community Health Systems for review and/or approval.</p>
	<p>Strategy 4: By May annually, the Regional Council Chair or appointee, if required by the State Department of Health, Office of Community Health Systems, will present revised Patient Care Procedures to the Governor's Steering Committee for approval.</p>
<p>Objective 4</p> <p>By July 2010, the King County MPD will evaluate standardized region-wide prehospital EMS system procedures and performance measures that address both trauma and medical emergencies to ensure they are evidence based.</p>	<p>Strategy 1: Beginning September 2009 and throughout the Plan cycle the Region's MPD or designee will attend State Medical Program Directors meetings to ensure regional input regarding development of standardized statewide prehospital system procedures and performance measures.</p> <p>Strategy 2: By September 2009 and through the Plan cycle, the MPD will hold quarterly regional Medical Directors meetings to evaluate and discuss emergent regional prehospital issues and evidence-based procedures.</p> <p>Strategy 3: By November 2009, the MPD, medical directors, prehospital providers, and King County EMS Division of Public Health Seattle & King County will develop processes for evaluation of prehospital system performance.</p>

<p>Objective 5</p> <p>By July, 2011, in preparation for the next Regional Strategic Planning cycle, the Regional Council, using standardized, evidence-based performance measures will evaluate the need & distribution of EMS prehospital services in the region and set recommended minimum and maximum numbers of Verified Trauma Services by Level.</p>	<p>Strategy 1: By May2010, the Regional Council and prehospital stakeholders will review the King County Trauma Response Map and revise boundaries as necessary.</p>
	<p>Strategy 2: By January 2011, the Regional Council will review 2009-2010 regional prehospital response times to determine if state guidelines are being met</p>
	<p>Strategy 3: By May 2011, the Regional Council, will evaluate data, using previously identified standardized methods for determining verified trauma services and discuss need and distribution of such services in the Region.</p>
	<p>Strategy 4: By July 2011, the Regional Council will determine min/max number of verified services in preparation for the Regional EMS & Trauma Plan 2012-2017.</p>
<p>Objective 6</p> <p>By March 2010, the Regional Council will append the King County Medic One /EMS 2008-2013 Strategic Plan update to the Central Region Strategic Plan.</p>	<p>Strategy 1: By January 2010, the EMS Division of Public Health Seattle & King County will provide an updated King County approved Medic 1/EMS 2008-2013 Strategic Plan to the Regional Council for appending to the Regional EMS & Trauma Plan.</p>
	<p>Strategy 2: By January 2010, the Regional Council will submit to State Department of Health Office of Community Health Systems appended Medic 1/EMS 2008-2013 Strategic Plan.</p>
	<p>Strategy 3: By March 2010, The Regional Council will submit, if necessary, the appended Medic 1/EMS 2008-2013 Strategic Plan to the Governor’s Steering Committee for approval.</p>

Acute Hospital

Central Region hospital resources provide health care to 1.86 million residents of King County as well as a large number of workers from neighboring counties. There are fifteen acute care hospitals. Nine hospitals are designated trauma facilities including Harborview Medical Center. Harborview Medical Center is the sole level 1 facility for the state and serves as the major referral destination for patients from Idaho, Alaska, and Montana.

The 2007 Navigant Cost Study found that the Central Region has the lowest bed capacity in the State. North Region (Snohomish, Island, San Juan, Skagit & Whatcom counties) was found to have the second lowest bed capacity. Both regions are experiencing high population growth which will increase demand for limited hospital and emergency department services. The Regional Council needs to determine if current resources are adequate.

For the past six years, emergency department diversions have increasingly plagued the Region, indicating that the Region has no surge capacity. Should a disaster or epidemic strike, the Region's hospital resources would be quickly overwhelmed. Discussions at Regional Council and Hospital Sub-committee meetings determined that hospital through-put and boarding of psychiatric patients are the two main culprits behind hospital emergency department overcrowding and diversion. The Region needs to address these critical issues that impact hospital care.

Hospital Through-put

Evaluation of emergency department saturation statistics have shown that emergency department overcrowding continues to worsen. Discussion at Regional Council and Hospital Sub-committee meetings found that emergency departments become backed up due to patients waiting admission into the hospital. On May 14th, 2008 the Central Region EMS & Trauma Care Council sponsored a Hospital Saturation Summit. Hospital administrators, chief nursing officers, and physician leaders from all hospitals in the Region attended the summit which presented information on the diversion issue in the region and a toolkit containing processes for improving hospital through-put. As follow-up to the Summit, each hospital administrator was sent a hospital diversion work plan and pledge letter requesting that each hospital establish a through-put committee to develop an internal plan for eliminating hospital diversion by July 1, 2009.

Psychiatric Patient Boarding

Boarding of psychiatric patients is another reason why hospital emergency departments go on divert. Since the government de-institutionalized mental health care, there have been significant challenges in finding inpatient treatment for psychiatric patients. There are few inpatient beds and limited outpatient treatment programs. As a result, the region's hospital emergency departments have seen a substantial increase in mental health patients.

In addition to the hospital through-put and boarding of psychiatric patients, the Region's hospitals struggle with lack of nurses, as well as on-call and specialty care providers.

Many physicians, pharmacists and other healthcare providers no longer accept Medicare and Medicaid patients. These patients turn to local emergency departments for medical treatment. Emergency department visits cost three to four times more than a visit to a primary care physician or clinic. Clearly access to early intervention saves the medical system money, yet universal healthcare coverage remains elusive. Universal access to healthcare is beyond the ability of regional EMS stakeholders to effect.

<p align="center">Goal 14</p> <p>There is a sustainable region-wide system of designated trauma services that provides appropriate capacity and distribution of resources to support high-quality trauma patient care.</p>	
<p align="center">Objective 1</p> <p>By July 2011, the Regional Council will identify critical issues and possible solutions related to emergency medical hospital care and inform system stakeholders of such issues and possible solutions.</p>	<p>Strategy 1: By August 2009 Harborview Medical Center, using ASPRS funds, will hire a hospital capacity project manager for a two-year project, who will collaborate with the Regional Council in the development of a regional ED overcrowding strategic plan to improve the hospital capacity and medical resilience over the next number of years.</p>
	<p>Strategy 2: By October 2009, the Regional Council will establish and maintain a collaborative relationship with King County Crisis & Commitment staff in an effort to improve patient & staff safety while psychiatric patients are being detained involuntarily in the emergency department and/or hospital.</p>
	<p>Strategy 3: By July 2011, the hospital capacity project manager will present to the Regional Council a draft hospital overcrowding strategic plan.</p>

<p align="center">Objective 2</p> <p>By November 2009, the Regional Council will recommend to the Governor's EMS & Trauma System Steering Committee the number and level of regional trauma designated services.</p>	<p>Strategy 1: By September 2009, the regional Hospital Subcommittee, using standardized methods for identifying resource needs including review of data on patient volumes, distribution patterns, geographic call patterns, EMS transport times, population projections, patient transfers, and current available hospital resources will develop recommendations for numbers & levels of designated trauma facilities in the Region.</p>
	<p>Strategy 2: By October 2009, the Regional Council will review the Hospital Subcommittee recommendations on the number & level of trauma designated services in Region and vote on revision or adoption of those recommendations.</p>

<p>Objective 3:</p> <p>By May 2012, the Regional Council will develop and implement a process to evaluate the impact of Snohomish County hospital diversions.</p>	<p>Strategy 1: By May 2010, The Regional Council Board will annually, review WATrac diversion data and data on trauma patients who were transported to Central Region hospitals due to diversion from Snohomish County to determine the impact of hospital diversion in that County.</p>
	<p>Strategy 2: By March 2012, the Regional Council Board will review Snohomish County population growth, and bed capacity data and develop trend lines.</p>
	<p>Strategy 3: By May 2012, the Regional Council Board will compare Snohomish County trend lines, Snohomish County hospital diversion WATrac data, and data on trauma patients transported to Central Region hospital due to diversion from Snohomish County hospitals and provide a report to the Regional Council.</p>

Pediatric

Prehospital pediatric care guidelines and protocols are integrated into Central Region EMS online training. King County EMS Training Division has also developed a pediatric sick not sick video for emergency medical technicians. Pediatric hospital care is provided by Harborview Medical/UWMC & Children’s Hospital and Regional Medical Center, which serve all of Washington State, Alaska, Montana and Idaho. Because of these pediatric focused facilities, staff at some hospitals may have limited exposure to pediatric emergencies which can place pediatric patients at risk should these resources become unavailable. Regional healthcare stakeholders need to develop and implement a plan to address this issue. In addition, the Region needs to be aware of newly developed pediatric guidelines and incorporate those guidelines into patient care protocols and procedures.

Goal 15	
There is a sustainable region-wide EMS and Trauma Care System that integrates pediatric care into the system continuum (prevention, prehospital, hospital, rehabilitation and system evaluation).	
<p style="text-align: center;">Objective 1</p> <p>By July 2011, the Regional Council and MPD will incorporate pediatric care protocols developed by the State of Washington Department of Community Health Systems into EMS Online training, prehospital and hospital guidelines and Patient Care Procedures as appropriate.</p>	<p>Strategy 1: by August 2009, the Regional Council will ensure that EMS Stakeholders participate in state Pediatric Technical Advisory Committee meetings.</p>
	<p>Strategy 2: by April, 2010, the MPD will incorporate pediatric protocols developed by the state Pediatric Technical Advisory Committee, into existing guidelines and/or Patient Care Procedures.</p>
	<p>Strategy 3: By May, 2010, the Regional Council will present any amended Pediatric Patient Care Procedures to the State Department of Health Office of Community Health Systems for review.</p>
	<p>Strategy 4: By July, 2010, the Regional Council will present any amended Pediatric Patient Care Procedures to the Governor’s Steering Committee for approval.</p>
	<p>Strategy 5: By July, 2011, the EMS Division of Public Health Seattle & King County will incorporate new pediatric procedures into the EMS online training program as necessary.</p>
<p style="text-align: center;">Objective 2</p> <p>By June 2012, regional healthcare providers will ensure access to plans, training and resources for appropriate medical care of children in the event of a health emergency.</p>	<p>Strategy 1: by August 2009, regional health care providers will continue to participate in Region 6 Healthcare Coalition Pediatric Workgroup.</p>
	<p>Strategy 2: by June, 2012 The Pediatric Workgroup will identify and make available educational materials and resources for disaster preparedness planning which are appropriate for healthcare providers who care for children</p>

Trauma Rehabilitation

Currently Children’s Hospital and Regional Medical Center is the Region’s level 1 pediatric rehabilitation facility. Harborview Medical Center is the Region’s level 1 adult rehabilitation facility and Northwest Medical Center is the Region’s level II adult rehabilitation facility. At the present time, the minimum number and level of rehabilitation facilities in the region is not met. Discussion at Regional Council meetings indicate that facilities are unwilling to apply for trauma rehabilitation designation primarily due to low reimbursement rates. The 2007 Navigant Trauma Cost Study has reinforced the findings of the Regional Council by reporting that rehabilitation facilities are reimbursed for only 88.9% of the cost of providing services to trauma patients. Regional rehabilitation stakeholders need to determine if present resources are adequate.

Goal 16	
There is a sustainable region-wide system of designated trauma rehabilitation services that provides adequate capacity and distribution of resources to support high-quality trauma rehabilitation care	
<p style="text-align: center;">Objective 1.</p> <p>By July 2010 the Regional Council will develop and implement a process to evaluate rehabilitation patient care in the Region and provide a report to the Regional Council and to the Office of Community Health Systems financial planning committee as needed.</p>	<p>Strategy 1: By November 2009, the Regional Council will hold one trauma rehabilitation meeting to discuss common issues and strategies to improve patient access to care and facility access to rehabilitation patient outcome data.</p> <p>Strategy 2: By January 2010, the Regional Council will establish a workgroup to conduct an analysis of financial needs to adequately fund rehabilitation care.</p> <p>Strategy 3: By May 2010, the rehabilitation work group will provide a report of their findings to the Regional Council.</p> <p>Strategy 4: By July 2010, based on the findings of the rehabilitation work groups, the Regional Council will provide a report of the workgroup findings to the appropriate Office of Community Health Systems financial planning committee.</p>
<p style="text-align: center;">Objective 2:</p> <p>By May 2010, the Regional Council will determine number & level of designated trauma rehabilitation services in Central Region</p>	<p>Strategy 1: By January 2010 the Regional Council will review, discuss and evaluate rehabilitation patient data and make recommendations on number & level of trauma rehabilitation services in Central Region</p> <p>Strategy 2: By May 30, 2010, the Regional Council will submit the recommendations for the number and level of rehabilitation services in the Region.</p>

System Evaluation

In Central Region, prehospital data collection and management services are provided by the King County EMS Division of Public Health Seattle & King County. The Division uses this data for long-term quality program management and evaluation, and the development of new service options. The MPD performs prehospital quality improvement and quality assurance activities and conducts research and evaluation of new approaches to the delivery of emergency medical care. The EMS Division is responsible for uploading prehospital WEMSIS data to the Washington State Trauma Registry.

Hospital system performance data is collected by WATrac and evaluated by the Central Region Hospital Committee and Regional Council for hospital system quality assurance/quality improvement purposes. WATrac data is also available for individual hospitals to use for internal planning procedures. Hospitals provide trauma patient data directly to the state Trauma Registry. Central Region contracts with HIPRC (Harborview Injury Prevention and Research Center to manage data to support the Region’s trauma quality assurance and improvement program. In fiscal year 2008, the Regional Council paid \$95,169 for this service. HIPRC obtains regional trauma patient data through a data sharing agreement with the Washington State Department of Health, Office of Community Health Services. Trauma rehabilitation data is not collected.

Prehospital, hospital and rehabilitation data needs to be available for trauma system quality assurance activities and to accurately make recommendations for number & level of services. It is equally important and necessary that regional stakeholders be involved in the development of standardized outcomes measurements through participation in appropriate state committees and workgroups.

Goal 17	
The Regional EMS and Trauma Care System has data management capabilities to support evaluation and improvement.	
<p>Objective 1:</p> <p>By December 2010, all Central Region verified agencies and designated services will continue to provide data to the state EMS & Trauma System.</p>	<p>Strategy 1: by October 2009, King County EMS Division of Public Health Seattle & King will continue quarterly uploads of prehospital data to the Washington State WEMSIS site.</p> <p>Strategy 2: by October 2009, regional hospitals will continue to provide, at a minimum, quarterly hospital trauma data transfers to the Washington State Trauma Registry.</p>
<p>Objective 2:</p> <p>By August 2009, the Regional Council will ensure that regional EMS & trauma data is available in fiscal year 2010 for regional quality Assurance programs by contracting with Harborview Medical Center</p>	<p>Strategy 1: by August 2009, the Regional Council will maintain a contract with Harborview Injury Prevention Research Center to manage and analyze hospital and prehospital data for fiscal year 2010.</p> <p>Strategy 2: by October 2009, Harborview Injury Prevention Research Center will maintain data sharing agreements with DOH for fiscal year 2010.</p>

Goal 18	
The EMS and Trauma Care System has comprehensive, data-driven quality improvement (QI) processes at the local and regional levels	
<p>Objective 1</p> <p>By July 2010, the regional EMS stakeholders will continue to support and participate in the statewide effort to define appropriate outcome measures and benchmarks for mortality & morbidity, quality of life to evaluate effectiveness and value of the EMS system.</p>	<p>Strategy 1: by August 2009, the Regional Council will identify which Central Region EMS stakeholders participate in the appropriate state technical advisory groups to establish appropriate mortality and non-mortality outcome measures and assign representatives if necessary.</p>
	<p>Strategy 2: By July 2010, the Regional Council will review minutes and attendance rosters of the appropriate state outcomes advisory group to gauge participation of regional EMS stakeholders and assign representatives if necessary.</p>
<p>Objective 2</p> <p>By January 2011, verified EMS agencies will use performance measures established by the State Department of Health, Office of Community Health Systems.</p>	<p>Strategy 1: by July 2010, the Regional Council will make available to the Medical Program Director all standardized performance measures developed by the Office of Community Health Systems.</p>
<p>Objective 3</p> <p>By May 2011, the Regional Council and EMS stakeholders will develop and implement Central Region-specific EMS & Trauma System performance indicators that will be used in a data-driven fashion to assess system performance, and improve patient care.</p>	<p>Strategy 1: By July, 2010 a System Performance Workgroup of EMS & trauma system stakeholders will develop recommendations for data driven EMS system performance indicators for review by the Regional Council</p>
	<p>Strategy 2: by October 2010 the Regional Council will review the System Performance Workgroup recommendations and develop an implementation process.</p>
	<p>Strategy 3: by May 2011, the Regional Council will begin review of EMS system performance indicators to assess system performance and improve patient care.</p>

Appendix 1

Approved Min/Max numbers of Verified Trauma Services by Level and Type by County

County (Name)	Verified Service Type	State Approved - Minimum number	State Approved - Maximum number	Current Status (# Verified for each Service Type)
	Aid – BLS	11	15	8
	Aid – ILS	0	0	0
	Aid – ALS	1	1	0
	Amb – BLS	27	30	29
	Amb – ILS	0	0	0
	Amb - ALS	5	6	6

Appendix 2

Trauma Response Areas by County

County (name)	Trauma Response Area Number	Description of Trauma Response Area's Geographic Boundaries	Type and # of Verified Services in each Response Areas * use key
King	Primary Zone 1	From NW border of Seattle; north to Snohomish County border; east along Snohomish County border to NE corner of FD 45; south along the eastern borders of FD 45 and Eastside Fire & Rescue and FD 27 FD 27 and continuing along the eastern border of Eastside Fire & Rescue, FD 27 borders to the NE border of Maple Valley Fire & Life Safety; west to NW border of Renton FD, north along east side of Lake Washington, including Mercer Island to the Northeast border of Seattle and west to NW border of Seattle.	A-2 D-11 F-3
King	NE Zone 1	Boundaries of FD 50	D-1
King	E Zone 1	Boundaries of FD 51	D-1
King	Zone 3	South border of Seattle and south end of Lake Washington along north border of Renton and Maple Valley, east: along Kittitas County Border; south along Pierce County border; west along Puget Sound including Vashon Island.	A-5 D-14 F-1
King	Zone 5	City of Seattle	D-3 F-1

King	Zone SW	North from SE border of Zone 3 along eastern borders of Zone 3 and Primary Zone 1 to the intersection of Primary Zone 1 and I-90; east along I-90 to intersection of I-90 and E Zone 1; around the southern border of E Zone 1 to Kittitas County border; south along Kittitas County border to Pierce County border; west along Pierce County border to SE corner of Zone 3.	No designated service
King	Zone NW	From intersection of I-90 and Primary Zone 1; North along the eastern border of Primary Zone 1 to Snohomish County Border; east along Snohomish County border to NW border of NE Zone 1; south along western border of NE Zone 1 to SW corner of NE Zone 1; east along southern border of NE Zone 1 to Kittitas County border; south along Kittitas County border to intersection of E Zone 1 and Kittitas border; west and south around E Zone 1 to intersection of I-90 and E Zone 1, along I-90 to intersection of I-90 and Primary Zone 1.	No designated service

Key: For each level the type and number should be indicated

Aid-BLS = A

Ambulance-BLS = D

Aid-ALS = C

Ambulance-ALS = F

Aid-ILS = B

Ambulance-ILS = E

Appendix 3

Table A: Approved Minimum/Maximum (Min/Max) numbers of Designated Trauma Care Services (General Acute Trauma Services)

Level	State Approved		Current Status
	Min	Max	
II	0	0	0
III	3	3	3
IV	4	4	4
V	1	1	1
II P	0	0	0
III P	0	0	0

Table B. Approved Minimum/Maximum (Min/Max) numbers of Designated Rehabilitation Trauma Care Services

Level	State Approved		Current Status
	Min	Max	
II	4	6	1
III*		1	0

Appendix 4

**CENTRAL REGION
PATIENT CARE
PROCEDURES**

Approved May 16, 2007

Submitted by:

**Central Region
Emergency Medical Services and
Trauma Care Council**

INTRODUCTION

WAC 246-976-960, Regional Emergency Medical Services and Trauma Care Systems, established the requirement for regions to adopt patient care procedures and specifically identified elements that must be included. The Central Region has developed and adopted Patient Care Procedures consistent with this requirement.

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PART I

Prehospital Response to an Emergency Scene

Dispatch

Dispatch centers are accessed through the enhanced 911 system. Regional dispatch centers dispatch EMS units in accordance with King County Criteria Based Dispatch Guidelines. Seattle dispatchers use Seattle Fire Department Dispatch Guidelines. Dispatchers provide bystander emergency medical instructions while EMS units are in route to the scene.

The Central Region EMS Trauma Committee requires that emergency dispatching protocols be based on medical criteria. All EMS dispatching guidelines and protocols must be approved by the Program Medical Director of King County EMS in consultation with the Medical Program Directors of the paramedic programs within the county. **Reference:** Dispatch Center Contacts

Basic Life Support

Basic Life Support response is provided by city and county fire department units staffed by First Responders and EMTs or private ambulance services staffed by EMTs. The nearest unit to an emergency scene will be dispatched following established dispatch guidelines.

BLS Code Red Response and Transport

Note: Primary responding EMS personnel refers to fire department EMT personnel or paramedics response originating as part of the 911 EMS system. Emergency response refers to travel with light and sirens. The following procedures are intended to maximize patient safety and minimize risk to life and limb. Common sense and good judgment must be used at all times.

- 1) The response mode from primary BLS response (fire department EMT personnel) shall be based on information made available to the EMS dispatchers and the decision for mode of travel made according to dispatch guidelines.
- 2) The default mode for travel to the scene for non-primary BLS responders shall be by non-emergency response unless a specific response for code-red (emergency response) is made by primary responding EMS personnel at the scene or specific protocols or contracts defining response modes exist between fire departments or private agencies and private

ambulance companies.

- 3) The default mode for BLS transport from scene to hospital shall be by non-emergency response unless a specific response for code-red transport is made by primary responding EMS personnel at the scene.
- 4) If a patient undergoing BLS transport to hospital deteriorates, the BLS personnel should contact the EMS dispatcher and ask for paramedic assistance, unless documentary evidence exists to travel code-red to hospital (such as travel to hospital can occur faster than waiting for paramedic assistance).

Advanced Life Support

The paramedic unit nearest the emergency scene is simultaneously dispatched consistent with dispatch guidelines. Paramedic units provide advanced life support transport.

Wilderness

Wilderness response is directed by the King County Sheriff Search and Rescue Coordinator. EMS units may be dispatched to a staging area depending on the nature and location of the incident.

DISPATCH CENTER CONTACTS

Company	Title	First Name	Last Name	Phone	Fax	Address1	City
Eastside Communications Center	OPs	Pam	Heide	(425) 452-2920	(425) 452-4340	16100 N.E. Bellevue Eighth	
	Dispatch			(425) 452-2048			
Valley Communications Center	OPS	Mark	Morgan	(253) 854-4320	(253) 850-3068	23807 98th Ave. S.	Kent
	Dispatch			(253) 854-2005			
Port of Seattle		Phyllis	Hull	(206) 431-4457	(206) 439-5167		
Enumclaw Department	Police	Mimi	Jensen	(360) 616-5800		1705 Wells	Enumclaw
		Lt.	Eric	Sortland	(360) 616-5800	(360) 825-0184	
Seattle Fire Department	Battalion Chief	John	Pritchard	(206) 1493	(206) 684-7276	2318 Fourth Ave	Seattle

PART II

Triage of Trauma Patients

These procedures are intended to provide guidance to prehospital care providers and their medical control physicians in determining which trauma center will receive the patient.

1. Prehospital providers will contact online medical control of the closest trauma center or Harborview Medical Center (Reference: Designated Trauma Centers in King County/Paramedic Response Area). Medical Control or Harborview Medical Center will determine patient destination consistent with Central Region Trauma Patient Care (Triage/Destination) Procedure.
2. The primary destination of **pediatric** patients meeting Step 1,2 or 3 inclusion criteria of Central Region Trauma Patient Care (Triage/Destination) Procedure is the Level I trauma center.
3. Unstable trauma patients should be managed consistent with the Central Region Trauma Patient Care (Triage/Destination) Procedure. Unstable trauma patients are those needing a patent airway or who may benefit from the initiation of fluid resuscitation. EMS providers who are unable to secure an airway or establish an intravenous line should consider these factors in the following order:
 - a. time to arrival of responding medic unit
 - b. time to rendezvous with responding medic unit
 - c. time to nearest trauma center
 - d. time to arrival of Airlift
 - e. time to nearest hospital with 24 hr emergency room
 - f. unusual events such as earthquakes and other natural disasters
4. Patient destination decisions will be monitored by the Regional Quality Assurance Committee

The goal in treating the unstable trauma patient is to provide potential life saving intervention and transportation to the highest-level trauma center able to provide definitive treatment. Ideally these interventions will be performed in a manner that does not unduly delay transport of a patient to the appropriate level of trauma center. This may require EMS providers to stop at a local hospital to stabilize and then transfer the patient to the trauma center.

Consistent with interfacility transfer agreements, trauma patients stabilized at non-designated hospitals should be transferred to a trauma center as soon as possible. Likewise, patients stabilized at Level III or IV trauma centers and meeting the criteria for triage to the Level I trauma center should be transferred as necessary.

The State's Level I trauma center is:

Harborview Medical Center

325 Ninth Avenue

Seattle, WA 98104

Transportation of trauma patients from wilderness areas is primarily accomplished by helicopter. The Level I trauma center should be the primary destination of these patients.

Reference: State of Washington Prehospital Trauma Triage (Destination) Procedure

STATE OF WASHINGTON
PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURE

Purpose

The purpose of the Triage Procedure is to ensure that major trauma patients are transported to the most appropriate hospital facility. This procedure has been developed by the Prehospital Technical Advisory Committee (TAC), endorsed by the Governor's EMS and Trauma Care Steering Committee, and in accordance with RCW 70.168 and WAC 246-976 adopted by the Department of Health (DOH).

The procedure is described in the schematic with narrative. Its purpose is to provide the prehospital provider with quick identification of a major trauma victim. If the patient is a major trauma patient, that patient or patients must be taken to the highest-level trauma facility within 30 minutes transport time, by either ground or air. To determine whether an injury is major trauma, the prehospital provider shall conduct the patient assessment process according to the trauma triage procedures.

Explanation of Process

A. **Any certified EMS and Trauma person can identify a major trauma patient and activate the trauma system.** This may include requesting more advanced prehospital services or aero-medical evacuation.

B. **The first step (1) is to assess the vital signs and level of consciousness.** The words "Altered mental status" mean anyone with an altered neurologic exam ranging from completely unconscious, to someone who responds to painful stimuli only, or a verbal response which is confused, or an abnormal motor response.

The "and/or" conditions in Step 1 mean that any one of the entities listed in Step 1 can activate the trauma system.

Also, the asterisk (*) means that if the airway is in jeopardy and the on-scene person cannot effectively manage the airway, the patient should be taken to the nearest medical facility or consider meeting up with an ALS unit. These factors are true regardless of the assessment of other vital signs and level of consciousness

C. **The second step (2) is to assess the anatomy of injury.** The specific injuries noted require

activation of the trauma system. Even in the assessment of normal vital signs or normal levels of consciousness, the presence of any of the specific anatomical injuries does require activation of the trauma system.

Please note that steps 1 and 2 also require notifying Medical Control.

- D. **The third step (3) for the prehospital provider is to assess the biomechanics of the injury and address other risk factors.** The conditions identified are reasons for the provider to contact and consult with Medical Control regarding the need to activate the system, they do not automatically require system activation by the prehospital provider.

Other risk factors, coupled with a "gut feeling" of severe injury, means that Medical Control should be consulted and consideration given to transporting the patient to the nearest trauma facility.

Please note that certain burn patients (in addition to those listed in Step 2) should be considered for immediate transport or referral to a burn center/unit.

Patient Care Procedures

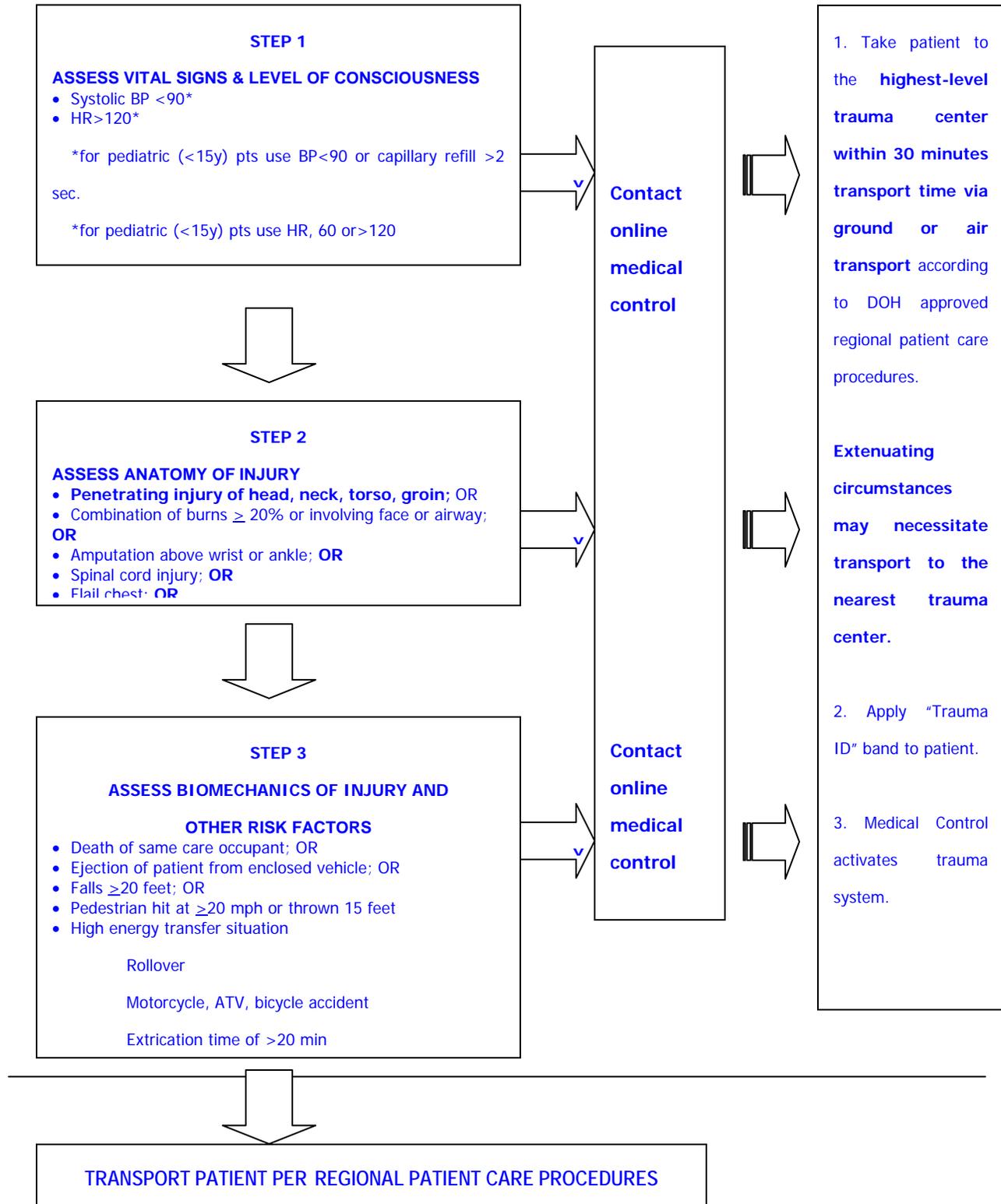
To the right of the attached schematic you will find the words "according to DOH-approved regional patient care procedures." These procedures are developed by the regional EMS and trauma council in conjunction with local councils. They are intended to further define how the system is to operate. They identify the level of medical care personnel who participate in the system, their roles in the system, and participation of hospital facilities in the system. They also address the issue of inter-hospital transfer, by transfer agreements for identification, and transfer of critical care patients.

In summary, the Prehospital Trauma Triage Procedure and the Regional Patient Care Procedures are intended to work in a "hand in glove" fashion to effectively address EMS and Trauma patient care needs. By functioning in this manner, these two instruments can effectively reduce morbidity and mortality.

If you have any questions on the use of either instrument, you should bring them to the attention of your local or regional EMS and Trauma council or contact 1-800-458-5281.

Trauma system activation is accomplished at the time of contact with Medical Control. Online medical control at the receiving trauma center will activate the trauma team upon notification of the transporting agency or dispatcher.

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



PART III

Trauma Care Facilities

Central Region Trauma Care Facilities are as follows:

Level I Trauma Center (Pediatric and Adult)

Harborview Medical Center

Level III Trauma Centers

Auburn General Hospital

Overlake Hospital Medical Center

Valley Medical Center

Level IV Trauma Centers

Evergreen Hospital Medical Center

Highline Community Hospital

Northwest Hospital

St. Francis Hospital

Level V Trauma Center

Enumclaw Community Hospital

PART IV

Interfacility Transfers

Private ALS and BLS agencies provide interfacility patient transfers at the direction of the hospital initiating the transfer. All interfacility patient transfers shall be consistent with the transfer procedures in chapter 70.170 RCW and WAC 246-976-890.

Level III, Level IV, and Level V trauma centers will transfer patients to the State Level I trauma center when appropriate. The State's Level I trauma center is:

Harborview Medical Center
325 Ninth Avenue
Seattle, WA 98104

PART V

Multiple Casualty Incidents (types and expected volume of trauma)

The Central Region has adequate resources to meet normal trauma patient volumes. The Quality Assurance Committee monitors mechanism of injury and patient volumes.

Large Multiple Casualty Incidents may require the triage of patients to non-designated King County hospitals or to trauma centers in adjacent counties.

Reference: Central Region MCI Hospital Utilization Guidelines (Trauma)

PART VI

ALL HAZARDS – MCI – SEVERE BURNS

I. STANDARD: During a mass casualty incident (MCI) with severely burned adult and pediatric patients,

1. All verified ambulance and verified aid services shall respond to an MCI per the King County Fire Chief's MCI Plan
2. All licensed ambulance and licensed aid services shall assist during an MCI per King County Fire Chief's MCI Plan when activated by incident command through dispatch in support of the King County Fire Chief's MCI Plan and/or in support of verified EMS services
3. All EMS certified personnel shall assist during an MCI per King County Fire Chief's MCI Plans when requested by incident command through dispatch in support of the King County Fire Chief's MCI Plan and/or in support of verified EMS services
4. Pre-identified patient mass transportation, EMS staff and equipment to support patient care may be used.
5. All EMS agencies working during an MCI event shall operate within the Incident Command System as identified in local protocol and MCI plan.

II. PURPOSE:

1. To develop and communicate the information of regional trauma plan section VII prior to an MCI.
2. To implement King County Fire Chief's MCI Plan during an MCI.
3. To provide trauma and burn care to at least 50 severely injured adult and pediatric patients per region.
4. To provide safe mass transportation with pre-identified medical staff, equipment, and supplies per mass transport vehicle.

III. PROCEDURES:

1. Incident Command shall follow the King County Fire Chief's MCI Plan and will notify Hospital Control when an MCI condition exists, including factors identifying severe burn
-

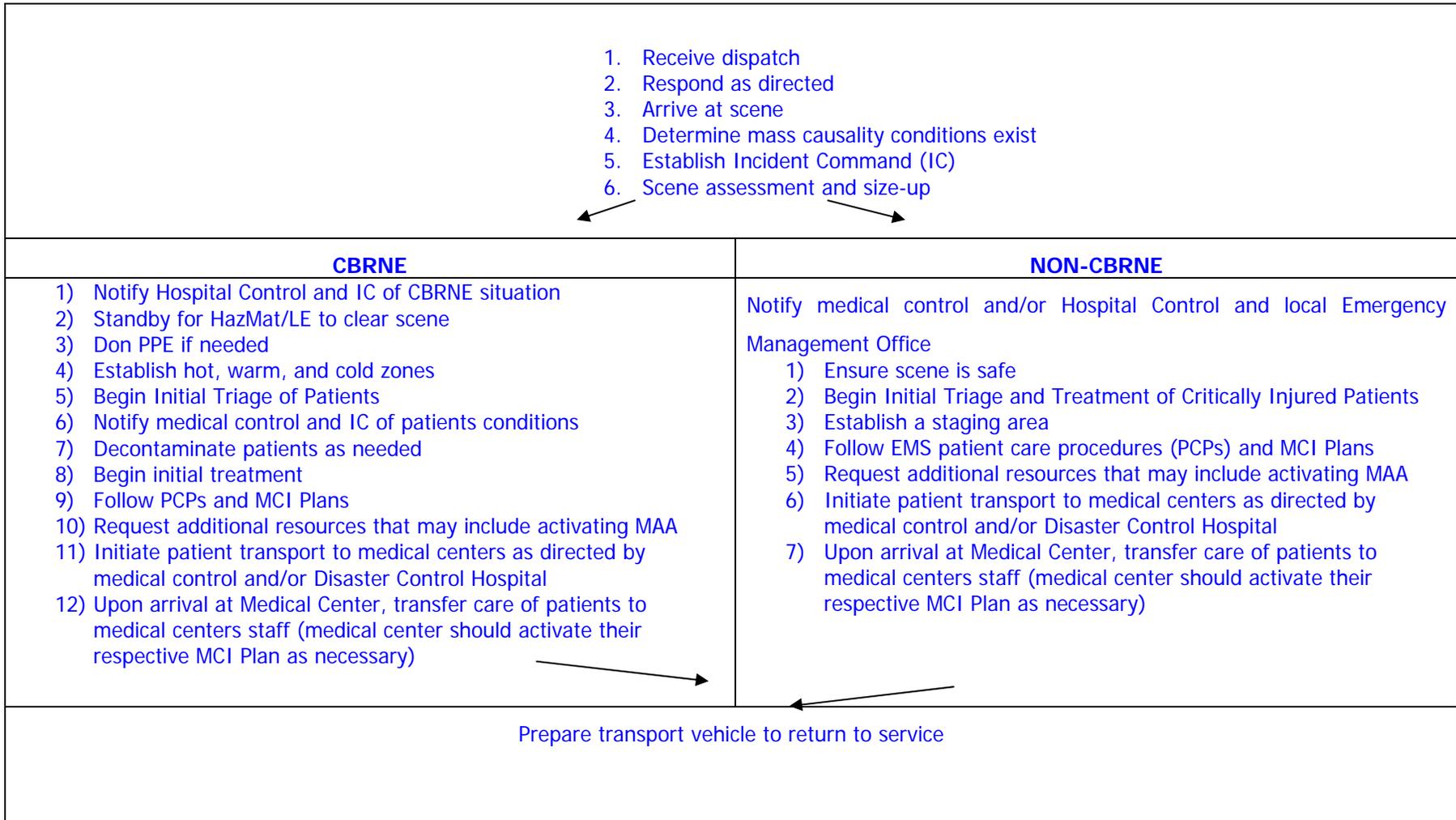
injuries and number of adult/pediatric patients.

2. Medical program directors agree that protocols being used by responding agencies shall continue to be used throughout transport of patients regardless of county, state or country.
3. EMS personnel may use the "Prehospital Mass Casualty Incident (MCI) general Algorithm during the MCI incident.
 - A. The "SAMPLE ONLY" algorithm is intended as a boilerplate or skeleton outline only. It is not intended as a state directed requirement.
 - B. The DRAFT-SAMPLE Algorithm is attachment below.

IV. QUALITY IMPROVEMENT:

The Central Region Prehospital Committee at the next regularly scheduled meeting will review this PCP upon receipt of suggested modifications from a local provider, the Central Region QI Committee, the Department of Health, or any other entity suggesting modifications to the document.

Prehospital Mass Causality Incident (MCI) General Algorithm



PART VII

Activation of Trauma Team

Trauma team activation is accomplished at the time of contact with Medical Control. Online medical control at the receiving trauma center will activate the trauma team upon notification of the transporting agency or dispatcher. All designated trauma centers will activate their trauma team per WAC 246-976-870.

PART VIII

Medical and Minor Trauma Patients Transportation Guidelines

- I. Prehospital care providers respect the right of the patient to choose a hospital destination and will make reasonable efforts to assure that choice is observed. Alternately and under ADAPT guidelines, fire department-based BLS providers may transport or suggest transport of patients to non-hospital settings such as stand alone emergency rooms and clinics. **Reference** *Appendix II – ADAPT Guidelines*

Factors including patient's choices may be:

1. Personal Preference
2. Personal physician's affiliation
3. HMO or preferred provider

Modifying factors which may influence the prehospital provider's response:

1. Patient unable to communicate choice
2. Unstable patient who would benefit from transportation to nearest hospital or to hospital providing specialized services.
3. Transport to patient's choice of hospital would put medic unit or aid car out of service for extended period and alternative transport is not appropriate or available.

- II. Prehospital providers should transport unstable patients, i.e. compromised airway, post arrest, shock from non-traumatic causes, etc. to the nearest hospital able to accept the patient.

- III. Emergency patients requiring specialized care such as hyperbaric treatment, neonatal ICU, or high-risk OB care should be transported to the nearest hospital able to provide such care.

- IV. When in doubt, prehospital care providers should contact online medical control.

Appendix I Hospital Diversion

Central Region ED Saturation Policy

Adopted March 8th 2006 - Revised 5-09-2007

OPEN

Resource open - no restrictions

No Critical Care
Beds

No Critical Care beds available: Hospital is able to receive all patients. Critical care patients will be treated and transferred to closest appropriate hospital with Critical care capacity. (will time out in 24 hours)

ED Saturated

Emergency Department Closed: hospital has exhausted the capacity of their emergency room to receive additional patients. No BLS or ALS transports **except** ALS critical and/or unstable patients which includes:

- Unstable patient as defined by attending paramedics:
- CPR performed or on-going,
- cathlab,
- airway problem
- acute stroke

ED may be on ED Saturated for no more than 2 hours at a time and for no more than 6 out of 24 hours. ED Saturated button will time off automatically after 2 hours.

..

Select services not available at this time (will time out in 8 hours)

Drop down pick list provided, choose from:

- CT down
- Cathlab down
- No OR
- Other

.. . . .

Update Required

Status info more than 25 hours old

Inactive

Status info more than 8 days old

Hospital

Hospital-wide Catastrophic Failure (hospital wide power failure and contamination, evacuation, and lockdown scenario)

Additional agreed upon recommendations:

- If all hospitals within a zone are on ED Saturation, all hospitals within the zone will come off ED Saturation.
- If 50% of hospitals region wide have no Critical care beds, a conference call will be initiated. Any hospital may initiate the conference call.
 - Access to conference call line and direct line to Charge Nurse to be provided
- Appropriate Website usage and adherence to Diversion Policy will be subject to formal Q/A process and may be requested by prehospital providers.
- At a minimum the ED manager should initiate the ED Saturation status.

Appendix II ADAPT Program

ADAPT Clinic and Urgent Care Clinic Transportation Policy

Selected patients may be transported to a clinic, urgent care clinic, free standing emergency department, or hospital based emergency department via BLS transport if the patient meets the criteria listed below. These policies apply to non-primary (private) BLS ambulance when EMS personnel request private BLS ambulance to transport the patient.

- 1) The fire department based (primary) EMT provider considers a taxi to be an appropriate and safe method of transportation for the particular clinical problem.
- 2) Paramedic care is NOT required
- 3) Patient is ambulatory
- 4) Patient has a non-urgent condition (clinically stable) including
 - a) Low index of suspicion for:
 - a. Cardiac problem
 - b. Stroke
 - c. Abdominal aortic aneurysm
 - d. GI bleed problems
 - b) Low index of suspicion for major mechanism of injury
- 5) Patient must not have
 - a) Need for a backboard
 - b) Uncontrolled bleeding
 - c) Uncontrolled pain
 - d) Need for oxygen (except patient self administered oxygen)
- 6) Patient should be masked if there are respiratory symptoms

For guidance regarding transport decisions EMTs may consult with paramedics or with emergency department personnel at the medical control hospital.

The EMT must notify the destination facility of the clinical problem and the facility must agree to accept the patient.

ADAPT Taxi Voucher Transportation Policy

Selected patients may be transported to a clinic, urgent care clinic, free standing emergency department, or hospital based emergency department via taxi if the following conditions listed above are met and the fire department-based EMT considers a taxi to be an appropriate and safe method of transportation for the particular clinical problem.