Alaska Statewide Trauma System

Fact Sheet

What is Trauma?

Trauma is any bodily injury from external force. Although many people think of trauma as "accidents", it is better thought of as a disease. Like heart disease and cancer, trauma has identifiable causes and risk factors; and like these conditions, prevention is the best strategy. However, even with the best prevention efforts we still need to be able to take care of the seriously injured. We need to show the same commitment that we brought to cardiac and cancer treatment to trauma care. The seriously injured require timely diagnosis and treatment by health care professionals who are appropriately trained and provided with the necessary resources to reduce the risk of death or permanent disability.

Impact of Trauma in Alaska

Trauma is a tremendous burden on families and communities. In the 1990s, nearly 5,000 Alaskans died from trauma.

- For Alaskans, ages 1 to 44, trauma is the leading cause of death.
- On average, more than 400 Alaskans die from trauma each year. For every injury death, eleven people are hospitalized for trauma-related injuries. For every trauma death that occurs in the hospital, there are an estimated 3 people discharged with permanent disability.
- On average, more than 800 Alaskans are hospitalized each year for central nervous system injury (spinal cord and brain injuries).
- In 2004, motor vehicles were the leading cause of injury death (117), followed by firearm-related injuries (116).
- In 2004, the economic cost of hospital stay alone for trauma patients in Alaska was estimated at over \$73 million. One in four hospital admissions were uncompensated.

Years of Potential Life Lost to Trauma

Death from trauma is tragic at any age. Society's loss is especially great because so many young people die from trauma. The impact can be measured in "years of potential life lost:" the number of years between early death from injury and the average age of death at age 70. Using years of potential life lost, trauma is the leading cause of potential life lost for all Alaskans followed by cancer and heart disease.

What is a Trauma System?

A trauma system is a predetermined, organized, multidisciplinary response to managing the care and treatment of severely injured people. It spans the full spectrum of care; from prevention and emergency care to recovery and rehabilitation. Best practice standards guide each stage of care to ensure that injured patients are promptly transported to and treated at facilities appropriate to their severity of injury and that they receive optimal care at each stage of their treatment.

A statewide trauma system also provides a framework for disaster preparedness and response. As part of its activities, a trauma system coordinates and monitors the

movement and care of severely injured people. Ideally, the trauma system identifies the needs and resources available at any moment and responds to insure optimal care.

Why Have a Trauma System?

For a severely injured person, the time between an injury and receiving definitive care is the most important predictor of survival—the "golden hour." The chance of survival diminishes with time, despite of the availability of resources and modern technology. A trauma system enhances the chance of survival by making sure that patients are brought to the most appropriate facility in the most efficient manner and that they receive optimal care each step of the way. Trauma systems benefit everybody regardless of income, race, party affiliation or locale. States with mature, comprehensive statewide trauma systems have experienced:

- A 9 percent decrease in motor vehicle crash deaths.
- A 15-20 percent increase in the survival rates of seriously injured patients.
- · An increase in productive working years.
- An improvement in statewide disaster preparedness.

Disaster Preparedness

Trauma systems play a vital role in the community response to natural disasters or manmade incidents. Despite concerns over bioterrorism, experience has shown that the vast majority of terrorist attacks will involve explosive devices. We also do know that Alaska will experience major earthquakes in the future. A functioning trauma system is the framework for developing an organized coherent response to these incidents

Alaska's Trauma System

In 1990, state authority for designating trauma centers was created in Alaska. Under this statute hospital participation is entirely voluntary. Criteria were established and the process for designation at Levels I-IV outlined. Since the original legislation there have been only three hospitals that have been designated by the state. One level II and four level IV centers. Clearly to fully realize the benefits of a trauma system more widespread participation is needed. Alaska's trauma system is ideally an inclusive system, recognizing the vital role that rural communities, hospitals and health care professionals play in the care and management of the trauma patient. Wide-scale involvement is critical to get optimal outcomes for the seriously injured.

Review of Alaska Trauma Care by the American College of Surgeons November 2008

The Alaska Department of Health and Social Services (DHSS) recently contracted with the Committee on Trauma of the American College of Surgeons to review trauma care in Alaska. The full report is available on the DHSS website (www.chems.alaska.gov). It notes our strengths and weaknesses and makes recommendations for improving trauma care in our state.

Strengths include: well established injury prevention programs; extensive and creative networks for ground and air medical transport; medical subspecialty availability at three

Anchorage hospitals; and a good relationship with Harborview Medical Center (Level I trauma center) in Seattle.

Deficiencies include the lack of an additional Level II trauma center in Anchorage and the existence of two patterns of trauma care, one for Alaska natives that follows national standards and one for the rest of the state. The review team members noted that among the nontribal hospitals "few of the facilities serving the majority population have made a similar commitment to achieving nationally recognized standards of trauma care". They also noted that there is no statewide trauma plan and no incentive or requirements for hospitals to participate in the system. Additionally, there are few resources at the state level for trauma system management and coordination. Perhaps as important as any of the above, they noted that there seemed to be very little public awareness of trauma system issues.

The review team made 15 priority recommendations. Several involve better organization of state resources and development of a comprehensive statewide trauma plan. The most sweeping recommendation was that all acute care hospitals be required to become designated trauma centers at a level appropriate to their resources and size within two years. They further stated that there should be a second level II trauma center in Anchorage as soon as possible. In addition, an assessment of pediatric trauma care needs should be completed with the goal of developing at least one pediatric trauma center of excellence.

The Alaska Trauma Systems Review Committee oversees the statewide trauma system in Alaska. The system addresses four primary components: trauma hospital designation criteria; trauma registry (monitors system performance and provides feedback for improvement); EMS/pre-hospital triage and transport guidelines; and inter-facility (hospital to hospital) transfer guidelines.

Where To Go From Here

- Increased hospital participation is necessary for the statewide trauma system to function optimally.
- There need to be incentives for hospitals to provide the staff and resources required for trauma center designation.
- Legislation to cover the cost of uncompensated trauma care and to limit the medical
 - liability for care given at designated trauma centers are two incentives that have been successful in other states.

House Bills 168 and 169 have been introduced by John Coghill to encourage hospitals to participate in the trauma system by covering some of the cost of uncompensated trauma care when it is given at designated trauma centers.

The goal of the statewide trauma system is to see every hospital in Alaska designated at an appropriate level.

*Surveys show that the general public overwhelmingly supports having a
hospital in their community that is prepared for and capable of effectively
managing a seriously injured patient—and are willing to pay for it!

*2005 Harris Interactive poll, "The American Public's Views of and Support for Trauma Systems: A Congressional Briefing."

Alaska Statewide Trauma System contact Information:

Frank Sacco MD FACS Chair Trauma Systems Review Committee

fsacco@anmc.org

907 729 2732

Julie Rabeau Trauma Program Manager Department of Health and Social Services

julie.rabeau@alaska.gov

907 334 2175

Mailing Address:

Dept of Surgery Alaska Native Medical Center 4315 Diplomacy Drive Anchorage, AK 99508

Mailing Address:

Alaska Department of Health and Social Services Division of Public Health Preparedness Program 3601 C Street Suite 756 Anchorage, Alaska 99503-0616