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Medical Director's Update for Base Station Physicians' Committee
July, 2009

Flu season: The H1N1 virus is still circulating in the community, and has become the predominant influenza virus. We have no way of knowing whether the virus will continue to be similar to other flu viruses in how ill it makes patients, or whether it will become more virulent. A vaccine is in preparation and should be ready for the fall. We will keep you informed about vaccination plans. A great deal of preparedness is occurring to be ready for the fall flu season. Public Health held a debriefing for the H1N1 outbreak to gather information and suggestions from the community about any beneficial changes in response plans. These are being developed now.

Field personnel should continue to use their routine PPE for patient contacts, but move up to an N-95 mask, eye shield if needed, and gown if the they must perform an "aerosol generating" procedure such as aerosol medications, intubation, tracheal suctioning, etc. The definition of Influenza like Illness is a person who has been evaluated by a healthcare provider and determined to have influenza-like illness (fever >100°F and cough or sore throat) with no other known or likely etiology. Obviously, in the field we must rely on the symptoms, before the healthcare provider examination. We will keep you posted about the influenza pandemic as details emerge.

Capacity Plan: The Capacity Task Force met to examine the Capacity Plan for this year. The committee reviewed a report on use of First Watch to determine the incidence and duration of off load delays. There was considerable interest in First Watch as a tool to prevent off load delays and the resulting adverse effects on system capacity. The Task Force is reviewing a cost analysis of use.

ED Admission Hold Report: The new system for tracking patients awaiting an in-patient bed continues. The recording is improving and will help monitor one of the factors that leads to ED crowding and off load delays. Totals are entered in QCS for patients waiting two hours for a bed in three categories: ICU, telemetry, and medical/surgical beds. In addition, there is a space for patients awaiting psychiatric disposition. The bed entries are done twice a day, at 8 am and 8 pm. Entries for the AM data are running about 66% compliance, a little higher among the hospitals that have basic emergency facilities. The evening compliance is less—about 33%--and we hope to see both improve.

Telemetry: One thing we have noted is the large number of patients waiting for telemetry beds. We would suggest that hospitals work with their medical staff to clearly identify which patients would benefit from telemetry monitoring, and only hold those patients for a bed while in the ED.

Protocol Updates: The updates were effective on July 1. Major ALS changes include adult IO, ondansetron for nausea and vomiting, and the King airway. Also, intranasal midazolam and naloxone administration. Tourniquets were added for uncontrolled extremity hemorrhage, especially in the setting of a bombing explosion with multiple casualties and limited immediate personnel. BVM is emphasized as the best ventilation technique for children.

Use of IO for trauma and fluid administration should not lead to extended on-scene times. The goal for injured patients who are hypotensive is to get off scene in 10 minutes or less. The penetrating trauma patient who is hypotensive should be moved immediately with procedures done en-route. "Medical" type resuscitation with medications and fluids followed by transport will not help the patient.

Spinal immobilization or collar use will be seen in patients to stabilize the neck and prevent movement of the endotracheal tube. In such cases, field personnel should make clear to hospital staff that the collar is there for the ET tube, and there was no injury.

Stroke system: A total of 15 hospitals qualified to receive acute stroke patients as of July 1. Naval Medical Center San Diego will likely be added to the system in the near future. Our congratulations and thanks to the facilities now serving stroke patients. This will optimize the use of current treatments such as thrombolysis, and coordinated care in the hospital in-patient setting.

Triage criteria are assessment with the prehospital stroke scale for symptom onset in the previous 3 hours. Age under 45 years, a seizure at the onset, confinement to a wheelchair all make an acute stroke less likely. The Base may stretch the 3 hour limit to 3½ hours based on recent information that intravenous thrombolytics are safe up to 4½ hours. The goal still is to administer the medication as quickly as possible if indicated.

POLST: The new POLST form was added to the state Do-not-Resuscitate guidelines at the last meeting of the state EMS Commission. A copy of the revised document is available on the EMSA website, www.emsa.ca.gov. The POLST document provides information on a patient's resuscitation choices, along with instructions about the intensity of care preferred, separated into comfort care, limited interventions, and full treatment. For the hospital or nursing home there are instructions regarding artificial nutrition as well. Both field and hospital personnel should become familiar with the instrument. Prehospital providers are expected to honor the requests in the document, unless there is some change in the patient's status. The POLST legislation includes liability and licensure protection for honoring the instructions. More information is available on the Medical Director's website for San Diego EMS.

State Issues: Changes in EMT and paramedic licensure, monitoring and discipline mean there will be changes to many of the state regulations over the next year and a half. This "2010" project by the state EMS Authority will be on-going for the next two years.

EMT Optional Skills: We expect training programs to start training courses in the relatively near future. We will keep you posted about this.

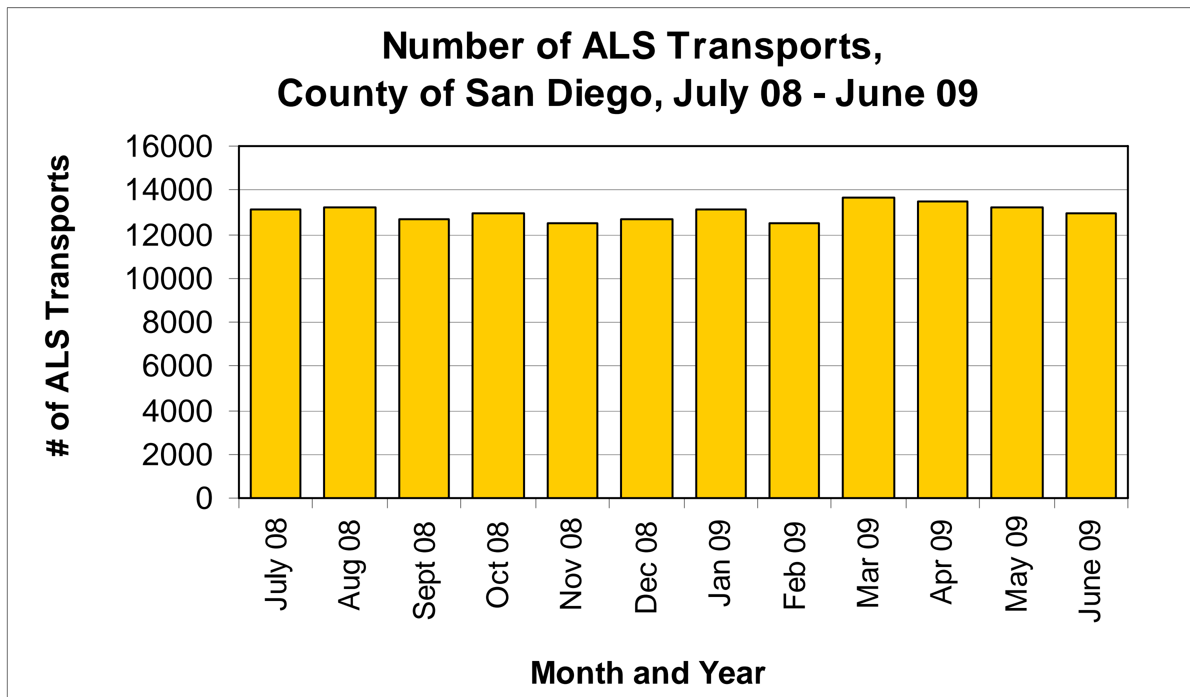
Good Samaritan law: The liability protection bills introduced in the legislature to change the Good Samaritan law following the California Supreme Court decision limiting liability protection to actual

medical interventions, not rescue actions. These bills originally added rescue to the clearly protected activities. AB 90 still would cover rescue actions, but has not advanced in the state assembly. The second bill, SB 39, would have done the same thing, but has been amended to cover liability protection in disasters. It is unclear whether the legislature will add liability protection for rescue actions by Good Samaritans.

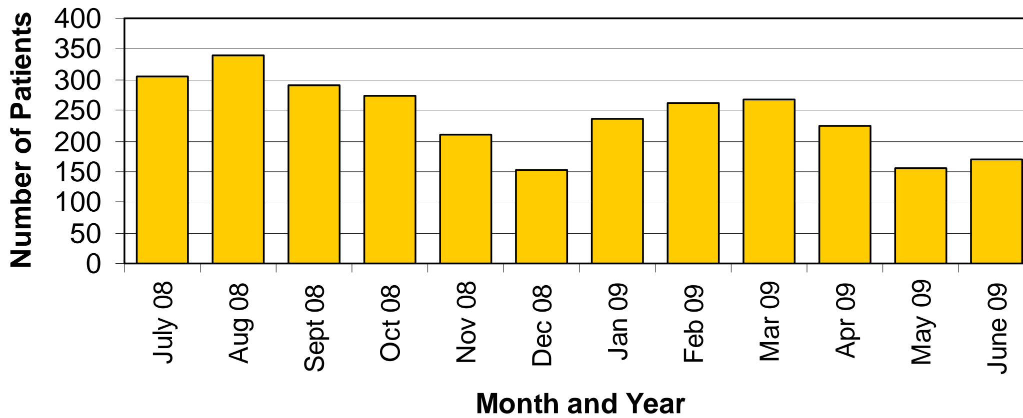
Ankylosing Spondylitis: The need for spinal stabilization adapted to the needs of the patient with ankylosing spondylitis were addressed in Pearls from PAC in 2000. These include the danger of attempting to force the patient into a supine position on a backboard, and the need for padding. A new video is available that provides information on ankylosing spondylitis and recommendations for assessment and spinal stabilization. It is available at:
http://www.spondylitis.org/physician_resources/ems_video.aspx

Snakebite: Snake season is underway. Several reminders based on recent experience will be helpful. One, never take a rattlesnake (or other venomous snake) to the hospital even if it's dead. No good will result. Also, despite the swelling and pain with snakebite, use of ice is not recommended and may increase the amount of tissue damage. The best treatment is immobilization of the extremity, possibly mildly elevated, pain relief, and transport for hospital treatment with antivenin.

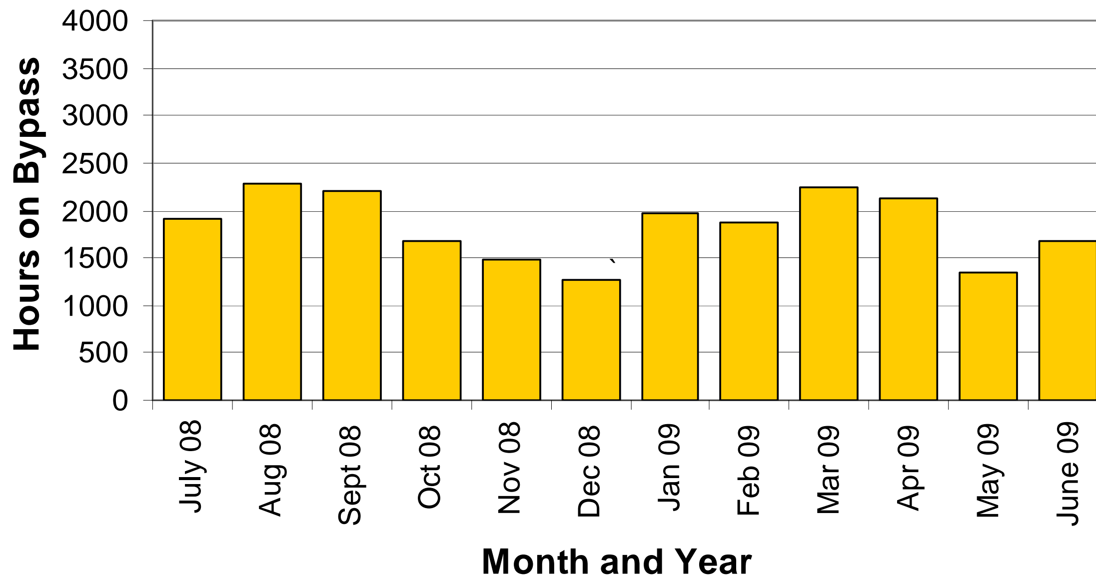
Below are the patient destination data in graphic form:



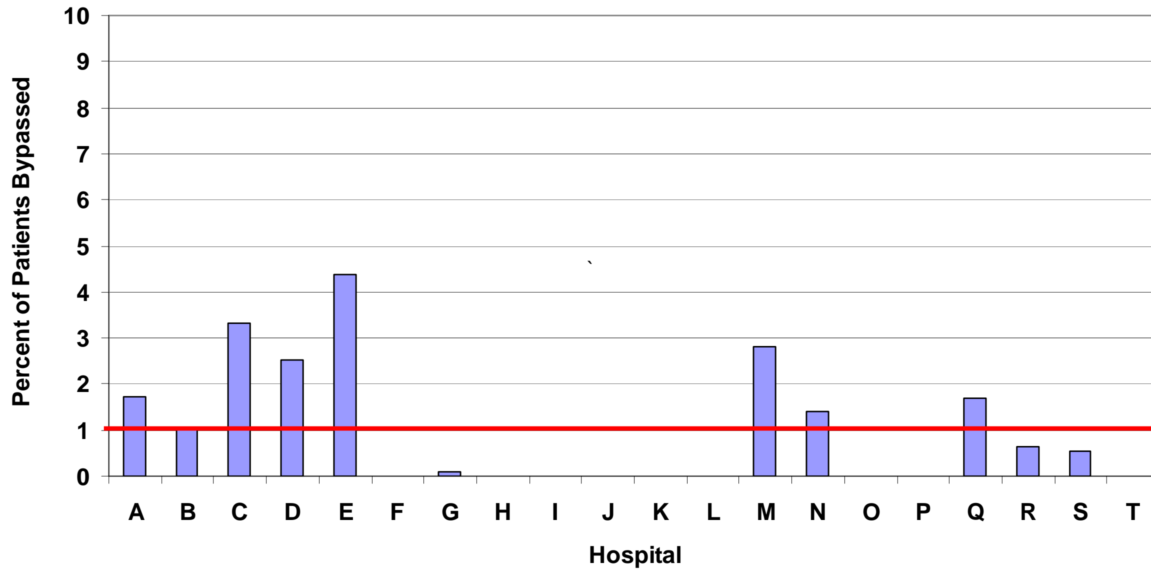
Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jul 2009 – Jun 2009 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



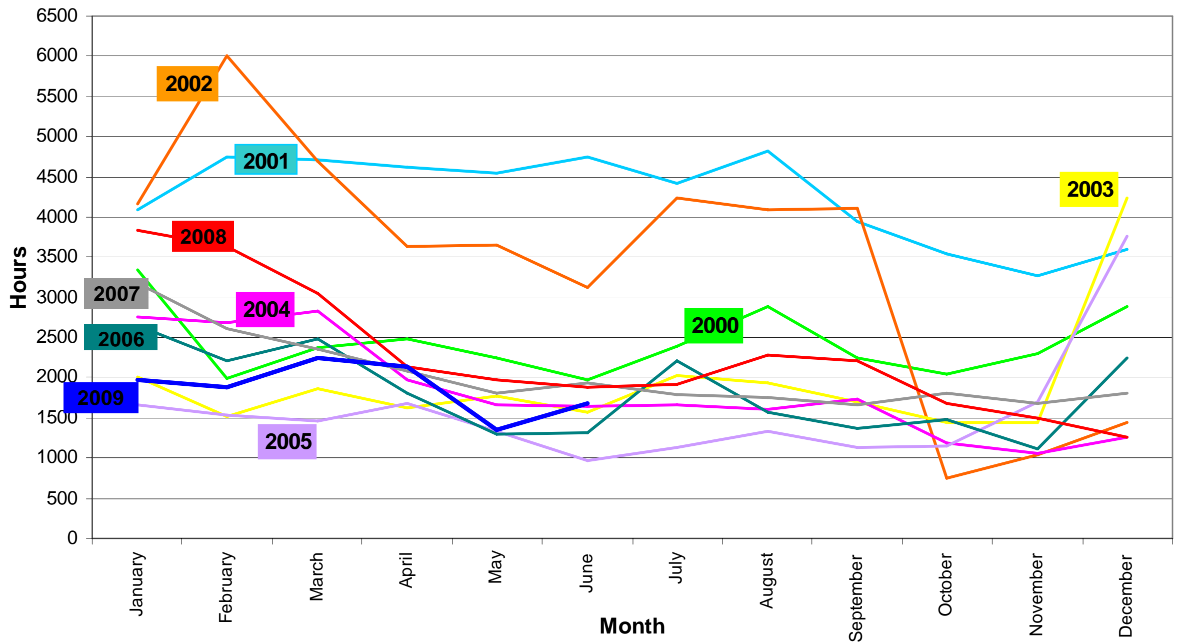
Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jul 2009 – Jun 2009 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



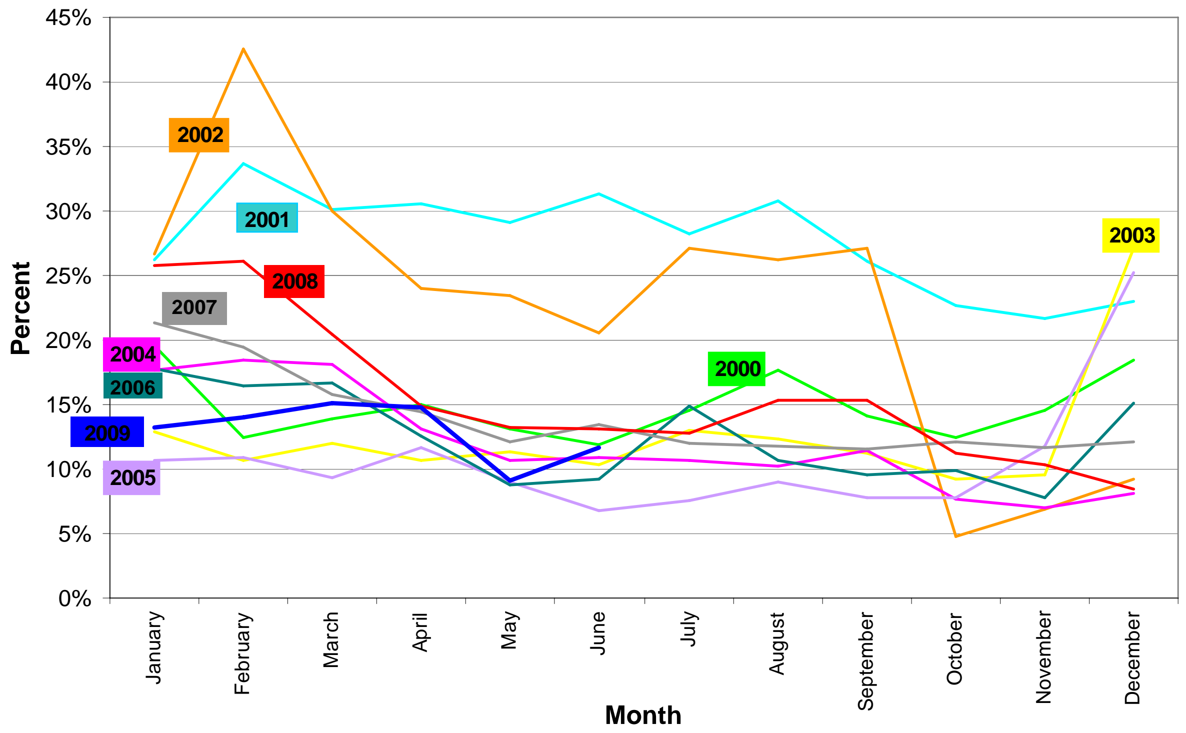
Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jul 2009 – Jun 2009



Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jun 2009 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jan 2000 – Jun 2009



Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Jan 2000 – Jun 2009. Note: 2008 line extended to June due to chart formula, no data for this future date.