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

In last month's Medical Director's Update I observed that the flu season was mild this year. This unraveled right after your last meeting. On the evening of April 21<sup>st</sup> the first cases of swine flu (N1H1) in Imperial and San Diego Counties were announced. With that announcement to the EMS community, we included the initial recommendations for personal protective equipment, and references to CDC information.

A week later after the initial experience with the virus and epidemiologic reports, a number of federal and state guidelines were issued. Just in time training was released by EMS to provide a background on the swine influenza (N1H1) and recommendations on how to avoid contracting it. In addition to these PPE recommendations, treatment protocols were changed for influenza like illness (ILI) patients to minimize possible exposure to the virus. These changes included minimizing deep suctioning to only when necessary, eliminating CPAP for ILI patients and eliminating nebulized bronchodilator treatments as well for ILI patients. The field was advised to only intubate ILI patients if mask ventilation or the Combitube were not possible or effective. Epinephrine injections were reduced to moderate to severe distress as an indication to substitute for nebulized treatments. Decontamination instructions were included as well. Several days later it was decided to add ondansetron to the treatment protocols before the official start on July 1<sup>st</sup> and to issue just in time training for that as well. While influenza is not typically transmitted through gastrointestinal secretions such as emesis, there was a 31% incidence of vomiting among patients with swine flu and the CDC had issued a caution about unknown routes of transmission.

Pre-arrival dispatch questions were added to try and identify patients with influenza like illness so that arriving crews could be notified to don their PPE before getting within six feet of the patient or sending one person in to get the initial history. This is consistent with some of the previous planning for pandemic influenza. EMS performed a survey of N95 availability and bolstered supplies of providers where needed. N95 masks were distributed to hospitals, pre-hospital providers and others.

Surveillance of the EMS system was an important part of the monitoring and was moved to daily surveillance reports from the normal weekly reports. Some of these were chief complaints among patients transported by ALS units out of the QCS system. This showed that time overlying the onset of the flu was a busy time but that there was not an increase in flu-like complaints. Respiratory disease in particular was lower than normal. Surveillance of county emergency departments showed that usage was normal until some of the heaviest publicity about the swine flu epidemic on about April 27<sup>th</sup> when the number of emergency department visits went up substantially, especially among patients with respiratory or fever complaints or respiratory with fever complaints. This lasted several days and then returned to baseline and the most likely explanation appeared to be that more patients were seeking care due to concerns about the swine flu than who actually had serious illness. To this point, the admission rate of swine flu patients is higher than that of the seasonal influenza but this is most likely due to a reporting artifact where testing is done especially heavily among those patients who have been hospitalized.

The Medical Operations Center went from Level 1 to Level 2 activation. It was in a supportive role of communicable disease and epidemiology, especially in the logistics area. Prescribing guidelines were developed by Public Health to identify those patients at highest priority for treatment with Tamiflu. Tamiflu supplies were obtained from state and federal sources and the distribution plan led to the allocation of these supplies to hospitals, the community clinic system, and university health centers. Later, EMS developed a pharmacy distribution plan so that physicians not affiliated with a hospital or caring for hospitalized patients would be able to prescribe Tamiflu and patients could pick it up from one of about twenty-six identified pharmacies across the county.

The 211 call system was activated to answer callers' questions and to provide needed information about the swine flu. It was recommended those individuals who became ill during the flu epidemic should remain off work for seven days after the onset of their illness or one day beyond the resolution of their symptoms. This is important to prevent field health care workers from infecting patients or their fellow workers. We did have two cases of possible exposure that received expedited testing for swine flu. One was a paramedic who performed an intubation without an N95 mask and other high level protection because of an unknown history at the time. The other was an EMT who became ill after transporting a patient with the swine flu infection, became ill with flu-like symptoms and returned to work too early. Neither the paramedic nor the EMT ended up contracting swine flu.

The recommendations for PPE will be changed in the near future. The level of PPE will be reduced closer to that used for seasonal flu, with a higher level for aerosol generating procedures.

County EMS has done considerable amount of pandemic influenza planning for a number of years now and that preparation paid off in terms of planning and familiarity with how to operate during such an event. We will keep you posted regarding H1N1 influenza

### Protocol Update

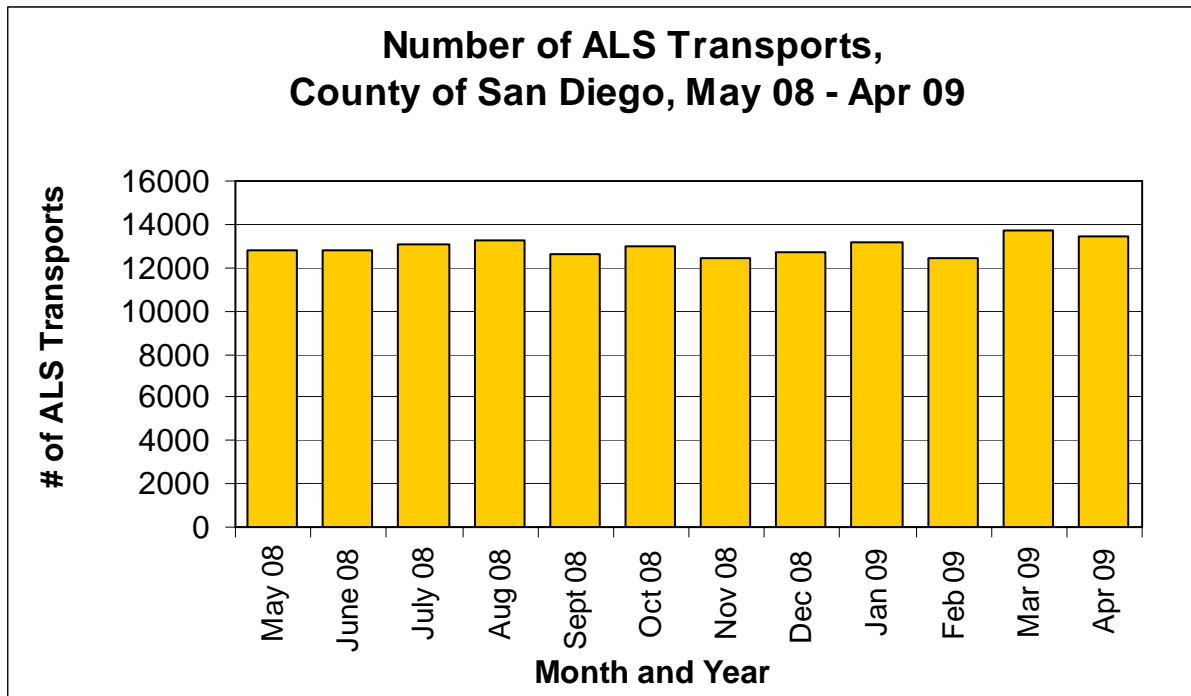
The training for the new protocols is finished and being distributed.

### EMT Optional Scope (Advanced EMT)

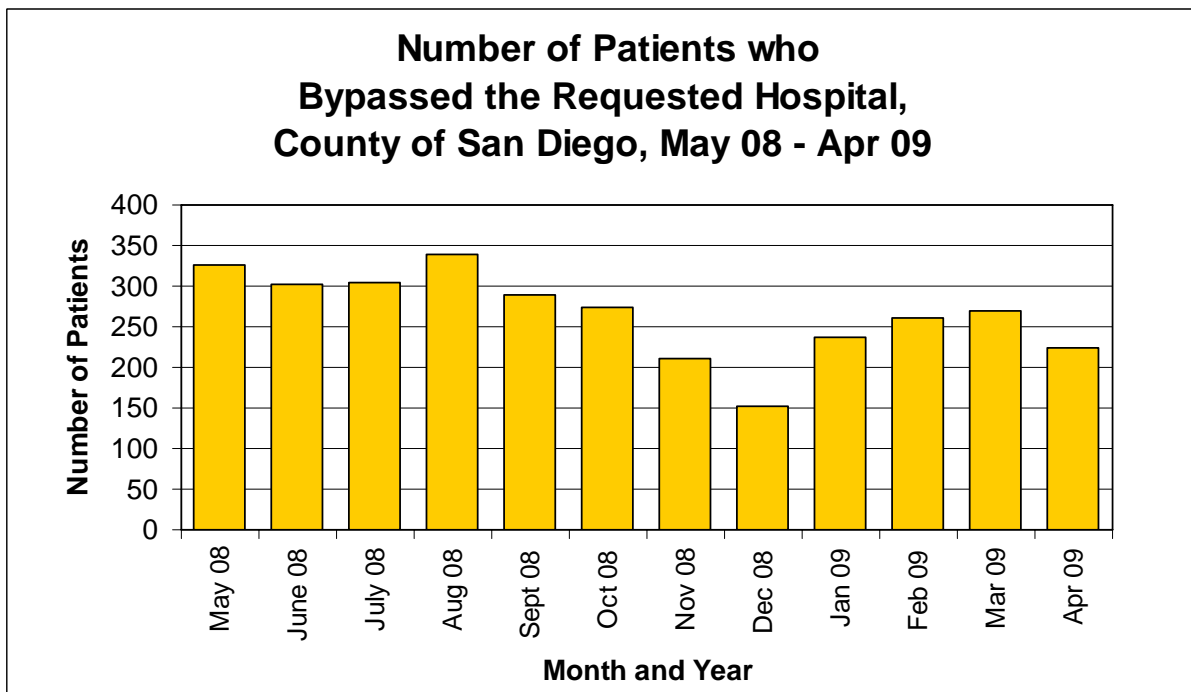
EMCC approved the optional scope EMT program at their last meeting. This program adds seven medications to the EMT scope of practice. It is designed to bring the basic, important ALS interventions to rural areas via first response EMTs with the enhanced scope of practice. We will be taking

applications from training programs. Priority for student enrollments will be those who deliver care to rural or remote areas. In addition, students will require the sponsorship by an ALS or BLS agency.

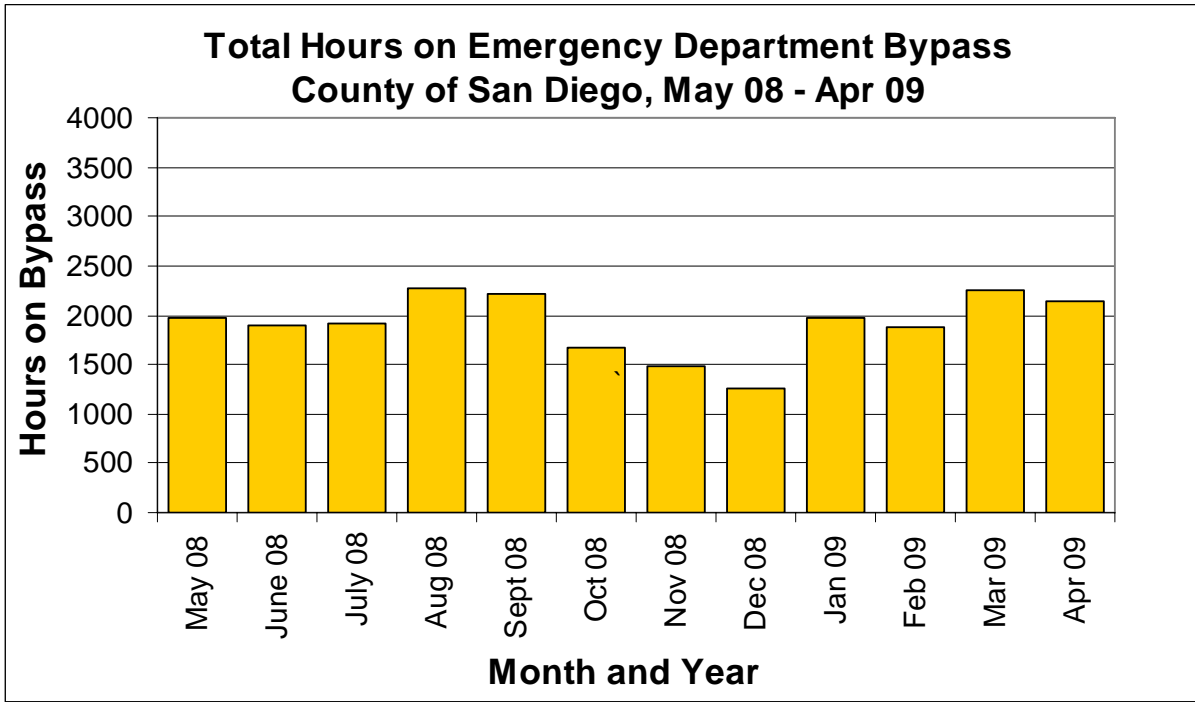
Below are the patient destination data in graphic form:



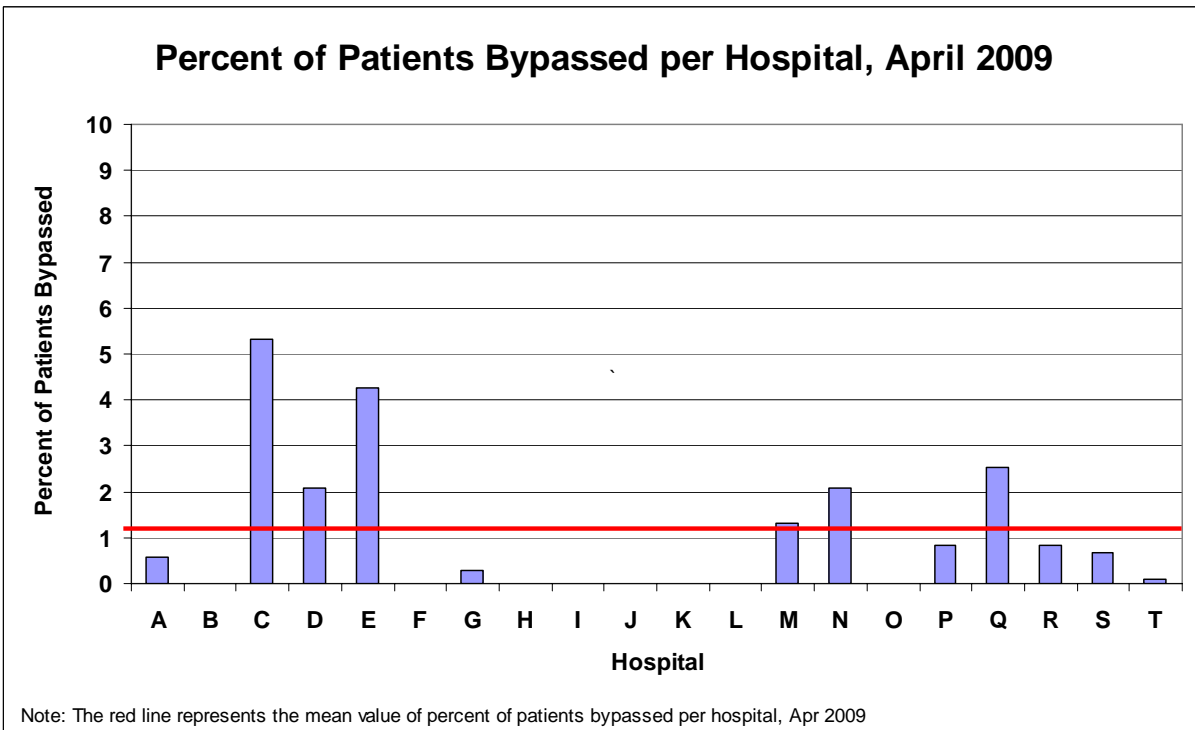
Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, May 2008 – Apr 2009 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



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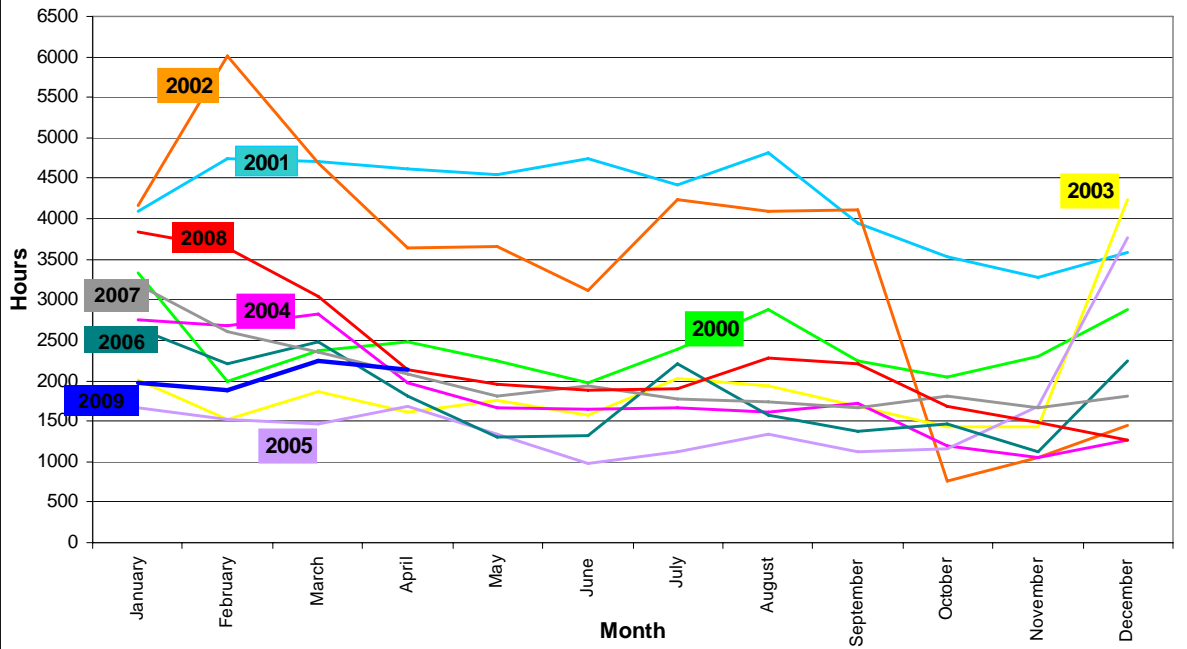


Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, May 2008 – Apr 2009



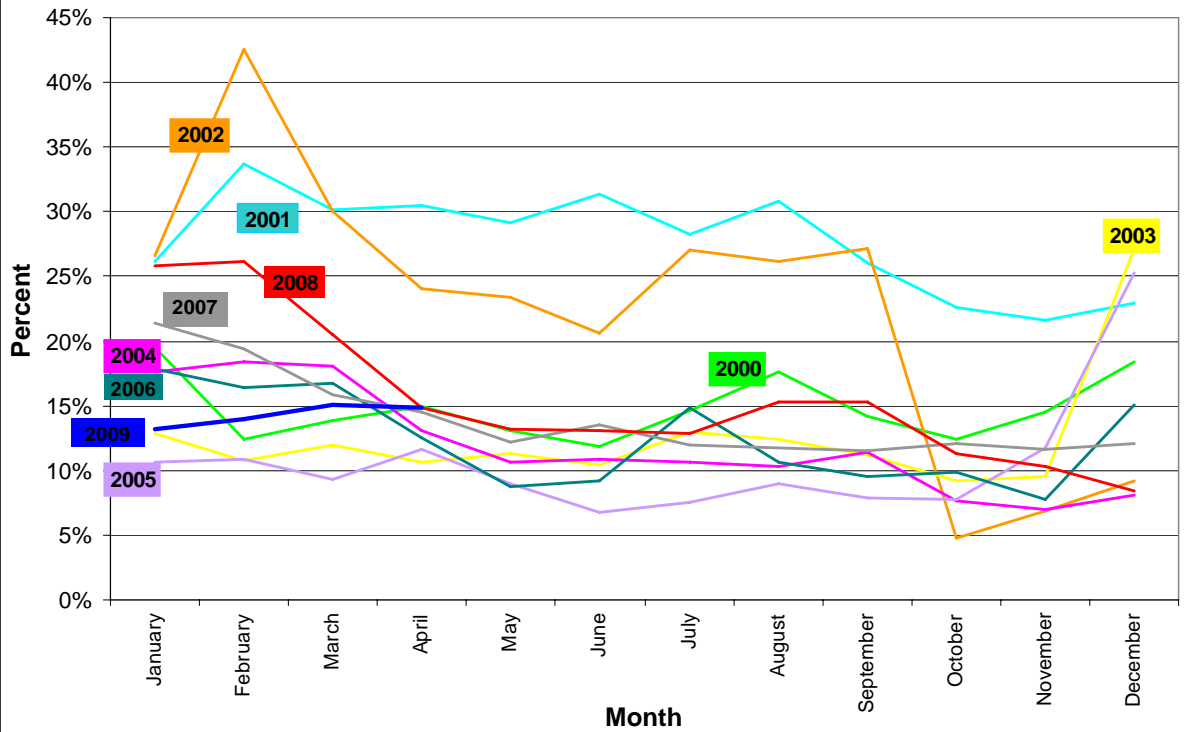
Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, MICN Records, Apr 2009 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

### Total Hours on ED Saturation by Month and Year, San Diego County, Jan 2000 - Apr 2009



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

### Overall Percent Hours on ED Sat Per Month San Diego County, Jan 2000 - Apr 2009



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