



“Mandatory Transport for All:  
Can EMS Decide  
Who Should Be Transported or Not?”



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## Case 1. N/V



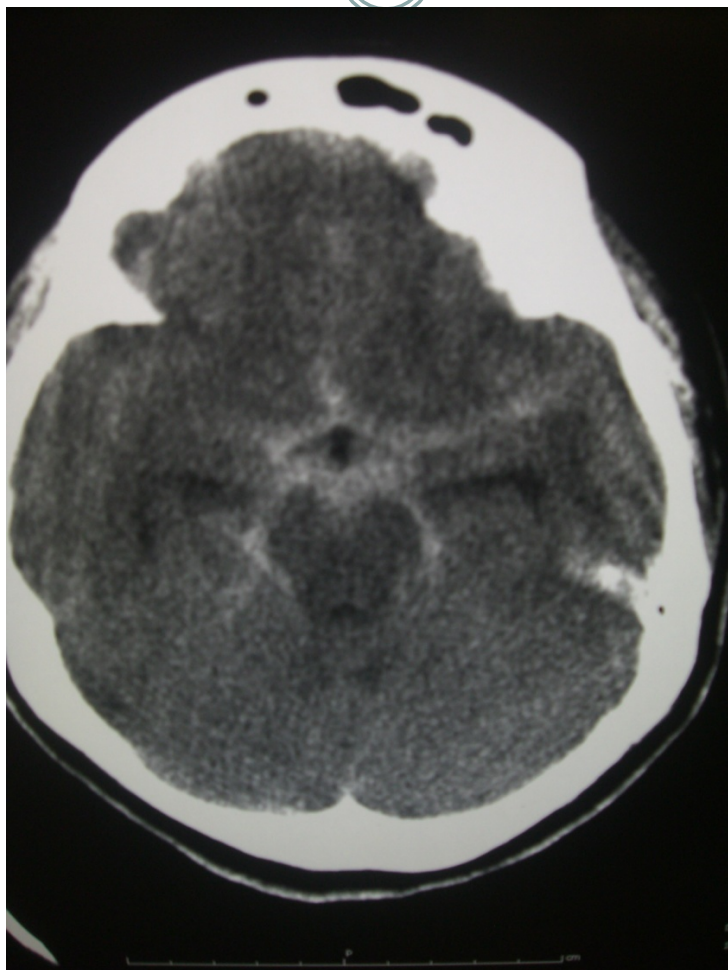
- 60 year old male complains of nausea and vomiting while eating dinner
- He denies any LOC
- 140/92 84 18 98%
- Family called on his behalf
- Patient does not want to go to the hospital
- Paramedics support his decision and tells him it is probably “something he ate”



## Case 1. Cont'd



- Paramedics are called back 40 minutes later
- Family is assisting patient out to the car
- He is lethargic and ataxic
- Paramedics place in ambulance and note ↓↓ respiratory effort and begin BVM
- Patient codes in ER and cannot be resuscitated
- Family files wrongful death lawsuit



# Grounds for the lawsuit



- Paramedics failed to transport patient
- Paramedics failed to recognize seriousness of presenting illness
- Paramedics told family patient was not sick
- Patient would have done fine had he been transported upon first contact

## Case 2. Seizure



- Paramedics are called to the jail for a reported seizure
- Jailers state patient may have had a seizure, but they believe the patient may have been “faking it”
- Paramedics find the patient A/O x 3 in NAD
- Patient does not recall events
- Denies hx of sz

## Case 2. (cont'd)



- Paramedics find no objective evidence of a sz, since the pt does not appear postictal, has no e/o tongue biting, or incontinence
- They agree with the jailer's assessment and opt to leave the pt
- They are called back 1 hour later for a man down and find the patient dead in the cell
- Cellmates state the patient had further seizures but the jailers refused to provide assistance or call for help

# Transportation Dilemma: Why *not* transport everyone?

- Increasing call load
- Emergency department overcrowding
- Increasing ambulance diversion
- Increasing “wall time”
- Workforce morale
- 911 abuse



# Transportation Dilemma: Why transport everyone?



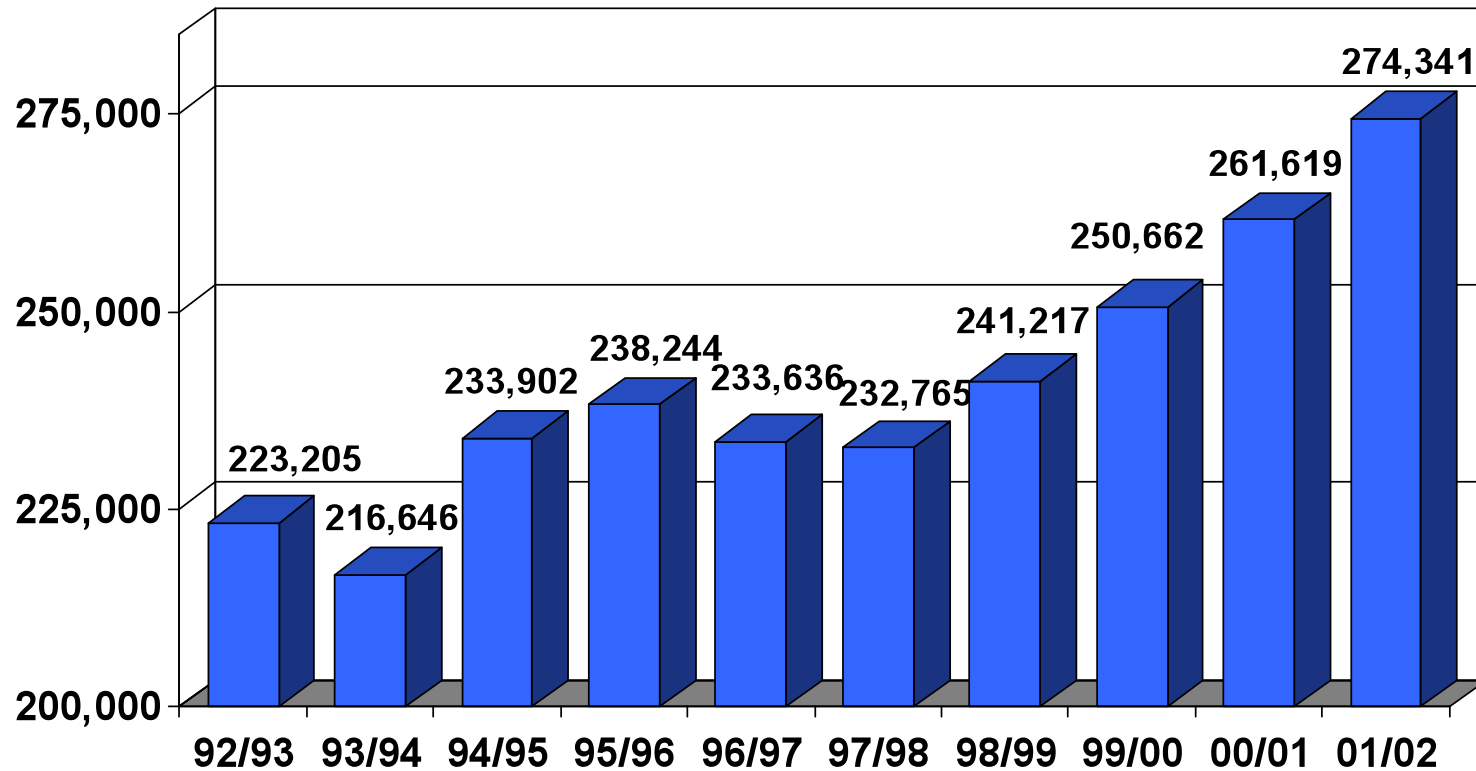
- Many potentially life or limb-threatening illnesses appear benign in the field
- Major source of liability
- Medics are not trained to “diagnose”
- *EMS-initiated refusal* is not the same as *patient-refusal*

# Increasing Call Load



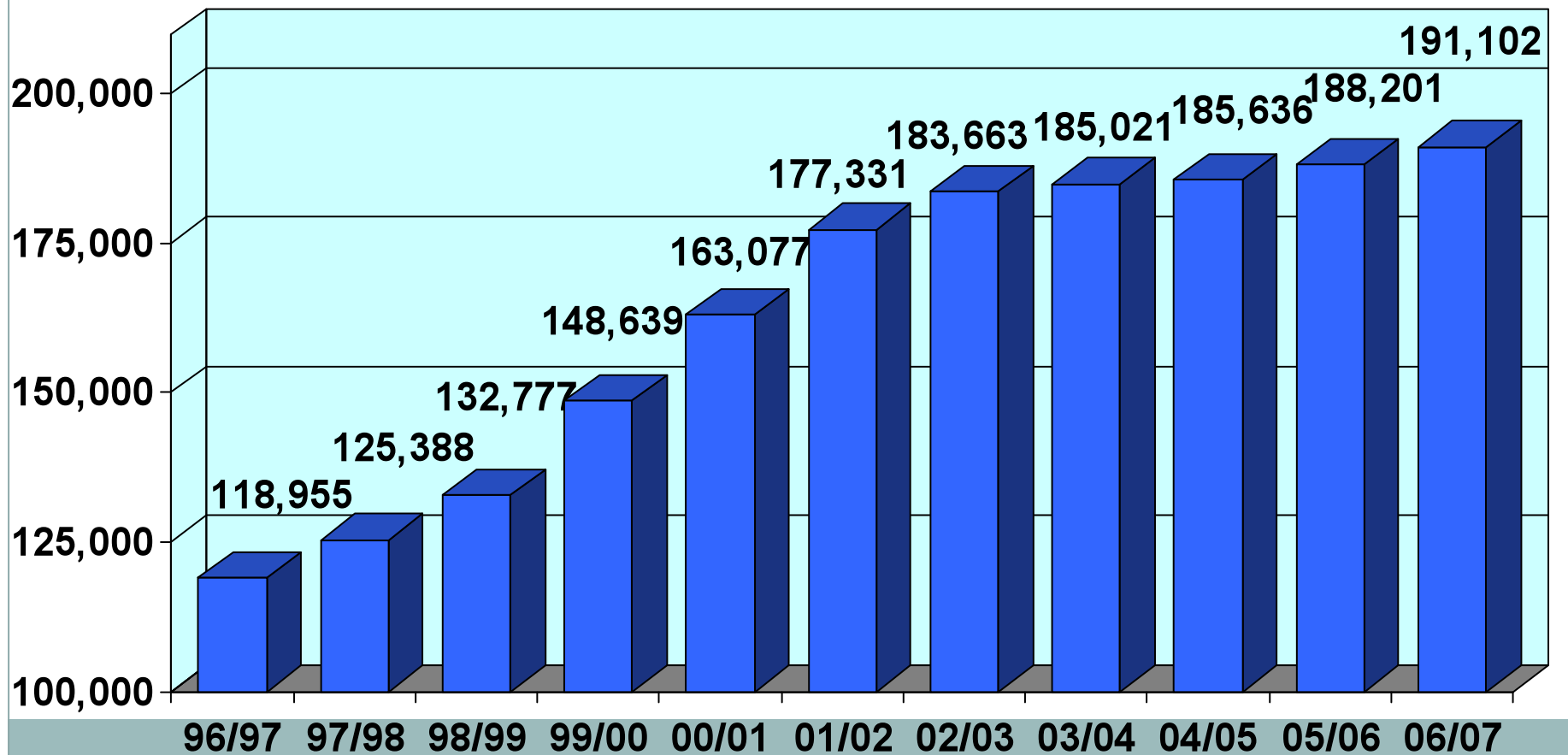
# EMS INCIDENTS

■ FIRE DEPARTMENT EMS INCIDENTS



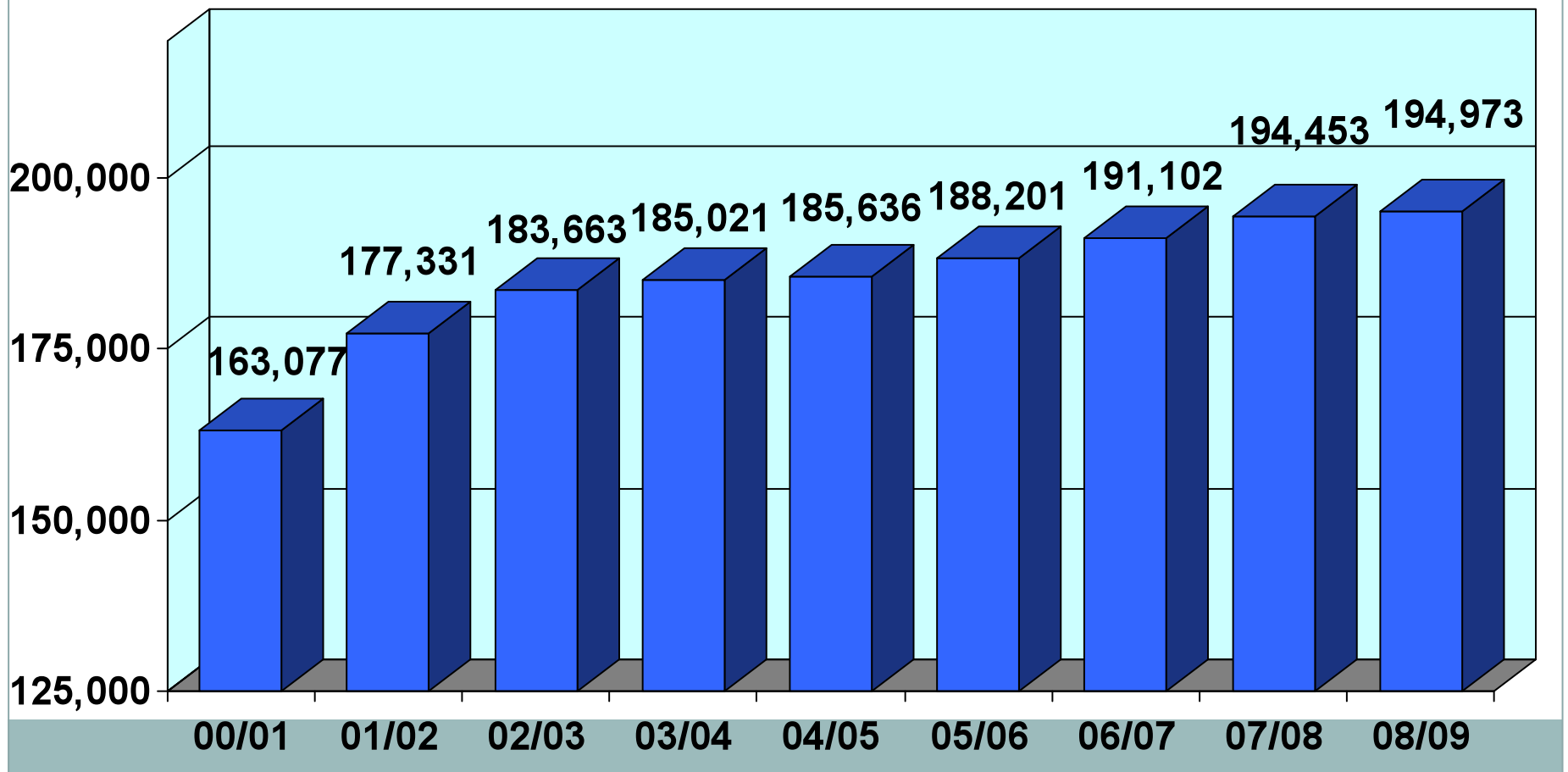
# HOSPITAL TRANSPORTS

■ ANNUAL NUMBER OF HOSPITAL TRANSPORTS BY LAFD



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# ED Overcrowding





# Increasing ED “boarding time”



# Increasing “wall time”

EMERGENCY MEDICAL SERVICES/ORIGINAL RESEARCH

## The Effect of Emergency Department Crowding on Paramedic Ambulance Availability

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From the Department of Emergency Medicine (Eckstein, Chan) and the Departments of Pediatrics and Surgery (Chan), Keck School of Medicine of the University of Southern California, Los Angeles County + University of Southern California Medical Center; and the Los Angeles Fire Department (Eckstein), Los Angeles, CA.

**Study objective:** We determine the effect of emergency department (ED) crowding on paramedic ambulance availability.

**Methods:** This was a prospective longitudinal study from April 2001 through March 2002 in Los Angeles, CA. All incidents in which a Los Angeles Fire Department ambulance was out of service for more than 15 minutes while waiting to transfer a patient because of the lack of open ED beds were captured and analyzed. Data included the total time each ambulance was out of service and the hospital where paramedics were waiting for an open gurney. Analysis was performed to determine weekly and seasonal variations and preponderance at various hospitals.

**Results:** There were a total of 21,240 incidents in which ambulances were out of service while waiting to transfer their patients to an open ED gurney, which accounted for 1 of every 8 transports. Of these, 8.4% were in excess of 1 hour. The median waiting time per incident was 27 minutes, with an interquartile range of 20 to 40. There was a statistically significant difference in the monthly number of out-of-service incidents during the study ( $P < .0001$ ), with the highest levels during the winter (January through March).

**Conclusion:** ED crowding has resulted in delays for paramedics waiting to transfer patients. This decrease in ambulance availability may have a significant effect on emergency medical services systems' abilities to provide timely response.

[*Ann Emerg Med.* 2004;43:100-105.]

### INTRODUCTION

Emergency department (ED) crowding and diminishing inpatient capacity have received a great deal of attention in the medical literature and the lay press as a nationwide problem.<sup>1-3</sup> When paramedics transport a patient to a crowded ED, they are often confronted with the unavailability of an empty ED gurney. The paramedics must wait in the ED with their patient on the ambulance stretcher until an ED gurney becomes available. These waits can vary from only a few minutes to several hours. During this time, the paramedic ambulance is out of service to respond to additional calls. When multiple ambulances are out of service, there is a potentially significant negative effect on the ability to provide emergency medical services (EMS) to the community.

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## SUNDAY | VALLEY Los Angeles Times

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## Crowded ERs Put Patients on Hold

**L.A. County:** Paramedics say long waits, which can stretch up to five hours, endanger lives. Officials contend the critically ill are seen immediately.

By CHARLES ORNSTEIN  
TIMES STAFF WRITER

Overcrowding in Los Angeles County emergency rooms is forcing patients brought by ambulance to wait up to five hours in hospital hallways and lobbies, cared for by paramedics rather than doctors or nurses.

Paramedics and ambulance workers with six months or less of formal training often are the only ones watching over patients who are seriously ill or even dying—a task many say is far beyond their ability.

"People call 911 and they think if we bring them in, they'll get seen by the doctor faster," said Los Angeles Fire Department paramedic Criville Wright, who waited more than two hours last week with a respiratory patient at Martin Luther King Jr./Drew Medical Center. "That's not the case."

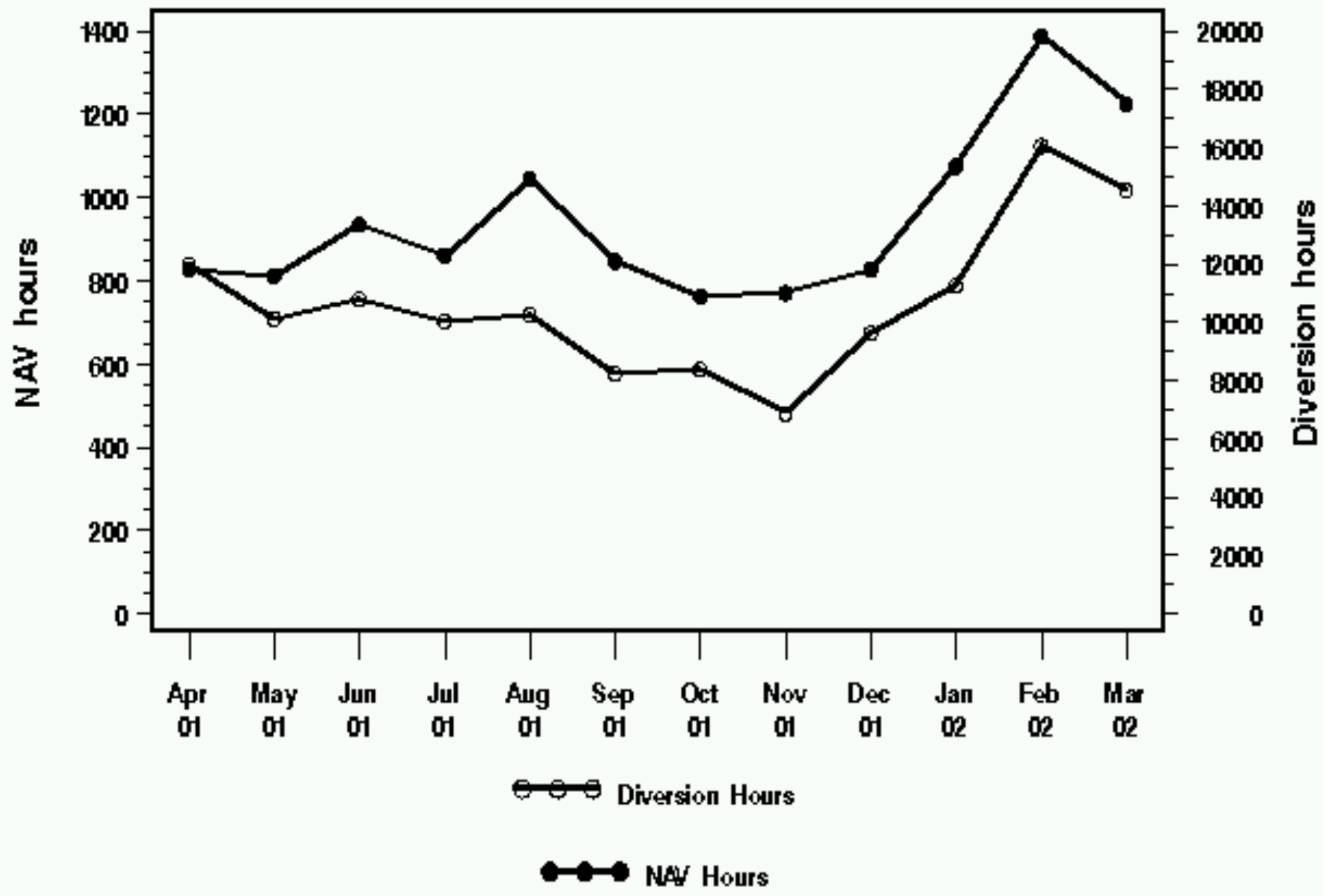
Hospital officials say the most critically ill patients are treated immediately. But paramedics and some emergency physicians say the congestion is endangering patients' lives.

The danger extends beyond the ER. While paramedics are waiting for a bed to open up in the emergency room, ambulance responses are often delayed in the communities they cover. If an ambulance is taken out of commission, response times in its service area increase by four to five minutes on average, fire officials say.

Ambulance backlogs are worsened



### Monthly NAV Hours and Diversion Hours



# Negative impact on morale



LAFD  
T/C E-46  
Photo by O. Ramos

# Non-Transports



- Failure to transport accounts for ~90% of EMS-related litigation
- Paramedics are not trained to diagnose in the field
- Many patients may be sick with minimal signs/symptoms
- Many serious conditions may present with seemingly minor complaints

# Some notorious “non-transport”



- 35 year old female with twin gestation who just delivered a stillborn
- 65 year old male with left-sided “rib pain”
- 10 year old male s/p assault with hematoma and laceration to scalp
- In-custody patient with seizure
- 78 year-old male with low back pain
- 50 year-old diabetic with nausea and vomiting

# Policies regarding non-transport



- EMS-initiated refusals
- Involvement of on-line medical control
- Mandatory transport for all patients
- Age-specific criteria

# LAFD Transportation Policy

- All patients with a medical complaint (excluding minor extremity trauma) *shall* be offered transport via department ambulance
- All patients < age 12 months who are not transported shall be made “AMAs” and OLMC is required

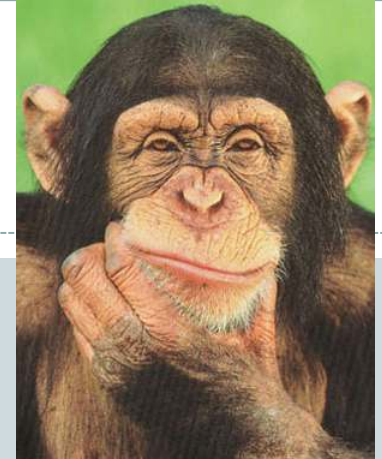


# AMAs



- Sub-category of non-transports
- Higher risk
- Pre-defined criteria by chief complaint
- On-line medical control
- Competency

# Issues to consider



- Is patient *competent* to refuse
- What constitutes an “AMA”?
- Are EMS providers trained to *diagnose* in the field?
- Are there any special circumstances which places a patient at high risk?



# High risk variables

- Patients who live alone
- Possible ingestion of drugs/alcohol
- Patients in-custody
- Psychiatric patients





# Can paramedics safely triage patients *out* of the system?



"Bye, now!"

## Paramedic determinations of medical necessity:

### A meta-analysis

Brown LH, et al. *Prehosp Emerg Care* 2009



- Review of 5 published studies reporting paramedics' ability to determine medical necessity of ambulance transport
- NPV in paramedics predicting need for hospital *admission* ranged from 82% to 90%
- NPV in need for ED *evaluation* was 45% to 97%
- One study found that in 85 cases where paramedics felt ED transport was unnecessary, 27 (32%) met criteria for ED treatment, including 15 (18%) who were admitted and five (6%) who were admitted to an ICU
- The aggregate NPV of the paramedic determinations is 0.91, with a lower confidence limit of 0.71.
- These data do *not* support the practice of paramedics' determining whether patients require ambulance transport

## EMS-initiated refusal and alternative methods of transport



- 34 (17%) EMS systems have written protocols that allow EMS providers to refuse emergency ambulance transport for patients judged to have minor illness or injury after examination.
- 21 (62%) of these EMS systems do not require on-line physician approval for EMS-initiated refusals.
- 7 (21%) EMS systems that allow refusal of transport also have a formalized alternative transport program in place.
- Nationwide, only 19 (10%) cities surveyed offer some type of alternative to ambulance transport, most commonly taxi and minivan.

Jaslow, et al. EMS-initiated refusal and alternative methods of transport.

## Does anyone now allow EMS-initiated refusals?



- 7.0% (14) of the 200 largest EMS agencies
- 64% (9) of those require direct medical control
- 5 (2.5%) of the 200 agencies sanctioned EMS-initiated refusals without requiring online medical approval.

Knapp BJ. J Emerg Med;36:2009

# Summary



- Many clinical conditions do not present with unstable vital signs or obvious s/sx in the field
- Allowing EMS-initiated refusals is fraught with peril and involves considerable risk
- Protocols and policies must address non-transport
- Beware of high risk patients

**If you don't look for the problems  
you won't find them  
(before the lawyers do).**

