Committee on Governmental Affairs Legal Drugs, Illegal Purposes: the Escalating Abuse of Prescription Medications

Testimony and written statement August 6, 2003

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Brief Biography

Dr. John Burton is the Medical Director for Maine Emergency Medical Services (1999-Present) and the Research Director in the Department of Emergency Medicine (1997-Present) at Maine Medical Center, Portland, Maine.

Dr. Burton completed medical school at the University of North Carolina at Chapel Hill (1992). He completed residency training in Emergency Medicine at the University of Pittsburgh Affiliated Residency in Emergency Medicine (1995).

Dr. Burton has lived in Maine since 1995. In addition to his work in emergency medical research and emergency medical services, Dr. Burton is also involved with management, consulting, and teaching efforts for a number of organizations in acute care and emergency medicine throughout New England. Dr. Burton holds an assistant clinical professor appointment at the University of Vermont School of Medicine.

Dr. Burton's interest in drugs of abuse came about with his observations of a sudden elevation in narcotic-related emergency visits and deaths, within the State of Maine, in the spring of 2002. Since that time, he has worked on a number of task forces with medical personnel, law enforcement, and state and local government representatives to attempt to address this complex issue.

Written Statement:

I first became concerned about the growing problem of narcotic and prescription narcotic abuse in Maine during the early months of 2002. At that time I was, and continue to be, the Medical Director for Maine Emergency Medical Services (EMS) as well as an emergency physician at Maine Medical Center in Portland, Maine.

My colleagues within the acute care and emergency medical fields were witnessing a dramatic increase in opiate-related medical encounters in early 2002. Maine Emergency Medical Services data currently demonstrate this alarming increase in opiate-related emergency encounters:

- <u>Current data suggests that a life-threatening opiate-related emergency encounter</u> <u>appears in the State of Maine EMS system at the rate of approximately one patient</u> <u>every day.</u>
- Life-threatening opiate-related encounters in the Maine EMS system have demonstrated an approximate 25-50% increase per year since 1999 compared with a growth of all patient encounters in the EMS system during the same period of approximately 4-7% per year.
- A large spike in life-threatening opiate-abuse encounters occurred during the calendar year 2002 in the Maine EMS system.
- In 2002 in the City of Portland, Maine, a life-threatening overdose patient was encountered by EMS providers at the rate of approximately once per week

Factors that seemed to be contributing to the number of encounters appeared to be the availability of methadone as a drug of abuse, large quantities of illicitly available methadone, the utilization of methadone as a recreational drug of abuse, and similar availability and interest in prescription narcotic pills as recreational drugs of abuse.

A teenage girl that I encountered in 2002 illustrates the alarming interest by Maine's youth in opiates as recreational drugs:

This young woman was a 16 year-old female who arrived at our emergency department with her parents. This teenage, parent-described "honor student" had been taking oxycontin for 6 months as a recreational drug of abuse. She obtained her oxycontin at her high school where she was introduced to prescription narcotic pill abuse by a friend. After approximately 6 months of oxycontin escalation and addiction, she was no longer able to obtain this drug and subsequently began injecting intravenous heroin, as well as smoking heroin, on a daily basis. She ultimately revealed her addiction to her parents and was brought to our emergency department seeking rehabilitation.

The relationship between an innocent, high school, entry-level experience with prescription pain pills and the progression to intravenous heroin is not to be underestimated. Many patients who we have seen in the healthcare system initiate their opiate interest with prescription pain pills. Once the supply of the initial drug runs out, the individual is forced to either progress to other drugs illicitly (e.g. heroin or methadone) or in a formal treatment setting, such as a methadone clinic.

Unfortunately, most patients who present to the emergency medical system have lifethreatening, immediate treatment needs. A similar case, with regard to the alarming entry age and innocence of the victims, was encountered in our emergency department in the fall of 2002:

Three young males - 18, 18, and 17 years of age were brought to our emergency department by EMS providers. These individuals were at a high school party where someone challenged them to drinking "shots" of beer "spiked" by liquid methadone. The source of the methadone was unknown. Emergency service providers were called to the party after all 3 of these individuals were witnessed to be hypoventilatory (breathing at a dangerously slow rate) and difficult to arouse. One of the patients was treated with the narcotic reversal drug, Naloxone, with all three transported to our hospital. Ultimately, all three individuals were treated and released after a multi-hour period of observation.

Other encounters have not ended so well for those interested in experimenting with available opiates, particularly heroin and methadone. One of my colleagues, in an emergency department in western Maine, relayed this patient history to me in the spring of 2003 after seeing this patient the night before:

This 23 year-old male ingested an unknown quantity of liquid methadone at an evening party. The mother of the host of the party was a methadone clinic patient on "high dose" methadone with "take-home" liberties. It was unclear whether this person willingly or unknowingly made her methadone "stash" available to her son. However, the son was able to access the methadone and presented it to the 23 year-old friend at the party. An undetermined rate of time elapsed and the patient was discovered unconscious on the party lawn during the early morning hours. 911 was activated, the patient treated and ultimately pronounced dead at the receiving emergency department within 30 minutes of his arrival.

The availability of large dose methadone has been a rather striking element in many emergency cases, I cared for this patient in the Spring of 2003:

This 20 year-old female was found in her apartment by her room mate. She was discovered to be unresponsive and EMS/911 was called. She was treated with intravenous naloxone and transported to our emergency department. In the emegency department, she stated that she had bought 300mg methadone from a methadone clinic patient. Her intent was "to party." She later became unconscious and this led to the 911 activation. This young woman was treated in the emergency department and admitted to our intensive care unit for approximately 8 hours on a naloxone infusion – due to the long effects of the methadone. She was ultimately released from the hospital the next day.

"High dose" methadone and methadone diversion to non-clinic patients appear to be common threads in many of the emergency patient encounters. However, not all cases that we treat are from methadone diversion. I relate a particularly alarming case that I saw in the spring of 2002, with near identical scenarios witnessed again in our emergency department with 4 to 5 encounters in 2002, and continuing with multiple encounters in 2003 – the most recent treated 3 weeks ago in our emergency department. It is not uncommon for emergency departments to treat accident victims from motor vehicle crashes. However, unique in many of our experiences over the last two years has been the number of patients in motor vehicle crashes who are "methadone impaired."

Three patients were transported from the scene of a motor vehicle crash on the Maine turnpike during a Saturday morning. The EMS providers stated that the driver crashed into a bridge abutment on the Turnpike road at a high rate of speed. The most concerning element among the 3 victims was their level of consciousness – rather lethargic and dazed. On questioning in the emergency department, it became apparent that the 3 patients had left a methadone clinic that morning after ingesting their "high dose methadone" in the parking lot as well as pooling each others' take-home dosages and ingesting the drugs en masse. One patient suffered a broken leg, the others had minor injuries and were released. In this case and similar cases with motor vehicle crashes due to opiate impairment healthcare workers have been increasingly alarmed at the threat posed by these individuals to innocent victims on Maine motor highways and roads.

Patients who present with substance-impairment, particularly opiate impairment, present a challenge to emergency healthcare workers. Levels of impairment in consciousness and alertness attributed to substance abuse must be quickly and decisively delineated from impairment due to medical conditions (e.g. heart problems, diabetes) and traumatic injuries (e.g. head injuries).

The point should be made, however, that patients with opiate-abuse problems who present to the emergency healthcare system are generally a population that is biased to individuals who are suffering the effects of narcotic addiction or lack of success in treatment programs. There are certainly successful cases of patients in treatment for narcotic addiction. In July 2003, I witnessed an illustrative case:

This 38 year-old gentleman presented to the emergency department with a work-related injury: a laceration sustained while working with a large press at work. During the course of his examination, he revealed that he had suffered addiction to intravenous heroin and prescription narcotics for approximately 5 years. In the

last 2 years, he had maintained a stable life and job due to his success in a methadone maintenance treatment program. He immediately returned to work after his laceration was repaired.

Data supporting my observations in my practice as well as the Emergency Medical Services for the State of is attached below. I have attached it with comments addressing the data presented.

Ultimately, the elements that appear to have most significantly impacted the number and types of encounters in the emergency medical services for the State of Maine would include, but not be limited to:

- □ The availability of methadone to individuals abusing drugs and experimenting with drug use
- Diversion of methadone from methadone treatment/clinic patients
- □ High dose methadone (in excess of 200mg/day) use by methadone clinic patients and diversion
- The availability of prescription narcotic pills such as oxycontin and generic oxycodone
- The apparent popularity of opiate abuse, particularly prescription drugs, among Maine's teen-agers and young people, relative to traditional drugs of abuse in this population (e.g. marijuana, alcohol)
- □ The attraction of abusers and those experimenting with drug abuse to methadone as a drug of abuse

After living and practicing emegency medicine through this dramatic rise in opiaterelated emergency patient encounters, I believe that certain elements must be addressed in any effort to confront the growing and alarming trend in of opiate abuse:

• Cooperation must be facilitated and encouraged between methadone treatment facilities, public health agencies, law enforcement and medical providers. In order to achieve this, attention must be directed to sharing critical information while

protecting the public's interest in safety and simultaneously patient and victim interests in privacy.

- Methadone clinic facilities should be monitored closely by regulatory agencies with particular attention towards policies for "take home programs," high dose methadone utilization, patient education towards diversion and methadone privilege abuse. Attention should also be directed to trends in abuse, diversion, and medical and law enforcement encounters within the communities and patient populations of methadone treatment facilities.
- High-dose methadone treatment strategies should be reviewed with a view that considers outcomes with regard to diversion, overdose, and side effects among clinic patients relative to more tradional dosage programs.
- Education and prevention efforts must be directed to the population at risk of drug abuse and experimentation with an attempt to educate those at risk to the life-threatening and life-addicting consequences of opiate use and experimentation.

The myriad of issues surrounding the problem of opiate abuse in the State of Maine, as well as the United States of America, cannot be quickly summarized or captured by any single statement. However, my written statement today is an attempt to lend an element from the "front lines" of the emergency health care system in the State of Maine as well as to convey patient vignettes that illustrate the observations of emergency healthcare workers.

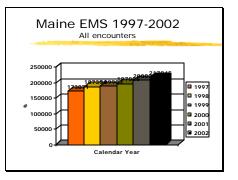
I thank the United States Senate Committee on Governmental Affairs for its attention to this most pressing concern and the honor of contributing testimony to this hearing. Slide 1

EMS Data 1997-2002

- Data source: EMS provider run sheets for Maine EMS encounters (approx 225k/yr)
 Data is complete 1997- 2002.
- Markers' for "opiate-related encounters:" Naloxone administration Miotic (Constricted) Pupils: 1 or 2mm
- Respiratory Depression: RR<10 #Data presented as case encounters per year as
- well as % growth from 1997 data.

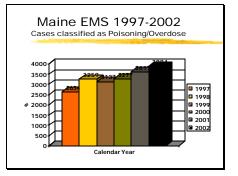
Maine Emergency Medical Services (EMS) maintains a database of all patient encounters. In attempt to address the question of narcotic/opiate-related encounters within the EMS system, I utilized it as a source for a study performed in the Spring of 2003.

Slide 2



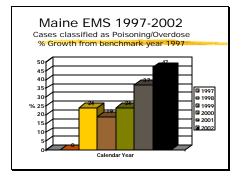
The number of encounters in the Maine EMS system has experienced a steady growth in the last 5 years with an approximately 4-7% increase per year. In the time interval 1997-2002, an increase of 25% in patient encounters has transpired.

Slide 3



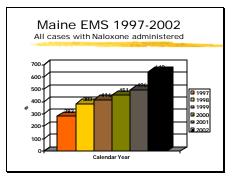
Cases classified by EMS providers, at each encounter, have also increased over the last 5 years with approximately 3800 overdose and poisoning patients seen in the year 2002.

Slide 4



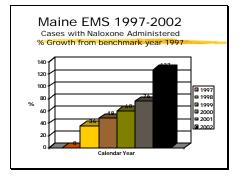
The percent rise in poisoning overdose encounters in the Maine EMS experience has been approximately double the rate of growth of all Maine EMS encounters.

Slide 5

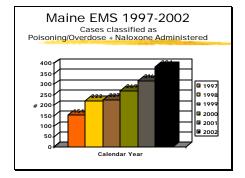


Naloxone (tradename Narcan) is a drug utilized in opiate overdose patients to reverse the effects of opiates. This drug is administered by paramedic providers in the Maine EMS system – until the year 2003 when we began a program allowing EMTintermediate providers to administer the drug. The drug is administered intravenously in our practice.

Slide 6

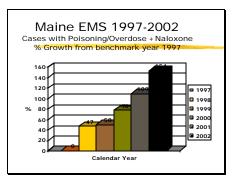


Nalo xone is administered only to those patients who have suspected overdoses with the great majority of patients suspected of opiate-related or combinationopiate overdoses. The growth of naloxone use in Maine EMS encounters has grown substantially, with a large spike in encounters during 2002.



There are some cases where naloxone may be administered to non-overdose patients. Therefore, I have combined the queries in the database to identify only those patients who were suspected of poisoning/overdose AND concomitantly given naloxone.

Slide 8



This slide most accurately presents the growth of life -threatening known and suspected opiate-related overdose encounters within Maine EMS during the period 1997-2002: there has been an approximately 25-50% increase per year in the EMS system since 1999.

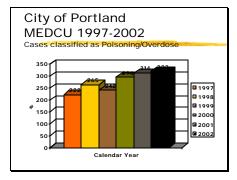
Slide 9

Opiate-Related Overdose Encounters in Maine EMS: 1997-2002 Conclusions

- *The growth of Opiate-related Maine EMS encounters has disproportionately outpaced the growth of all Maine EMS encounters as well as Poisoning/Overdose encounters.
- *****There appears to be a large escalation in Opiate-related Maine EMS encounters in the period 2001-2002.

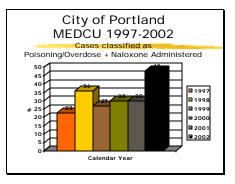
The growth of opiate related overdose encounters in Maine Emergency Medical Services has well outpaced the baseline activity in the system. <u>Current data</u> <u>suggests that a life-threatening encounter</u> <u>appears in the EMS system at the</u> <u>present rate of approximately one</u> <u>patient every day in the State of Maine.</u>

Slide 10



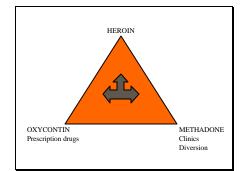
The City of Portland, Maine, similar to the State of Maine, has witnessed a steady growth in the number of medical emergency overdose patients in the last 5 years.

Slide 11



A large spike in life-threatening opiate abuse encounters occurred during the calendar year 2002. <u>In the City of</u> <u>Portland, a life-threatening overdose</u> <u>patient was presenting to the 911 system</u> <u>approximately once per week in 2002</u>. The activity in years prior to 2002 suggests encounters on the order of one patient every 12 days.

Slide 12



In the emergency medical system, we've observed many patients who demonstrate a close relationship between heroin, methadone, and prescription pain medications. Patients frequently are evaluated who entered the opiate-addiction world with prescription pills (e.g. Oxycontin) and then were forced to abuse of heroin or methadone due to supply problems.