



INJURY PREVENTION COMMITTEE

OF THE GOVERNOR'S EMS AND TRAUMA ADVISORY COUNCIL (GETAC) OF THE TEXAS DEPARTMENT OF STATE HEALTH SERVICES (DSHS)

COMMITTEE CHAIR'S REPORT

Renaissance Worthington Hotel
200 Main Street
Fort Worth, Texas

November 24, 2008
6:00 pm

Research and Surveillance – Dr. Rohit Shenoj

ACTION ITEMS FOR GETAC:

In order to jump start the surveillance of injuries and injury prevention process in Texas, we will have to concentrate on the leading cause of death, disability and financial cost due to injuries in our state. We should concentrate on establishing accurately the burden of injuries due to motor vehicle crashes. Also because of the questionable quality and incomplete nature of injury data within the Texas Trauma registry it is imperative that alternate sources of injury data be utilized.

See Attachment A for background information
INJURY SURVEILLANCE AND RESEARCH IN TEXAS

The following recommendations are requested for feedback and implementation benchmarks:

ACCEPT	REJECT	DEFER Until (identify timeframe)

1. Analyze the EMS data from the EMS systems of the 10 largest cities in Texas. (Houston, Dallas, San Antonio, Fort Worth, Austin, El Paso, Corpus Christi, Arlington ,Plano and Garland). This data if complete can give us adequate information for hotspot analysis to focus injury prevention activities.

- A) Collect all injury-related death, hospitalization and emergency department data.
- B) Incidence and rate of injury as used by the CDC
- C) Mechanism-specific, community specific and population specific data
- D) Use of E Code matrix for mortality and morbidity Data

<http://www.cdc.gov/ncipc/osp/matrix2.htm>

- E) Barell matrix
- F) Ten leading cause of death indicators
 - a) **By age group**
 - b) **Nonfatal Injuries Treated in Hospital Emergency Departments**
 - c) **Injury Death: Highlighting Unintentional Injury**
 - d) **Injury Death: Highlighting Violence**
- G) Hot-spot analysis

2. Obtain up-to-date information of injuries from the Texas Health Care Information Collection (THCIC) inpatient database. This data has to be purchased, GETAC shall identify a funding source.

3. Link EMS data with in the THCIC inpatient database after stripping personal identifying information of patients. A protocol is being developed for the submission of a State IRB approval.

4. Identify timeline for the inclusion of external cause of injury (E-codes) into the state hospital emergency department database (HEDDS). GETAC shall identify workgroup for implementation.

Legislative Affairs - Paula Yuma

**See Attachment B for background information
LEGISLATIVE AFFAIRS**

ACTION ITEMS FOR GETAC:

The following recommendations are requested for feedback and implementation benchmarks:

ACCEPT	REJECT	DEFER Until (identify timeframe)

1. Understand and follow the Legislative Appropriations Request for the Department of State Health Services, which includes increased an exceptional item request for improvements to the Trauma and EMS Registry.
2. Be ready to provide data-based responses to lawmaker's questions about proposed changes Texas Child Occupant Protection Safety Code, pre-filed as SB 61, which reflect best-practice child restraint guidelines
3. Identify and make GETAC member agencies aware of these three initiatives to decrease MVC morbidity and mortality related to alcohol:
 - (1) highly visible enforcement campaigns (i.e. saturation patrols, sobriety checkpoints, Click It or Ticket)
 - (2) changes in exiting ignition interlocks laws for all DWI offenders, and
 - (3) proactive and prospective actions related to use of ignition interlocks for all DWI offenders
4. Recommending RAC's oppose the use of pre-trial diversion programs in their communities
5. Make GETAC member agencies aware of MADD's proven strategies focused on preventing underage drinking and impaired driving (Youth In Action, UMADD, legislative improvements, support of increased enforcement and increased penalties)

Education and Programs - Rick Moore

ACTION ITEMS FOR GETAC:

The following recommendations are requested for feedback and implementation benchmarks:

ACCEPT	REJECT	DEFER Until (identify timeframe)

INJURY PREVENTION CRITERIA

Current language Section K; Advanced Essential Criteria:

1. A public education program to address the major injury problems within the hospital's service area. Documented participation in a RAC injury prevention program is acceptable.
2. Coordination and/or participation in community/RAC injury prevention activities.

Proposed language Section K; Advanced Essential Criteria:

1. A public education program to address a statewide major injury problem as defined by data published by DSHS Epidemiology and Disease Surveillance Unit. The program may be promising or best practice injury prevention programs. Programs will be implemented by hospital trauma injury prevention staff.
2. A public education program to address the major injury problems within the hospital's service area, as defined by data extracted from the hospital's trauma registry. The program may be promising or best practice injury prevention program
3. Trauma Service shall have an identified injury prevention coordinator with documented training in injury prevention, such as ENA Injury Prevention Provider Training or equivalent course as approved by DSHS. The injury prevention coordinator shall have 6 hours of continuing education in the field of injury prevention annually. Hospital staff providing public injury prevention presentations shall have documented proficiency presenting such programs on an annual basis.
4. All public education and prevention programs must include annual evaluation and revision based on outcome data as published by DSHS Epidemiology and Disease Surveillance Unit, regional and/or local registry data.

5. Coordination and/or documented participation in community/RAC injury Prevention Activities.

INJURY PREVENTION DEFINITIONS

The Governor's EMS and Trauma Advisory Council Injury Prevention Committee seeks to establish statewide criteria for injury prevention program implementation. In order to establish a uniform statewide injury prevention program, the committee also needs to establish a uniform statewide definition for injury, injury prevention and injury prevention programs.

Proposed definition of "injury": "Injury" means damage to the body that results from intentional or unintentional acute exposure to thermal, kinetic, electrical or chemical energy or from the absence of essentials such as heat or oxygen. This also includes acquired injury to the brain due to anoxia due to submersion.

Proposed definition of "injury prevention": "Injury prevention" means employing strategies that prevent or reduce the effects of intentional or unintentional acute exposure to thermal, kinetic, electrical or chemical energy or the absence of the essentials of heat or oxygen.

Proposed definition of "injury prevention programs": "Injury prevention programs utilize the strategies of education, enactment, enforcement, engineering, and economic incentives and penalties to reduce and eventually eliminate injury.

Communications Inter/Extra GETAC - Mary-Ann Contreras

ACTION ITEMS FOR GETAC:

The following recommendations are requested for feedback and implementation benchmarks:

ACCEPT	REJECT	DEFER Until (identify timeframe)

Goals for Communication Inter/Extra GETAC sub committee

- 1) Increase access to and linkages with GETAC standing and ad hoc committees
- 2) Improve communication between the Injury Prevention Committee and other GETAC committees

ACTION ITEMS FOR GETAC:

The following recommendations are requested for feedback and implementation benchmarks:

- 1) Develop a communication tool to be used between the IP committee and other GETAC committee members
- 2) Develop contacts within the GETAC committee members
- 3) Solicit the injury prevention needs throughout the state of Texas from other GETAC committee members based on current collected data
- 4) Identify outside stakeholders
- 5) Identify successful Injury Prevention programs through communication between the GETAC committee members and the IP committee members
- 6) Consider a utilizing a program state wide for a period of time. This program should be planned, studied, analyzed, and evaluated for effectiveness, data analysis and potential publication.

ATTACHMENT A: INJURY SURVEILLANCE AND RESEARCH IN TEXAS

A) Status of current Data and Information systems:

Though data is collected, this is not analyzed in methods useful for data driven injury prevention programs. There are many sources of data (e.g. individual providers, EMS System, State Trauma Registry) but the data is not consolidated or used in any sort of universal or regional way. There is (1) a lack of appreciation for the need for such data, (2) a delivery system that is operationally and not strategically driven and (3) a strong bias that data is proprietary and should not be shared for system wide improvements. The Texas Department of Health Trauma Registry has two established databases (one for trauma centers, one for EMS agencies). However there is a problem in managing incoming data and meaningful reports are just beginning to be generated from these databases. Reports suggest that despite the regulatory requirement in Texas that trauma centers and EMS agencies submit patient care data not all agencies are submitting data. (About 40% of EMS agencies in the Houston-Galveston area are submitting data) The results from other parts of the state are not known. Most EMS data submitted was for injuries (80%) even though the registry inclusion criteria require all 9-1-1 calls to be included. Some Level 3 and Level 4 hospitals are inaccurately reporting trauma cases and there is a lack of consistency in inclusion criteria. The quality of data collected by the law enforcement officers is also generally very poor. Consequently, the data available is not current, of uneven quality, not easily accessible with few analytical tools to work with it. The information available is not useful enough to make strategic decisions and reports to develop data driven injury prevention programs. In addition, the release of the new Crash Records Information System (CRIS) has been delayed and local stakeholders are still without the ability to use this information.

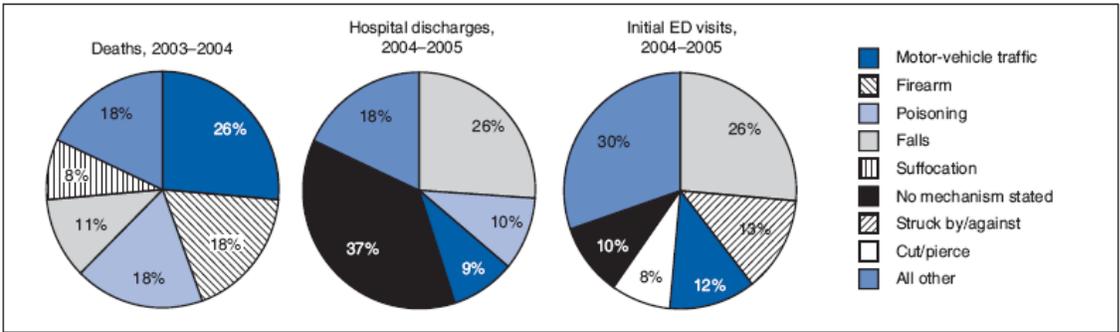
In summary, what is lacking is the ability to receive, evaluate, and trend provider and regional data information on system performance, clinical care, patient demographics and health care and injury prevention initiatives.

B) Classifying External Cause-of-Injury (E-codes) Data:

Knowledge of the external cause-of-injury is important for a) defining injury as a public health problem b) identifying risk factors and c) developing effective prevention activities. E-codes can be used to group the circumstances of an injury in two dimensions: 1) intent (i.e. cause of death: accident, suicide, homicide and undetermined) and 2) mechanism that characterized the external agent that caused the injury. The mechanism of injury is coded within the intent category.

Below are listed the leading causes of injury deaths, hospital discharges for injury and ED visits for injuries in the US from 2003 through 2005 and the availability of external cause-of-injury coding for statewide hospital inpatient databases and ED discharge data systems.

FIGURE 1. Leading mechanisms of injury deaths, hospital discharges for injury, and emergency department (ED) visits for injury — United States, 2003–2005



Source: GDC, National Center for Health Statistics: data from National Vital Statistics System for deaths, National Hospital Discharge Survey for hospital discharges, and National Hospital Ambulatory Medical Care Survey for ED visits.

FIGURE 2. Statewide hospital discharge data systems (HDDS), by external cause-of-injury coding (E-coding) status — United States, 2007

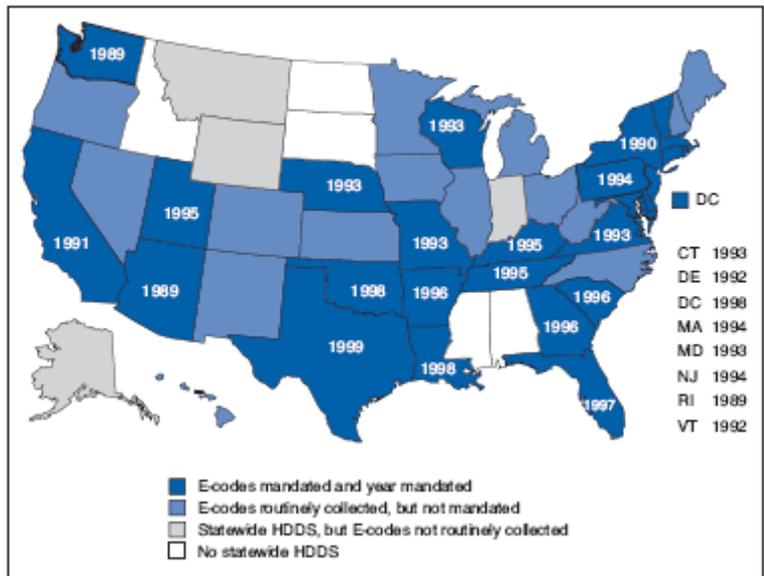
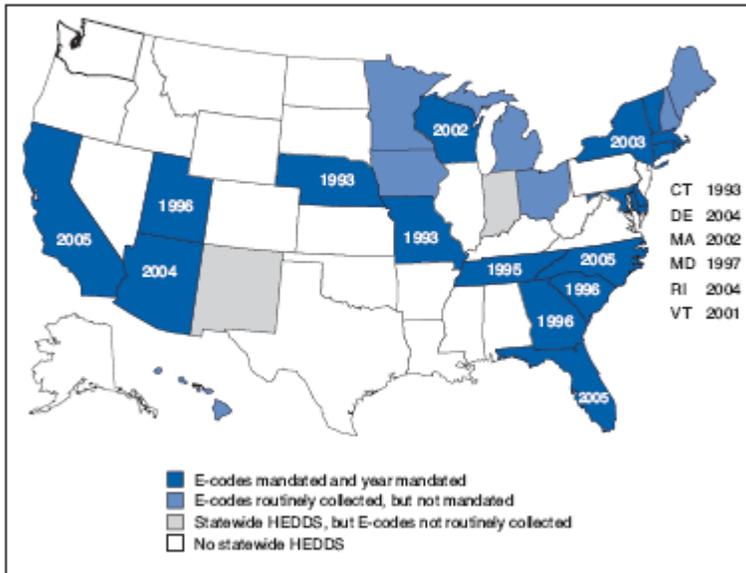


FIGURE 3. Statewide hospital emergency department data systems (HEDDS), by external cause-of-injury coding (E-coding) status — United States, 2007



The Texas inpatient database (THCIC) uses E-codes and diagnosis codes (ICD-9). However, external cause of injury coding is not required for Emergency Department visits in Texas.

Strategies are needed to ensure completeness, specificity and accuracy. Accuracy is specially needed to identify the specific circumstances of the injury incident. This may be possible with electronic health and patient records and integrating medical care with billing data. “Passive protection” through modification of consumer products and environments is most effective in reducing injury, regardless of intent. Standard external cause groupings that allow uniform aggregation of injury deaths by mechanism and intent can facilitate comparisons of injury data.

C) Research Issues:

- 1) When using large existing data-sets that do not contain identifiable private information about living individuals, the Institutional Research Board (IRB) would not consider the study to constitute human subject research. In these situations further IRB review and informed consent would not be required.
- 2) Data that have been made anonymous (ex. Codes and other identifiers are permanently removed from the data set before the data are sent to the investigator) would also not be considered to constitute human subject research. In these situations further IRB review and informed consent would not be required.
- 3) The Texas Health Care Information Collection (THCIC) hospital inpatient database does not permit any attempt to link the hospital stay records of patients in the THCIC dataset with personally identifiable records from any other source.

D) Hot spot analysis and Linkage studies:

Mapping injuries (crashes) with GIS helps show the overall crash patterns and linking the crash data to statistical analysis can identify the hazardous locations (hot spots). Further breaking the hot spots into types of crashes can help identify which behaviors triggered crashes and then linking this to an analysis of the drivers can help understand some of the characteristics that might have contributed to the behavior. The information needs to be reported to the public at large and to key decision makers. This could be done from crash data (CRIS) and/or EMS data.

Probabilistic linkage has been found to be an effective method for describing motor vehicle crash (MVC) and medical outcomes. By linking MVC data with EMS, ED and hospital discharge data, investigators have determined the benefits of important safety measures such as wearing safety belts and motor cycle helmets. This has the advantage of relying on hospital records for a more accurate assessment of injury severity rather than the law enforcement officers at the scene. The use of population data sets reduces ascertainment bias. The limitations are that crash data uses a peace officer's report about a MVC rather than an analysis by a crash investigation specialist. An important caveat in injury linkage research is that data should be devoid of personal identifying information.

Common linkage variables are: date of incident, date of birth, hospital code, county code, city code, sex and age. Crash and admission date are required to be within 1 day whereas the age in the motor vehicle crash file is required to be within 10% of the age in the hospital discharge file to get an agreement weight.

The pitfalls of unsuccessful linkage is 1) the records are not supposed to link, i.e. a patient was not injured 2) Corrupted data and 3) Incomplete data files. Usually, the discharge database is population-based and seldom contains missing records. It is usually the completeness of the crash data that is in question.

ATTACHMENT B LEGISLATIVE AFFAIRS

Texas EMS and Trauma Registry

The exceptional item request for the Trauma Registry is part of a request to upgrade and support a number of disease registries. That item was listed as “must haves” for the agency by the Commissioner and the CFO; and was placed in the top tier. The Trauma Registry biennium request is for \$1.7 million and includes start-up costs of \$800,000 to implement a new system (a tailored commercial off the shelf product managed by an outside entity), maintenance costs of \$160,000 to pay for the service in outgoing years, and support for seven FTEs to oversee operations, work with users on their needs, analyze the data for epidemiology and prevention purposes, disseminate the information, and develop and advance strategies for prevention.

Since the last committee meeting discussions with the advocacy representatives from the Texas Hospital Association, Children’s Hospital Association of Texas, the Traumatic Brain Injury Advisory Council and the Texas Pediatric Society, as well as meeting minutes from the Texas Trauma and Acute Care Foundation, reflect the trauma system’s interest in seeing the Department of State Health Services outsource the operation and maintenance of the Trauma and EMS Registry.

Senator Watson’s office has been involved in discussions with stakeholders regarding this issue and may be willing to sponsor legislation if necessary.

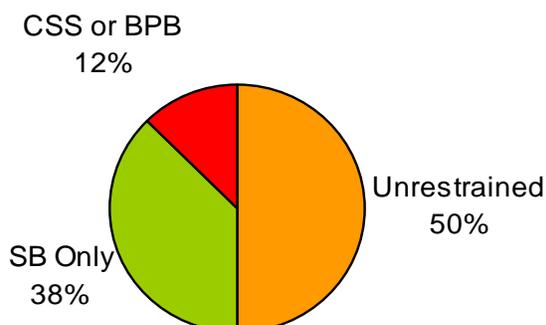
TETAF is also working towards developing a registry and will be holding stakeholder meetings in February. Anyone interested in attending these meetings should contact Jorie Klien or a TETAF officer.

Child Passenger Safety

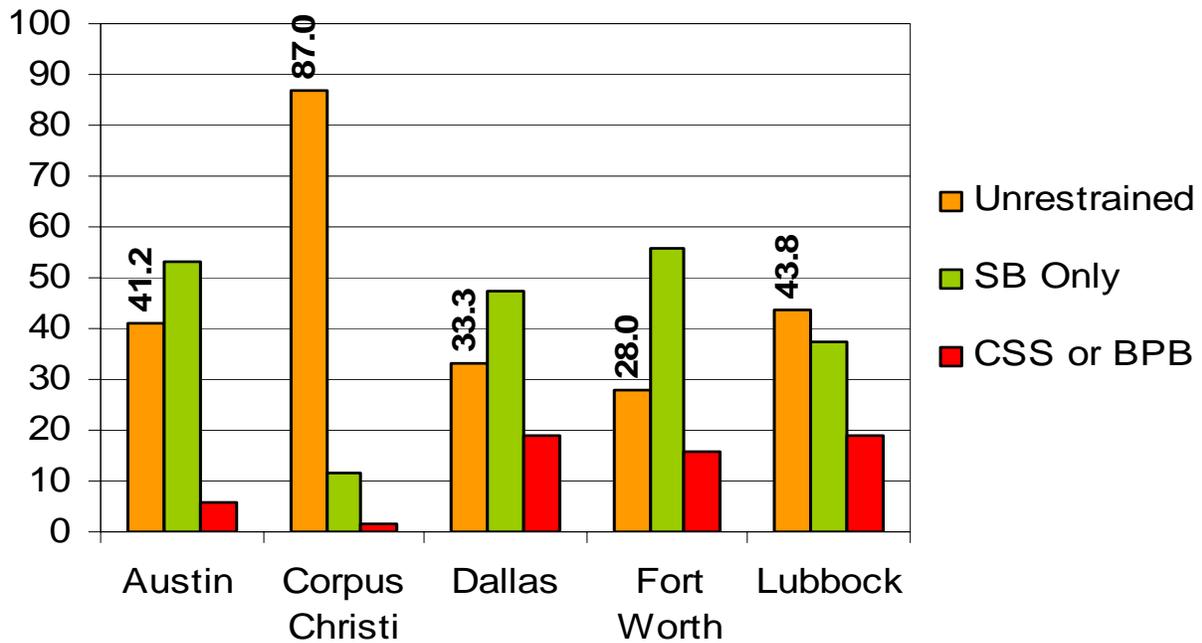
Children’s hospitals across the state have been participating in collecting data on children 4-7 years of age involved in motor vehicle collisions.

The data is being compiled by Dell Children’s Medical Center, and has so far been received from: Children’s Medical Center Dallas, Covenant Children’s, Cook Children’s, Dell Children’s, and Driscoll Children’s. Texas Children’s and Hermann Memorial are still preparing their data submissions. These data will be used to inform legislators and the public about the injury and financial burdens of under-protected child passengers in motor vehicle crashes. Early results of this data show the following:

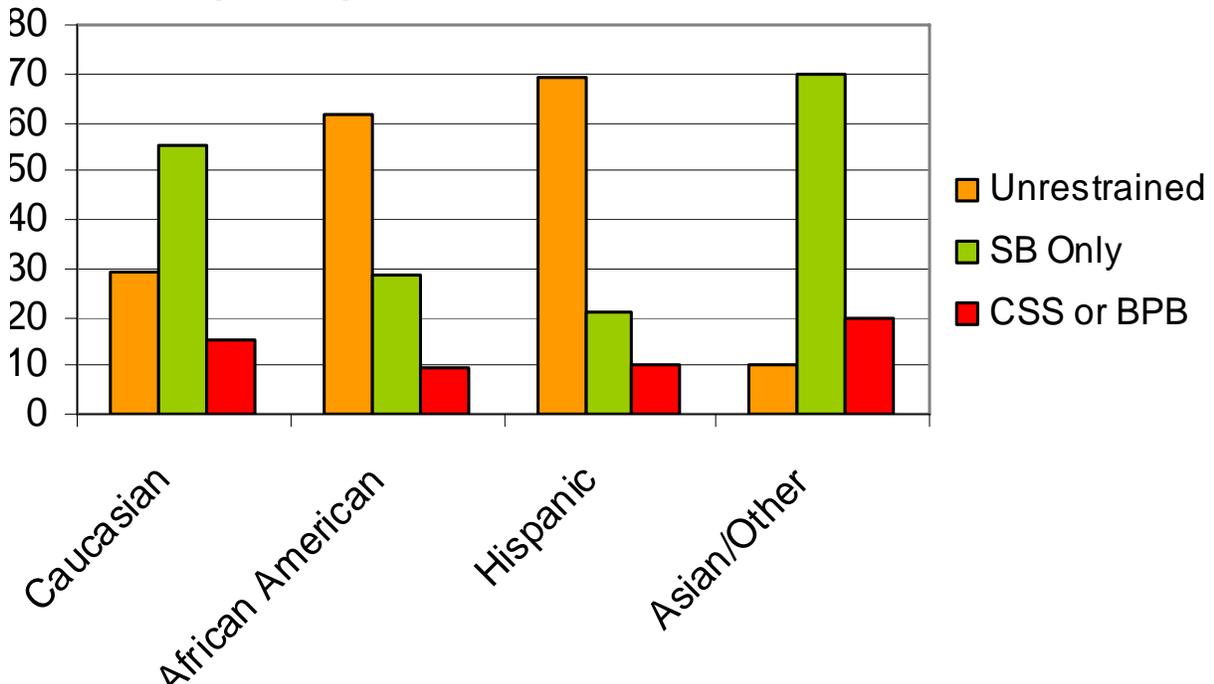
Restraint use in a sample of 4-7 year olds admitted to Texas children's hospitals for MVC-related injuries in 2007, n=214



Restraint use by hospital



Restraint use by ethnicity



The grassroots supporters of the bills, the Texas Child Occupant Protection Safety Advocates, are still searching for personal stories of children 4-7 whose lives have been saved, or lost, in motor vehicle crashes. Anyone interested in supporting this effort should contact Paula Yuma, pyuma@seton.org.

SB 61 was pre-filed on November 10, and the committee asks that GETAC and its members formally support these bills and/or provide their expert opinion on the bill's ability to reduce pediatric injury.

Driving under the Influence

Based on information provided by Jennifer Northway for MADD, the committee will be considering and is likely to support the following measures:

- Supporting legislation to offer sobriety checkpoints as a tool to law enforcement
- Supporting the use of ignition interlocks (despite research supporting their efficacy, interlocks are not consistently ordered)
- Recommending RAC's speak out against the use of pre-trial diversion programs in their communities
- Partner with MADD to implement proven strategies focused on preventing underage drinking and impaired driving (Youth In Action, UMADD, legislative improvements, support of increased enforcement and increased penalties)

Anyone interested in supporting these efforts should contact Jennifer Northway, Review additional information below
Jennifer.Northway@madd.org.

GOALS FOR 2009 TEXAS LEGISLATURE

Texas continues to lead the nation in alcohol-related traffic fatalities (1,292 in 2007). In 2009, MADD will support two legislative initiatives that will, if passed, save lives and reduce injuries on Texas' roads and highways.

Sobriety Checkpoints

MADD will once again ask the Legislature to pass a bill that will provide guidelines Texas law enforcement agencies need to conduct sobriety checkpoints. Until the Legislature provides these guidelines to ensure the public's constitutional protections against unreasonable searches, Texas law enforcement cannot use what traffic safety experts agree is *the most effective deterrent against drunk driving* – sobriety checkpoints. Properly conducted, vehicles at sobriety checkpoints are stopped in a specific sequence, such as every fourth or sixth vehicle, which prevents racial disparities in traffic law enforcement. Law enforcement then evaluates drivers for signs of alcohol or drug impairment. Texas is one of only 11 states that do not allow law enforcement to conduct checkpoints.

Mandatory Ignition Interlock Devices for all first-time convicted DWI offenders

People who have previous drunk driving convictions make up approximately one-third of the drunk driving problem in America. First-time offenders have driven drunk an average of 87 times before they are arrested and most likely have a serious problem with alcohol. Ignition interlock devices have the potential to eliminate repeat drunk driving because they can prevent a vehicle from being driven by a drunk driver. If they are used correctly – in concert with treatment and hard license suspensions, and remain in vehicles for a substantial period of time – they can substantially reduce repeat offenders.

FOR MORE INFORMATION, PLEASE CONTACT THE MADD STATE OFFICE
(CONTACT INFORMATION ABOVE).

Texas's Need for Mandatory Interlocks

- In 2007, **38.4 percent** of Texas's highway fatalities involved a drunk driver.ⁱ
- In 2007, **1,292** people lost their lives to drunk drivers on Texas's roads.ⁱⁱ
- Texas **leads** the country in number of **youth** involved in **alcohol-related traffic fatalities**, with **276** in 2006.ⁱⁱⁱ
- Texas drivers share Texas's roads with **124,662 persons** convicted of **3 or more DUIs**.^{iv}
- Texas drivers continue to share the road with at least **18,271 persons** convicted of **5 or more DUIs**.^v
- At least **60 percent** of Texas's DUIs involve drivers with a **High BAC**, defined as equaling or exceeding .15.^{vi}

ⁱ Data reported by the National Highway Transportation and Safety Administration for 2007.

ⁱⁱ Data reported by the National Highway Transportation and Safety Administration for 2007.

ⁱⁱⁱ Data reported by the National Highway Transportation and Safety Administration for 2006, the most recent year for which this category of data

is available.

^{iv} Data provided in September 2008 by the Texas Department of Transportation.

^v Data provided in September 2008 by the Texas Department of Transportation.

^{vi} Data reported by the National Highway Transportation and Safety Administration for 2006, the most recent year for which this category of data is available.

Texas needs sobriety checkpoints

- **Texas continues to lead the nation in alcohol-related traffic fatalities, well ahead of even California, which has more people, more drivers, and more vehicles than Texas.**
- **A review by the Centers for Disease Control of 23 studies of checkpoints found that conducting regular sobriety checkpoints reduced the crashes that involved alcohol and associated fatal and nonfatal injuries by about 20 percent.^{vi}**
- **Fatal alcohol-related crashes dropped by over 20 percent when the Tennessee Highway patrol and local police agencies conducted extensively publicized checkpoints.^{vi}**
- **The United States Supreme Court (*Michigan Dept. of State Police v. Sitz*, 1990) upheld the constitutionality of sobriety checkpoints. If conducted properly, sobriety checkpoints do not constitute illegal search and seizure.**
- **The Texas Court of Criminal Appeals (*State v. Holt*, 1994) ruled that sobriety checkpoints were unconstitutional in Texas only because no statewide guidelines existed for properly conducting checkpoints.**

Texas is ready for sobriety checkpoints

- **Allowing sobriety checkpoints is supported by a majority (67%) of Texas voters. African-American voters (73%) favor allowing sobriety checkpoints more than do Anglo and Hispanic voters (66% each).^{vi}**
- **Eight in ten El Paso voters say they favor highway sobriety checkpoints.^{vi}**
- **Public support for the use of checkpoints in Tennessee grew from 88% in the first round of checkpoints to over 91% in the third round.²**
- **Since the bill MADD will support will require that vehicles be stopped on a predictable, non-arbitrary basis, not randomly; sobriety checkpoints reduce racial disparities in traffic law enforcement.**

