

TRAUMA CENTER DISCUSSION

TRAUMA CENTER ASSOCIATION OF AMERICA

FULFILLING THE PUBLIC'S EXPECTATIONS FOR TRAUMA AND EMS CARE: *Las Cruces Needs Better Access to Trauma Care*

HOW MUCH IS A LIFE WORTH?

That is the question posed by the *Chicago Weekly*, following the death of Damian Turner on August 15, 2010 after he was shot within two blocks of a closed trauma center and transported to another one half an hour away. His mother believes the time differential may have cost her son his life. According to Dr. Renee Hsia, a prominent trauma care researcher, "trauma care isn't a luxury good -- it's not like Botox, or plastic surgery...having access to trauma care means someone lives or dies based on whether they get it or not. " As Dr. Hsia succinctly stated, "minutes matter" when treating a trauma victim.

News headlines of late have been filled with the stories of the tragedy in Tucson and the survival and recovery of 13 of the 19 victims. The organized trauma care system in place in Tucson – from the EMS first responders to the proximate trauma facility – played a significant role in the survival of many of the victims. In contrast, consider the events of January 2008 when a bus slid off a remote road and overturned in Mexican Hat, Utah. While responding heroically, first responders were hampered by bad weather and poor communications due to the remote location of the accident. The closest trauma center of any kind was 115 miles away, and victims had to be transported as far as 360 miles and up to 13 hours away after the accident to receive care at a trauma center. Beyond such large scale events, 33,000 people each year die in motor vehicle accidents, with the risk of dying in a rural crash being 15 times higher than in urban areas.

The outcome from a survivable injury should not be a matter of chance. Trauma program leadership and funding at the federal level has been sporadic, cyclic and short-lived. This lack of resources and vision directly impacts states' abilities to continue the development of trauma systems, improve service availability and the ability of trauma centers to remain viable. A high degree of variability exists. There are clearly islands of excellence; unfortunately, they are often surrounded by seas of mediocrity. Not because health care officials and providers do not want to do the right thing, but because they do not have the resources to make the right things happen.

The public's expectation that trauma care will always be available to them wherever they reside or travel, just as it was on that tragic day in Tucson, has yet to be met. The challenges facing trauma centers, trauma systems and physicians who put people back together again are profound. While studies clearly show the value and cost-effectiveness of trauma care compared to other health interventions (such as defibrillators, cardiac arrest care or renal dialysis), the federal government has yet to make the necessary investments to ensure access to it for all Americans and as a result a fragile trauma and EMS system is faltering. A few statistics tell the story:

TRAUMA FACTS

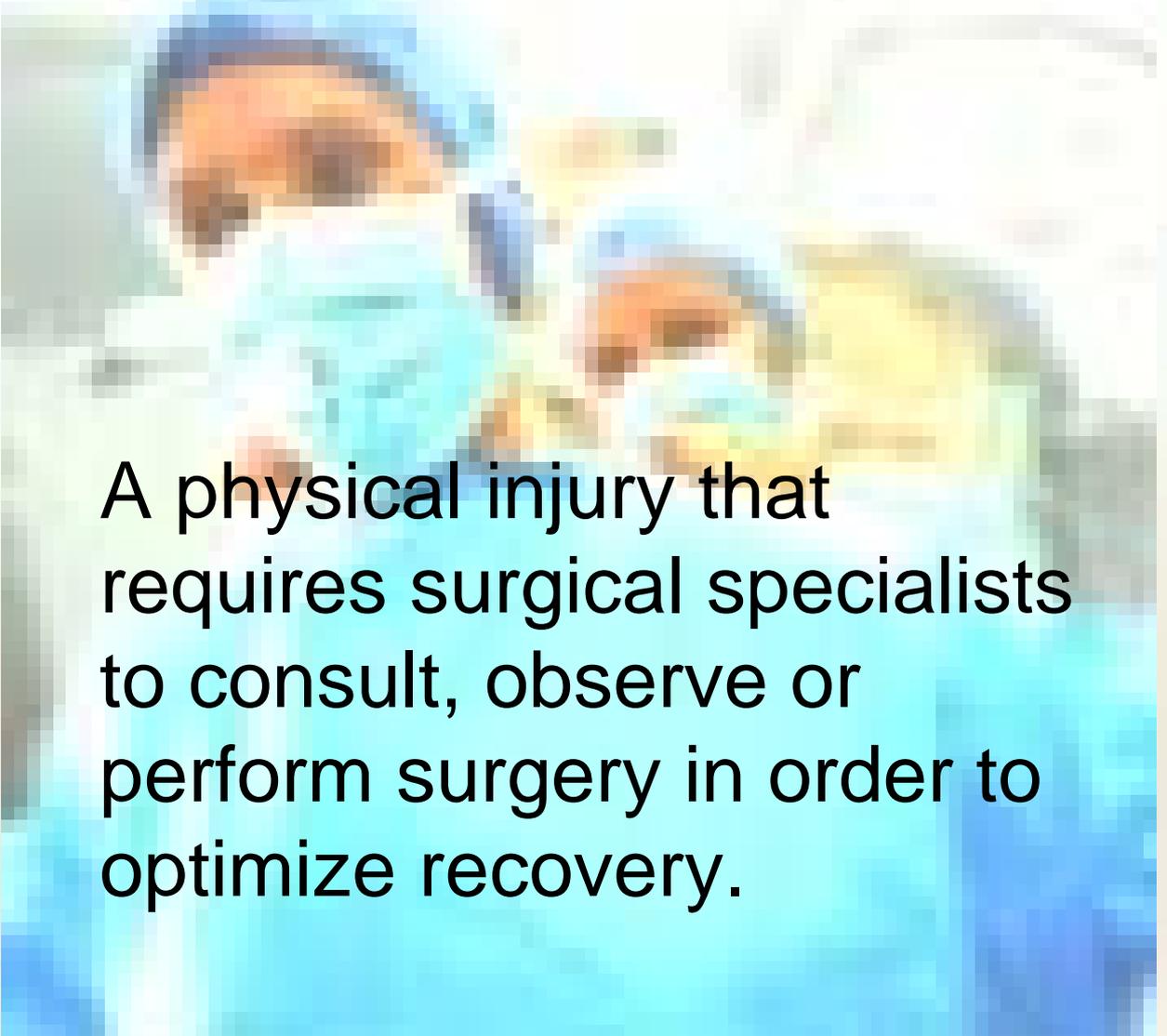
- Trauma is the leading cause of death under age 44 -- more than stroke and AIDS combined.
- \$80 billion annually is attributed to trauma medical expenses; \$326 billion is estimated for lifetime productivity losses for almost 50 million injuries that required medical treatment
- 35 million people are treated each year for traumatic injuries -- 1 person every 90 seconds and 1 person every 15 minutes requiring hospitalization.
- Severely injured trauma patients treated at Level I trauma centers have a 25% reduction in mortality.
- Conversely, nearly 1 in 4 patients is more likely to die when not initially taken to a Level I Trauma Center (mortality increases 3.8 times if a severely injured patient is treated initially at a non-trauma hospital instead of direct transport to a Level I Trauma Center).
- Yet, 45 million people lack access to a trauma center within one hour following injury during which definitive treatment can make the difference between life and death.
- Less than 10% of hospitals have a Level I or II trauma center and only 8 states have fully developed trauma systems.
- 1 in 5 people are more likely to survive a traumatic injury in a state with established trauma system than one without (there is a 20% reduction in the risk-adjusted odds of death in the state with a trauma system).
- At least 21 trauma centers have closed over the past decade, including St. Vincent's in Manhattan which treated 848 patients on 9/11/01.
- While there is \$224 million in **authorized** federal funding for trauma care, no federal funding is currently **appropriated** to ensure the availability of trauma care for all Americans.
- A federal investment of the entire \$224 million amounts to 71 cents per person to ensure system readiness to protect the public.

Welcome to the Reality of Trauma !!!

UMC of El Paso is the only
Level I Trauma Center for Las Cruces, it is 60
minutes away by ground – right at the “Golden
Hour” for survival.



What is trauma or traumatic injury?



A physical injury that requires surgical specialists to consult, observe or perform surgery in order to optimize recovery.

How does traumatic injury affect us?



For every traumatic death, seven patients survive to be fully disabled for at least one year (mostly at the public's expense). Reaching a trauma center reduces death rates by **25%**.

Initial care at a Non-trauma center increases death rates **3.8 TIMES**.

Trauma Requires More Medical Resources to Benefit ALL Patients

- **Extra staff to respond to emergencies**
- **Extra beds in ED**
- **Space in OR at a moment's notice**
- **Backup OR Team**
- **Extra night coverage**
 - **CT scan**
 - **Respiratory Therapy**
 - **Lab/Blood bank**
- **More supplies and equipment**
 - **Special instruments**
 - **Blood**

An ER is NOT a TRAUMA CENTER & Las Cruces has NO Trauma Center

EMERGENCY ROOM

- Broken Leg
- Concussion
- Back Sprain
- Broken Rib
- Laceration
- Rear End Crash
- BB Gun Shot
- Trip on Sidewalk

TRAUMA CENTER

- Multiple Fractures
- Brain Injury
- Paralysis
- Punctured Lung
- Stab Wound
- Car Rollover/Ejection
- Handgun/Rifle Wound
- 20' Fall from Window

Level I and II Trauma Center Physician Specialties

**Trauma Surgery
Anesthesia
Ob/Gyn Surgery
Cardiac Surgery
Hand Surgery
Plastic Surgery
Oral Surgery
Radiology**

**Neurologic Surgery
Micro Surgery
Ophthalmic Surgery
Thoracic Surgery
Orthopaedic Surgery
Critical Care Medicine
Emergency Medicine**

Level III Trauma Center Physician Specialties

**Emergency Medicine
General Surgery
Anesthesia or CRNA**

Major Trauma

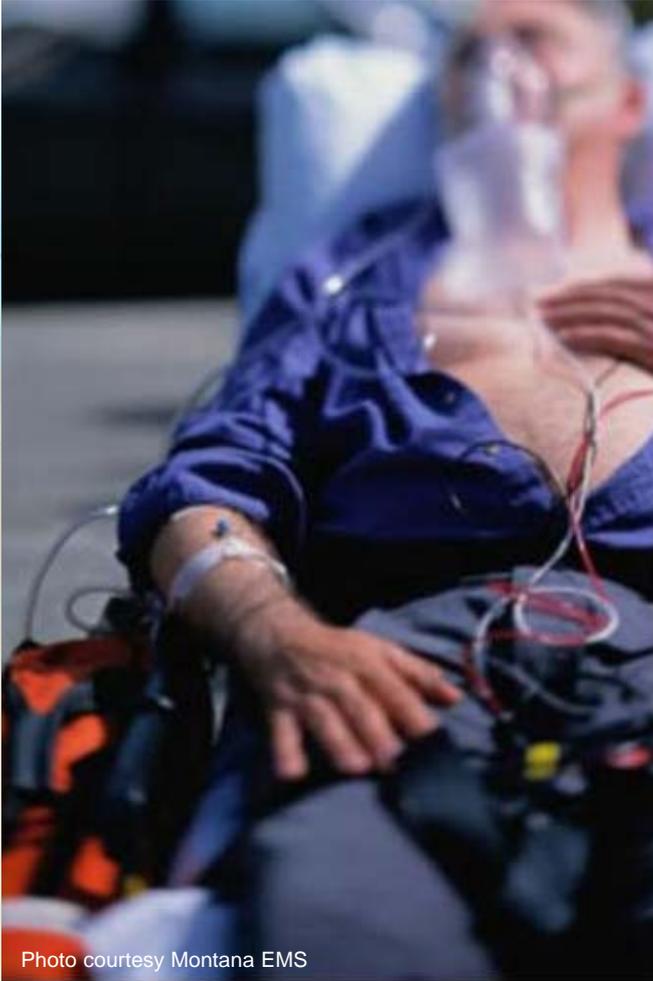


Patients with the most severe and critical injuries who require a coordinated and organized approach in order to save life and/or limb.

(Usually only 20% of all trauma team activations), the other 80% can be treated in the COMMUNITY Trauma Center

Timely care is critical!

What is Trauma?



- Defined as a disease
- Mostly preventable
- Associated with high risk behavior

Trauma Facts

- Leading cause of death in persons 1-45 yrs. of age
- Kills more Americans than stroke and AIDS combined
- 45-50,000 deaths per year
- Affects mostly the young and the old
- Leading cause of disability

Types of Injuries

Non-intentional

- Car crashes
- Severe burns
- Falls
- Pedestrian hit

Intentional

- Gun shot
- Stab wounds
- Domestic violence
- Child abuse





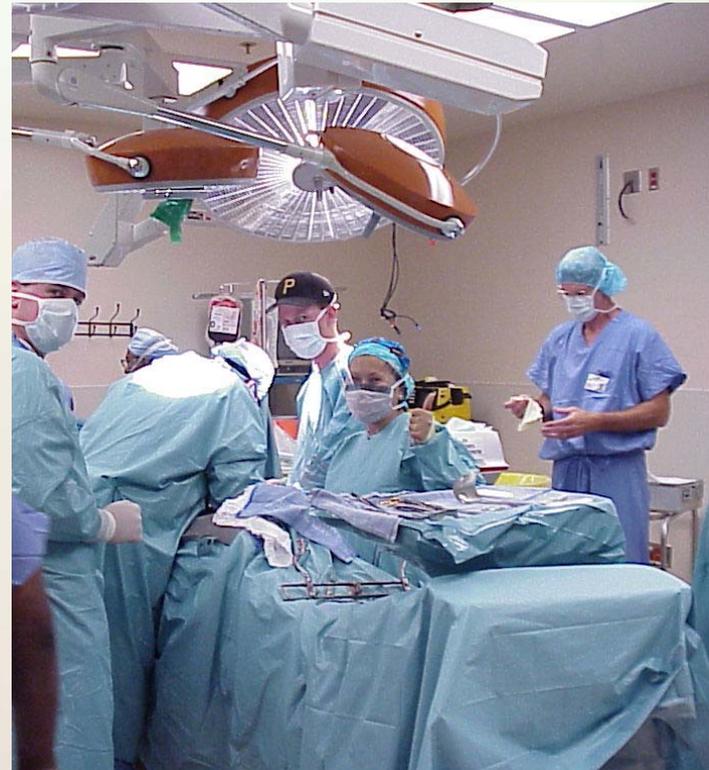
**We Are Part
of a
Trauma System**
***NM has 7 Designated
Trauma Centers:***
Locations are

**Farmington (II), Santa Fe (II), Albuquerque (!), Portales (IV),
Carlsbad (II), Roswell (II), Alamogordo (II)**

Trauma System

An organized and coordinated approach to treating patients with acute traumatic injuries

- Available around the clock
- Specialized personnel, facilities and equipment



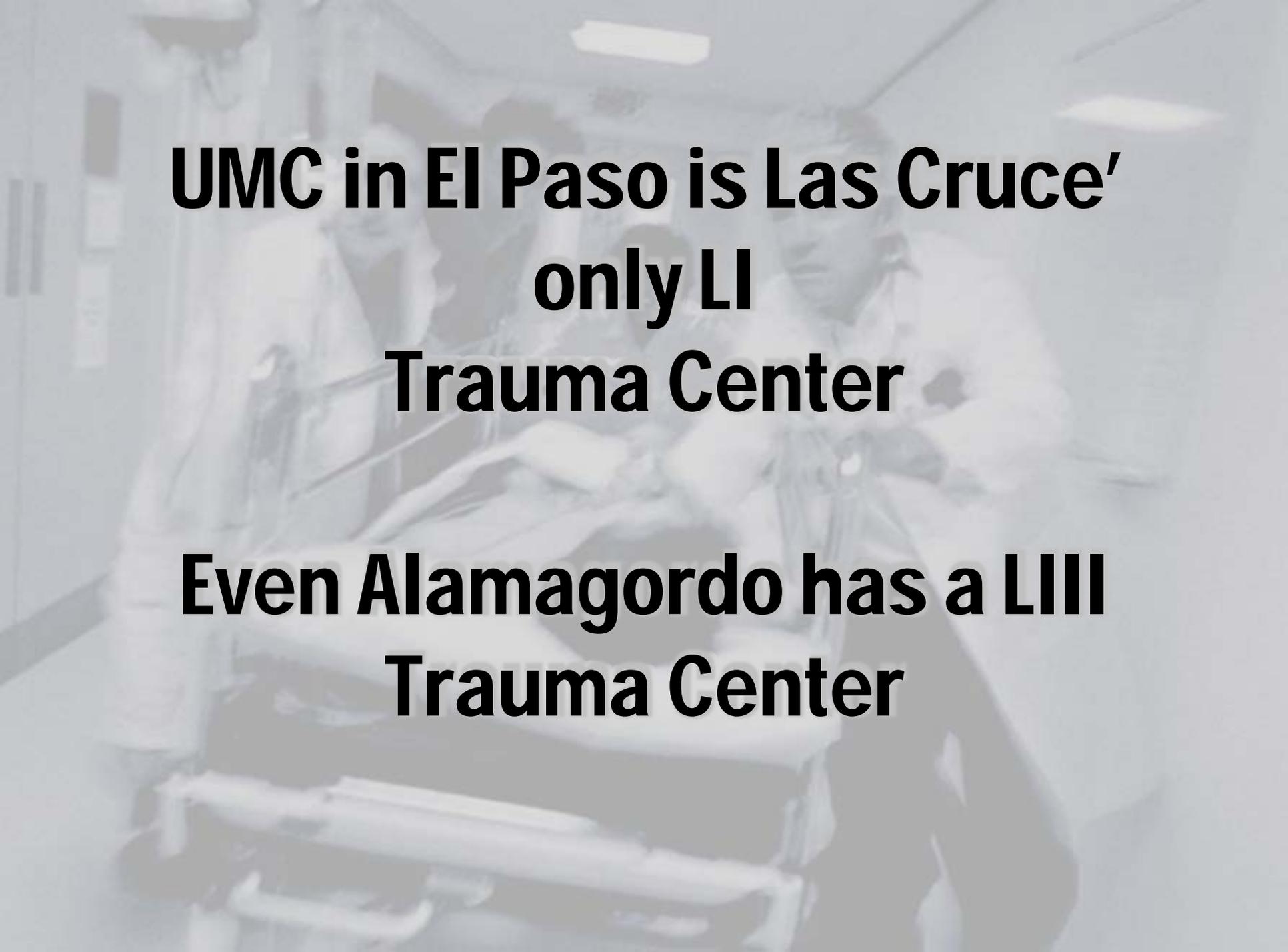
Trauma System

A network of emergency care professionals whose job is to assess and transport injured patients to the trauma center.

Trauma System

- Right patient
- Right hospital
- Right time





**UMC in El Paso is Las Cruces'
only LI
Trauma Center**

**Even Alamogordo has a LIII
Trauma Center**

What is Las Cruces' Problem with Trauma

- **2nd Largest City in State**
- **Both hospitals have had training in trauma operations**
- **NM DOH has \$3.9M for designated Trauma Centers**
- **Trauma makes money for hospitals**
- **Trauma improves care for all other specialties**
- **Citizens EXPECT trauma care just like police and fire when they NEED it**

Trauma Center



Specialized hospital distinguished by the *immediate* availability of *specialized* personnel, equipment and services to *treat* most severe and critical injuries

There are 4 Levels of Centers

- **Level I provides full services PLUS**
 - Education
 - Research
 - Surgical sub-specialties, i.e., microsurgery, hand, etc.
- **Level II provides wide range of specialists**
 - Mostly community hospitals
- **Level III stabilizes and transfers seriously injured patients**
 - Must have surgeons
- **Level IV have emergency services**
 - Stabilize and transfer – does not require a surgeon

Trauma Center Mission

To ensure continuity and quality of care for injured patients from the scene of injury through reintegration into society

Level I Trauma Centers

UNM, UMC El Paso, UMC Lubbock, UMC Tuscon

Cross all

- Political boundaries**
- Health disciplines**
- Hospital departments**

Provide a leadership role in

- Research**
- Education**
- Injury Prevention**

**TOO FAR AWAY FOR FIRST
RECEIVER CARE**



LI Trauma Centers

Provide a continuum of care:

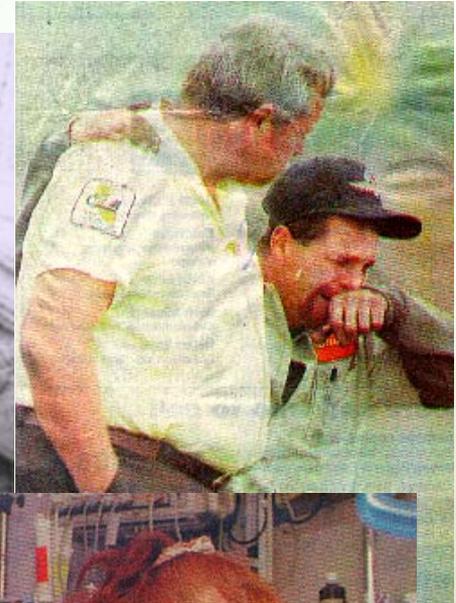
- Pre-hospital
- Emergency Department
- Radiology
- Operating Room
- Recovery
- Critical Care
- Medical-Surgical
- Rehabilitation
- Prevention

TRAUMA Emergency Departments

- Provide around the clock trauma teams and advanced diagnostic capabilities in order to resuscitate and stabilize the most severe and critical injuries
- Are only one component of the trauma center continuum of care, which includes other departments in the hospital
 - OR, ICU, nursing units
 - Radiology, lab, blood bank
 - RT, PT, Rehabilitation, Dietary and more...

Effects of Traumatic Injury

- Patient
- Family
- Caregivers



Our Trauma Patients

Traumatic injury represents a life-altering event for the patient.....

- Physically
- Emotionally



Photo courtesy TIP: Trauma Intervention Program

Trauma Patients Need

- Highly skilled caregivers
- Rapid response
 - Time is critical
- Compassion
- Dignity and respect
- Information
- Support
 - Physical
 - Emotional



Photo courtesy TIP: Trauma Intervention Program

The Family

The impact of traumatic injury on the family is profound....

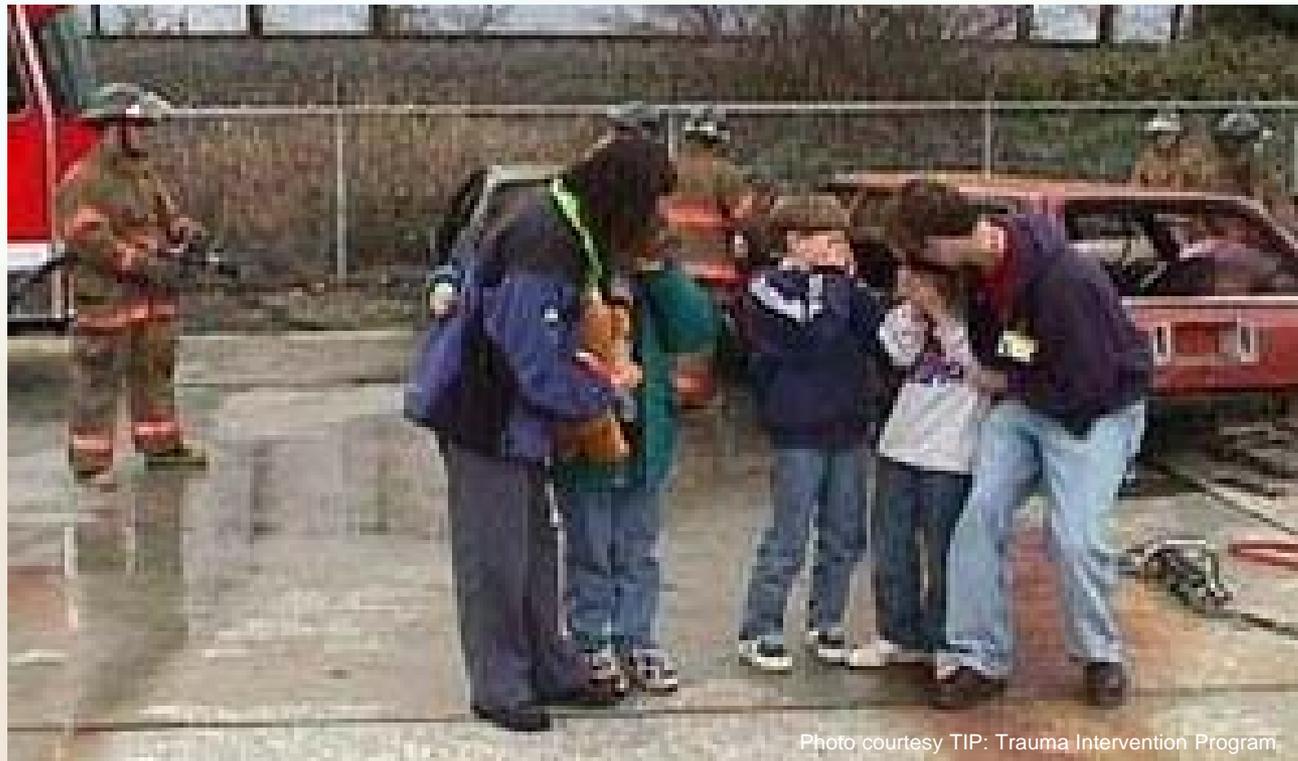


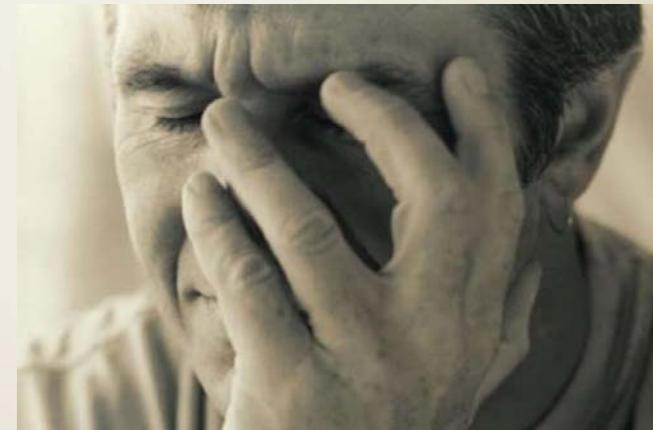
Photo courtesy TIP: Trauma Intervention Program

....comes without warning

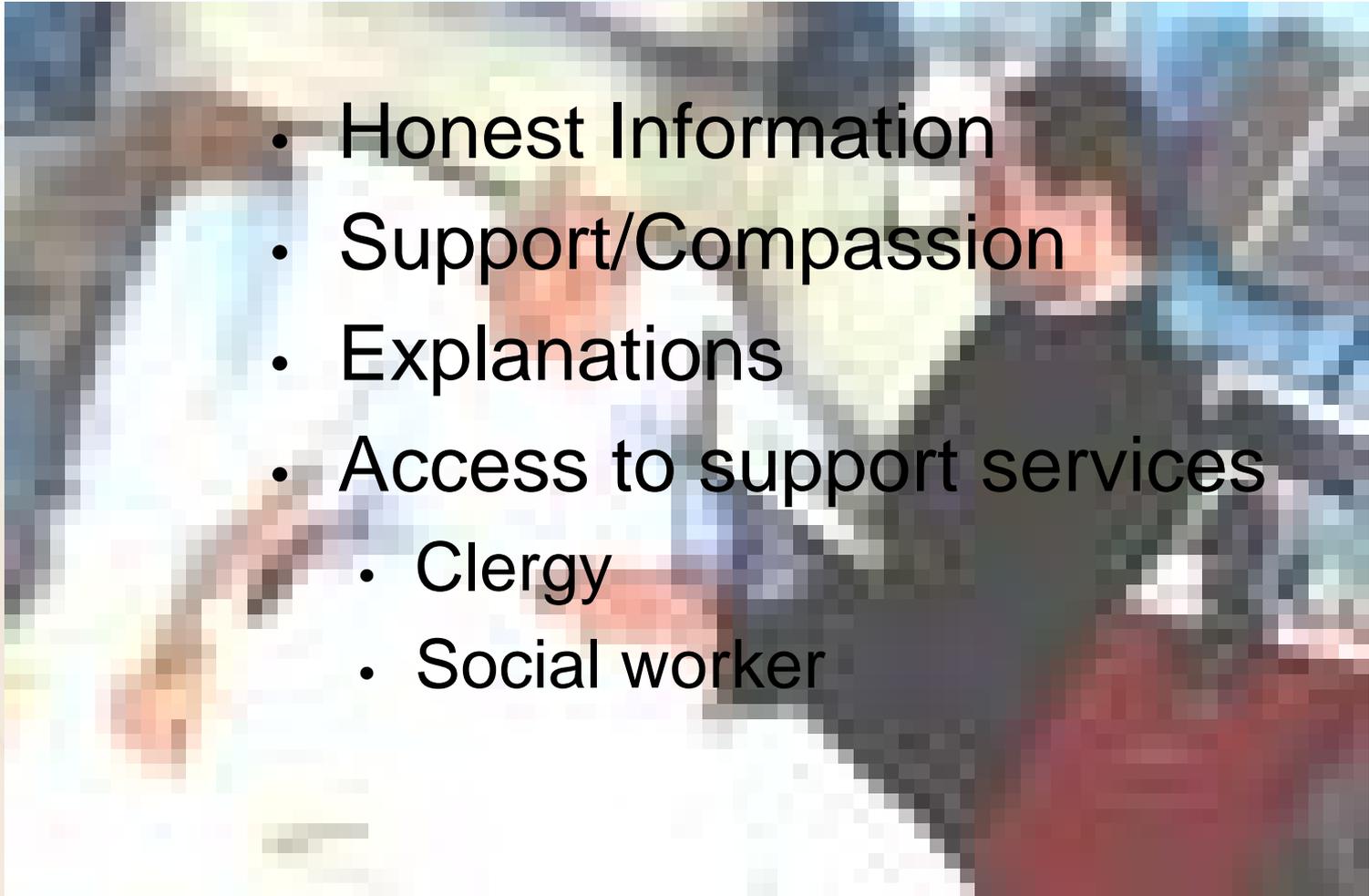
Common Family Reactions



- Crisis
- Emotional turmoil
- Fear/Anxiety
- Shock
- Anger



Family Needs

- 
- Honest Information
 - Support/Compassion
 - Explanations
 - Access to support services
 - Clergy
 - Social worker

Most Common Patterns of Injury

- Falls
- Pedestrian injuries
- Motor vehicle crashes
- Gun shot
- Stab wounds



Trauma Prevention: Let's Start Somewhere!

Promote safety precautions:

- Encourage attentive, defensive driving
- Enforce Primary Restraint Law
- Require a child safety seat properly for all ages
- Encourage helmets when cycling, skiing, skateboarding, or motorcycling (NM is a laggard in this legislation)
- Encourage proper gun safety (training and handling)
- Enforce law prohibiting cell phones or texting when driving
- Publicize annual checks for smoke detectors in homes, including rentals

Trauma Prevention

Discourage risky behavior:

- Driving while under the influence of alcohol or drugs
- Encourage parents to talk with teens about alcohol and school events such as spring break, proms
- Enforce speeding laws and red lights
- Pull over inattentive drivers, tailgaters, weaving vehicles
- Watch for tired or sleepy drivers (as likely to wreck as ETOH)
- Promote pedestrian safety; jaywalking, skateboarding on streets
- Increase awareness of signs of gang involvement
- Encourage home and personal safety measures 24/7

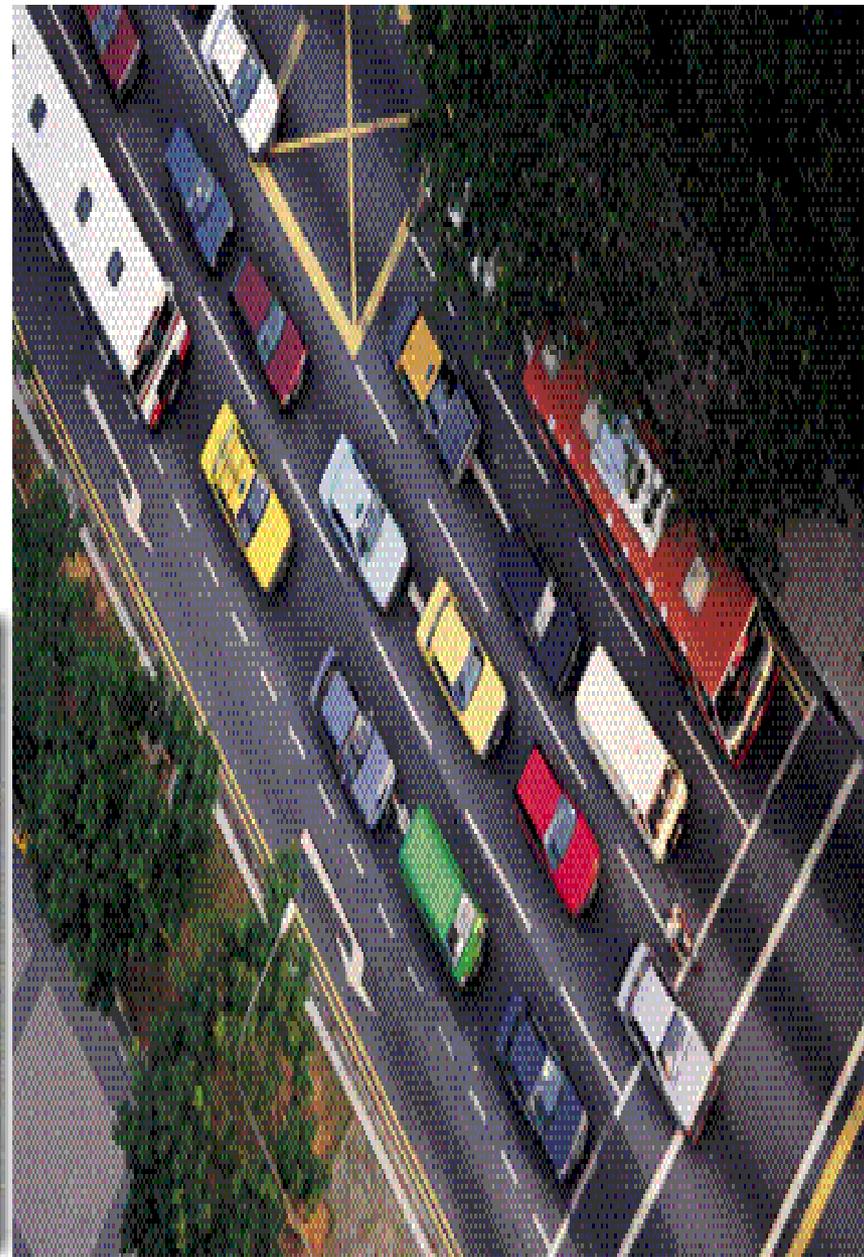
By learning more about Trauma and supporting a comprehensive Trauma System



**We can make Las Cruces a safer
place....**



To work



To play



And to live

