



## Educating the Patient

**William Lehman Injury Research Center  
University of Miami School of Medicine  
Miami, Florida**

### **Injury Prevention in a Trauma Center**

A trauma center with a roof-top heliport, operating rooms, a 20-bed intensive care unit, and a 60-bed hospital unit seems an unlikely location for an injury prevention unit, but at the William Lehman Research Center, primary injury prevention is an integral part of patient care.

This Safe Community program supported by the Florida Department of Transportation is housed in the William Lehman Injury Research Center, a unit of the University of Miami School of Medicine, and Miami's only Level I trauma unit. "Motor vehicle injuries are about half of our 3,500 annual patient visits. The medical and financial burden of these injuries is great - so, it's only logical that we spend some of our treatment efforts *preventing* injuries, says Dr. Jeffrey Augenstein, Director of the Lehman Injury Research Center.

### **Routine Patient Care**

As part of the routine patient care program, each person injured in a motor vehicle injury is counseled about how to prevent motor vehicle injuries. "Some may think this is closing the barn door after the horses have escaped," says Carol Steans, the Center's Injury Prevention Coordinator, "but most of our patients know very little about how they can prevent these injuries. And they know next to nothing about proper seat belt and child restraint use." We try to meet with each injured patient, discuss how their injuries could be prevented, and show an 8 minute multimedia demonstration on the proper use of air bags, seat belts, and child restraints.

So far the educational program seems to be having some positive changes - about 95% of the patients reported that they were now using seat belts three months following their discharge from the hospital. About 80-90% are still using them after six months. "Of course, these are self-reports, but we are confident that our post-trauma program is making a positive impact changing patient behavior," says Carol.

### **Community Activities**

The Lehman Injury Research Center has launched a number of community injury prevention activities as well. The Center is a

frequent participant at community health fairs sponsored by the Dade County SafeKids Coalition, hospitals, churches, and women's auxiliary groups in the South Florida community. At COPE Extension North High School, an alternative school for pregnant teens, the Center provides car seats and presents the multimedia education program. The Center is also a supporter of the Health Occupation Students of America Club, a high school club, designed to expose students to potential health careers. Club members are involved in promoting seat belt use in their schools.

### **Research and Treatment**

The William Lehman Injury Research Center is involved in a major research effort to learn more about the different types of injuries associated with different types of motor vehicle crashes. On the Center's staff are engineers and crash investigators who collect data on crash conditions, motor vehicle damage, and other human factor information. These data are integrated with an injured patient's medical record and analyzed.

The investigations involves the latest in computer and multimedia technology and are yielding results. For instance, based on their integration of crash and clinical data, the researchers have determined that there is a very high likelihood of injuries in certain side impact crashes. They've cautioned investigating police and EMS personnel to always transport a crash victim to the hospital, even if that person appears to be uninjured. In one case, following a side impact crash, the driver of the car not only appeared uninjured, but she stated she felt

well enough to go back to work. The police - aware of the Lehman Center research that indicated there was a strong possibility of injury - insisted that the driver be transported to the trauma center for care. Shortly after her arrival at the trauma center, her condition suddenly deteriorated, and it was only because she was in a trauma center that physicians could rapidly intervene to repair the driver's internal bleeding.

### **Multimedia Training Aids**

The Center has also been instrumental in documenting the association of serious and sometimes fatal injuries associated with air bags and improper use of front seat child car restraints. They've taken the engineering,

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clinical, and rash data and integrated them into a multimedia presentation that can be used to train physicians and engineers about the interaction of biomechanics and medicine.

### **Organizational Practices**

Community Coalition - A Safe Community Coalition has been organized with membership invited from rehabilitation centers, police, fire, and emergency medical services, and Dade County SafeKids. The coalition meets monthly to set priorities and select activities.

Project Staff - An Injury Prevention Coordinator is based in the Lehman Injury Research Center and provides full-time management and technical expertise to the Safe Community program.

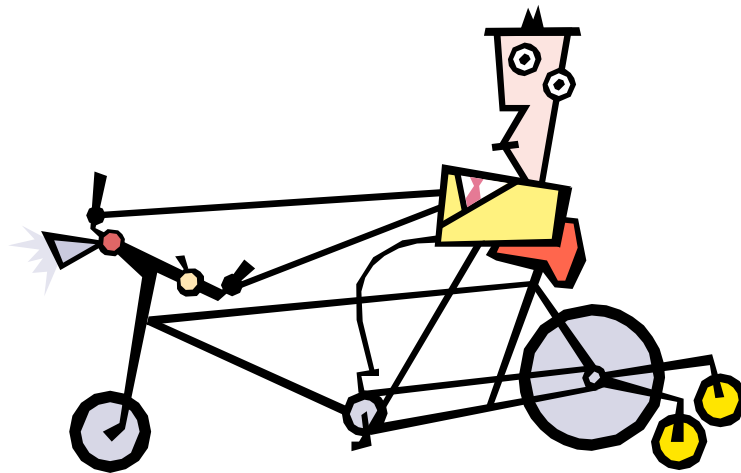
### **Activities**

Besides those activities listed above, the coalition is involved in community outreach activities, lectures to school children about

safety, brain awareness week, and promoting corporate traffic safety activities such as seat belt use among health care providers.

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