Mott Buckle Up!
Dianne DeGregorio
Child Passenger Safety Coordinator
• Leading cause of death
  – over ½ unrestrained

• 90% believe car seat is installed properly
  – 85% are incorrect
Annual Pediatric Patient Statistics

- Motor Vehicle Crashes:
  - 500+ patients seen ED (0-17yrs)
  - Represents 32% of all trauma admissions
  - only 5% of treated & released are MVC’s

- Approximately 4,000 births
University of Michigan Vehicle Safety Programs

- Physical Medicine & Rehabilitation (PM&R)
- University of Michigan Program for Injury Research & Education (UMPIRE)
- University of Michigan Transportation Research Institute (UMTRI)
- Mott Buckle Up!
Physical Medicine & Rehabilitation

- 4 certified technicians
- Evaluate children with temporary or chronic conditions that may prevent them from riding in a conventional seat
- Wheelchair use in vehicles
- In-patient: Modified EZ On Vests, Hippo car seats & car beds
- Outpatient: larger special needs seats for children who have outgrown their conventional car seat
UMPIRE

- U of M Program for Injury Research & Education
- Created in 1999
  - Facilitate exchange between automotive engineers & healthcare
- Current Projects
  - CIREN: Crash Injury Research & Engineering Network
  - Human Body Modeling
  - Automatic Collision Notification
  - Safety in a Box
  - Automotive Engineering Fellowship
Crash Injury Research & Engineering Network

- Goal = improve prevention, treatment & rehabilitation of MVC injuries ► reduce deaths, disabilities & human & economic costs
- Funded, in part, by NHTSA
- Multi-center research program (8 sites)
- U of M is a founding center
- Conducts in-depth studies of crashes, injuries & treatments to improve processes and outcomes
Safety In a Box

• Booster seat program
  – Measure weight & height
  – Worksheet with measurements
  – Take home “Licenses”
  – Toy vehicle with ramp to demonstrate belted vs. unbelted occupants

• Free program – available by request
- Dummy development
- Child anthropometry studies
- Crash investigations
– Studies of child belt fit
– Surveys of misuse patterns & rates
– Research, design & testing of child restraints
Our Program

- U of M: C. S. Mott Children’s Hospital
  - Pediatric Surgery/ Pediatric Trauma Program
  - Injury Prevention/ Mott Buckle Up!
- Lead organization for Safe Kids Washtenaw County
- OHSP Grant: October 2005 – September 2007
Activities

- **Car Seat Education**
  - Parent/ Family Education (In-patient)
  - Appointments (open to the community)

- **Coordination in Hospital**
  - NICU
  - Mom/ Baby
  - General Care
  - Physical Medicine & Rehabilitation
  - Med Equip
  - Social Work

- **Community Events**
  - Babies R Us
  - Pregnancy/ Parenting Groups
  - Auto Dealerships
  - Schools, Preschools & Day Cares

- **Angle Tolerance Testing**
Doing Our Part

- **1288 Seats Checked in 2007**
  - C.S. Mott Children’s Hospital: 958
  - Community events: 330

- **215 Seats Provided in 2007**
  - C.S. Mott Children’s Hospital: 136
  - Community events: 79

- **Training Technicians**
  - Over 40 new technicians trained
  - Includes: Auto Engineers, Insurance, CPS Advocates, Police Officers, Fire Fighters, and Healthcare Workers

- **Creating Fitting Stations**
  - 2008: 6 new fitting stations (so far)
Angle Tolerance Testing

• **AAP recommends:**
  – Every infant born < 37 weeks gestation
  – Undergo period of observation in car seat

• **Monitor:**
  – Heart Rate (Bradycardia)
  – Respiratory Rate (Apnea)
  – Oxygen Saturation Level (Desaturation)

• **Revisions:**
  – Current AAP from 2000
  – AAP update in 2008???
  – Mott update 2007: car bed use
Challenges

- Old habits are hard to break…
- Storage Space
- Setting Priorities
  - Money
  - Staffing
- Proactive vs. Reactive
  - Class vs. paging as being discharged
- Multi-lingual population
Goals

- Angle Tolerance Testing for ALL newborns meeting AAP criteria
- Increase parents educated before discharge
- “In & Around Cars Program” with Cub Scouts
- Expanding to include consultation within ED
- Train more Technicians
- Establish additional fitting stations
- Website – michigancarseats.com – coming soon!
Medicaid Reimbursement for Car Seats Is Cost-Effective Health Policy

- Study released 1/16/08 by Children’s Hospital of Philadelphia
- Distributing car seats to low income children (Medicaid) could be as cost-effective as vaccination programs…
- Programs would break even after 3 years…
- Suggested: physician’s prescription for:
  - Education
  - Convertible seat at birth
  - Booster seat at age 4
Contact Information

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Resource and Reference

- **DVDs**
  - ‘Child Safety Seats’ (Multi-lingual dvd): echominnesota.org
  - ‘Don’t Risk Your Child’s Life’ (dvd): Shelness Productions 336-774-0780

- **Resource list**: safekids.org/certification/resources.html

- **Generic seat check forms**: safekids.org/certification/docs/

- **Car Seat Distributors**:
  - Mercury Distributing (Hospital Supplier): mercurydistributing.com
  - Evenflo: 877-288-0288
  - National Safety Resources: nsrinc.org

- **Conferences**:
  - KIM: kidzinmotion.org
  - Life Savers: lifesaversconference.org

- **Recall lists**:
  - http://www.hsrc.unc.edu/recalls