More Than an Ounce of Prevention:
The Incidence, Outcomes, and Prevention of Pediatric Motor Vehicle-Related Trauma

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INTRODUCTION

Goals: Examine pediatric trauma from motor vehicle collisions (MVC) to understand preventative measures that are in place and improvements still needed in Worcester.

Progress: Learn the epidemiology of pediatric MVC-related trauma and examine three prevention programs in Worcester.

Outcomes: 1) Participate in prevention programs helping youth learn to make smart decisions as drivers and pedestrians; 2) Understand the importance of partnerships between professions for successful injury prevention.

EPIDEMIOLOGY

Unintentional Injuries: The Leading Cause of Death in the US (2000-2010) in Ages 1-17:

- Motor Vehicle Traffic: 56%
- Poisoning: 16%
- Suffocation: 13%
- Drowning: 7%
- Fire/burn: 4%
- Other: 4%

- Every hour ~150 children aged 0-19 are treated in the emergency department for motor vehicle traffic injuries.²

Social Determinants:
- Children with low socioeconomic status are at increased risk for mortality and hospitalization from trauma.³
- Hispanic & African American children are less likely to wear seat belts than Caucasian & Asian children.⁴
- In-vehicle distractions (cell phones, passengers, etc.) increase teen drivers’ risk of MVC.⁵

Social Manifestations/Implications:
- Victims of MVC suffer physical injuries and are prone to posttraumatic stress, depression, and anxiety.⁶
- US unintentional child injuries cost ~$11.5 billion and are the leading cause of medical spending in children.⁷

HEALTH ADVOCACY

Injury prevention programs looked at during our clerkship:
- **Teen D.R.I.V.E.** - A driving simulation program that demonstrates the risks & consequences of risky driving.
- **Mobile Safety Street** – An interactive learning experience for young children, enforcing the importance of safety in the home, on the bus, and on the street.
- **Teen R.I.D.E.** – A program for teenagers who partake in risky and illegal driving. This is a 1 day experience that walks participants through the implications of a MVC.

KEY TAKE AWAY POINTS

- If it’s predictable, it’s preventable
- Prevention programs can reduce trauma incidence
- Partnership between professions is needed for prevention

REFERENCES


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