Because traffic related trauma is preventable and frequently predictable, it is subject to the same epidemiology as disease. By defining and addressing trauma as a disease, and approaching it within the context of behavioral theory, traffic safety advocates can develop interventions with the potential to reduce the impact and incidence of traffic related trauma across a wide spectrum of at-risk groups.

Objectives
Upon Completion of this session the participant will be able to:

Define and explain the four core concepts of the Health Belief Model

Discuss how to apply the concept of self-efficacy to current and future prevention messaging.

Describe how these concepts can be utilized in planning and implementing traffic safety initiatives.
99% of Minnesotans live within 60 min of a Trauma Center

Currently in Minnesota, there are 337 licensed ambulance services, and 29,000 actively credentialed EMS personnel in Minnesota.

Trauma Prevention Programs are required/desired for all levels of Trauma Centers in Minnesota

Level I and II
• Participate in injury prevention activities
• Have a coordinator/job description/salary
• Presence of prevention activities that center on priorities based on local data
• Demonstrate collaboration/participation in national, regional or state programs

State Level III and IV
• Coordination/participate in community Prevention activities
  • Level III- Essential
  • Level IV- Desired
Health Belief Model

• HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services
• A psychological model that attempts to explain and predict health behaviors.
• Done by focusing on the attitudes and beliefs of individuals.

The Health Belief Model is based on the understanding that a person will take a health/safety related action (i.e., MV Safety) if that person:

• feels that a negative health condition can be avoided,
• has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition and
• believes that he/she can successfully take a recommended health action to overcome real or perceived barriers to the change.
HBM assumes …

- It assumes that everyone has access to equal amounts of information on the illness or disease.
- It assumes that cues to action are widely prevalent in encouraging people to act and that “health” actions are the main goal in the decision-making process.
- Does not suggest a strategy for changing health-related actions
- Perceived susceptibility, benefits, and barriers were consistently associated with the desired health behavior; perceived severity was less often associated with the desired health behavior.

**HBM Conceptual Model**

**Individual Perceptions**

- Perceived Susceptibility /Seriousness

**Modifying Factors**

- Age, sex, ethnicity
- Personality
- Socio-economics
- Knowledge

**Likelihood of Action**

- Perceived Benefits vs. Barriers to behavior change
- Likelihood of behavioral change

**Cues to action**

- Education
- Symptoms
- Media information

Source: Glanz et al, 2002, p. 52
Preventive Framework and Traffic Safety Messaging - questions to ask

- What are the causes and consequences?
- How can you maintain the change?
- What can you do to prevent it?
- What are your barriers to change?
- How can you make it happen?
- How can you maintain the change?

Self Efficacy

The HBM suggests that a person's belief in a personal threat of an illness or disease (injury) together with a person's belief in the effectiveness of the recommended health behavior or action will predict the likelihood the person will adopt the behavior.
Behavior Change-Case Studies:
- 77 yo Male - does not wear seat belt
- 55 yo Male - does not wear MC helmet
- 30 yo Female - does not wear seat belt

Not one magic intervention – need to find out the person’s values

Choosing an EMS/ Emergency Services Intervention

- Bike Safety Rodeo
- Reward helmet wearing
- Safety Camps
  - Think First
  - Safe Kids
  - Senior Safety
- Teddy Bear Clinic
- EMS- out reach use fatal vision goggles (TBI)
- Work Site Drive Smart Challenge
- High School Drive Smart Challenge
Don’t Stop Believing: Health Belief Model and TZD

Julie Philbrook, RN, DNP
Trauma Prevention Specialist
Julie.philbrook@hcmhealth.org
www.hennepinhealthcare.org/traumaprevention