Helmet Safety Community Outreach Project

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Introduction

Date: June 13, 2022

Location: Highland Park Middle School

Contact: Deanna Gentry, PE Teacher

Target Audience: teens, age 11-13 years
- total attendees 700

Format: Video Presentation

Background

Learning Objectives
- Benefits of wearing a helmet
- Consequences of not wearing a helmet
- Mechanism of helmet safety
- Proper fit of a helmet
- Activities in which a helmet should be worn

Populations at Risk
- There is an average of 608 children per day treated in the ER for bicycle-related injuries in the US[1]
- Children not wearing helmets are x2.9 more likely to be hospitalized and x4.3 more likely to have a traumatic brain injury[1]
- Children 10-14 years have highest incidence of bicycle-related traumatic brain injuries[2]

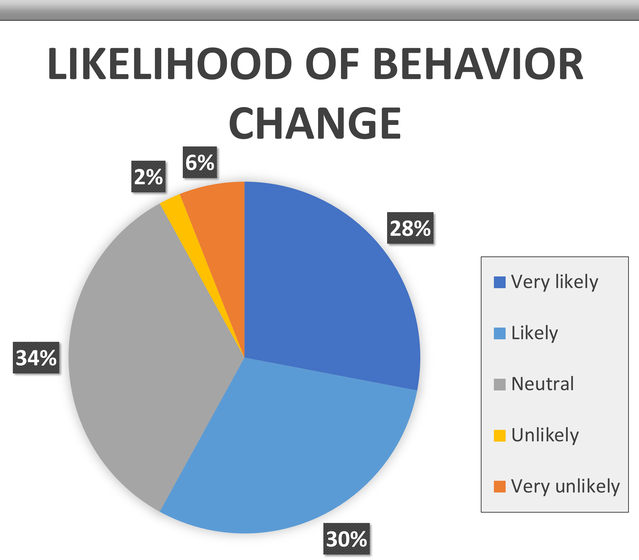
Content

Helmets lessen an impact to the head by absorbing some of the energy and dissipating the force through a larger area of the helmet[3].

A properly fitted helmet can prevent traumatic brain injuries, including concussions[3].

Activities when a helmet should be worn include football, baseball, hockey, lacrosse, skiing, sledding, and riding bikes, skateboards, all-terrain vehicles, and scooters[4].

An effective analogy to promote helmet safety in teens is relating a brain to a cell phone. If a teen knows the importance to have a phone case to prevent damage, then they will also understand the importance of helmets to protect the brain[5].



Discussion & Conclusion

Opportunities
- Video was played for the entire school with ~700 attendees

Challenges
- Unable to determine how many attendees would regularly wear helmets prior to presentation
- Convincing teens to wear helmets by overcoming opposing peer pressure

Evaluations
- Students' responses demonstrated knowledge of helmet safety, including how a helmet prevents concussions and how to properly fit a helmet.

Reflection
- By using a video format for my presentation, it was possible for the video to be played for a larger audience (the entire school) without schedule conflicts.
- From the survey responses 58% of students reported that they will likely change their behavior because of the presentation.

References

1. McAdams RJ, Swidarski K, Clark RM, Roberts KJ, Yang J, Mckenzie LB. Bicycle-related injuries among children treated in US emergency departments, 2006-2015. Accident Analysis & Prevention. 2018;118:11-17. doi:10.1016/j.aap.2018.05.019.

2. Sarmiento K, Haileyesus T, Waltzman D, Daugherty J. Emergency Department Visits for Bicycle-Related Traumatic Brain Injuries Among Children and Adults — United States, 2009–2018. MMWR Morb Mortal Wkly Rep. 2021;70(19):693-697. doi:10.15585/mmwr.mm7019a1.

3. Prevention C on I and P. Bicycle Helmets. Pediatrics. 2001;108(4):1030-1032. doi:10.1542/peds.108.4.1030.

4. Heads Up - Wear a Helmet! intermountainhealthcare.org. https://intermountainhealthcare.org/blogs/topics/pediatrics/2018/09/heads-up-wear-ahelmet/.

5. Ryan LM, Solomon BS, Ziegfeld S, et al. Evaluation of a Culturally Tailored Educational Video Intervention to Promote Bike Helmet Safety for Urban Children: A Pilot Study. Health Promotion Practice. 2020;21(6):872-876. doi:10.1177/1524839920920304.