and Mann Whitney U tests. Multivariate logistic regression modeling was performed with risky behavior as the outcome, followed by an assessment of model fit and predictive accuracy.

**Results:** There were 59 pediatric fatalities, 25 (42%) children and 34 (58%) adolescents, with median (IQR) age=17.0 (7.0-19.0) and ISS=75 (33-75). The head was the most frequent (90%), and severely injured body region, followed by the thorax (88%). Thirty-six pedestrians (61%) engaged in risky behavior. Logistic regression modeling found being male (OR=5.883), in an urban environment (OR=7.209), at nighttime (OR=13.562) significantly associated with pedestrian risky behavior. Significantly more children were involved in collisions during the daytime (6:00-1800) (83% vs. 30%; p<0.001), in crosswalks (42% vs. 10%; p=0.007) and intersections (45% vs. 20%; p=0.042), while crossing with the right of way (42% vs. 7%; p=0.003). Adolescents had higher impairment (36% vs. 0%; p=0.001), dark conditions (80% vs. 12%; p<0.001) and highspeed collisions (77% vs. 46%; p=0.017). There were 6 intentional adolescent pedestrian deaths (20% vs. 0%; p=0.027). Two-thirds (4/6) of these intentional injuries were death by suicide.

Conclusions: Pediatric pedestrians engage in risky behaviors. Being male, in an urban environment, at night increased the odds of risky behaviors. A safe system approach recognizes that people are vulnerable and inevitably make mistakes. Incorporating multiple countermeasures can help provide a safe and equitable transportation system that mitigates crash risk and protects all road users. Increased mental health and substance use services, higher rated vehicle headlight performance and reducing speeds were identified as prevention strategies to target adolescents. For children, implementing crossovers, safe routes to school programs and increased use of collision avoidance vehicle safety features, which are effective at low speeds, in lighted areas, could be effective strategies to mitigate pedestrian crash risk.

## Objectives

- 1. By the end of this presentation, participants will be able to identify risk factors for child (age < 14 years) pedestrian crash fatalities, including low speed, daytime collisions in crosswalks and intersections, that can be used to target prevention strategies to mitigate child pedestrian crash risk.
- 2. Participants will be able to identify adolescent (age 15-19 years) pedestrian unintentional and intentional fatality risk factors, including high speed collisions at night, often involving impairment, that can be used to target prevention strategies to mitigate adolescent pedestrian crash risk.
- 3. Participants will learn the key principles of a safe system approach to be able to proactively identify risks in the transportation system and develop multiple countermeasures to help provide a safe and equitable transportation system for all road users.

## Partnering Prenatally for SUID Prevention: Safe Sleep Kits for Expectant Parents



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**Background:** Sudden Unexpected Infant Death (SUID) kills ~3600 infants each year in the US. While SUID is associated with many upstream structural root causes of poor health, there is strong evidence that consistently providing a safe sleep environment for infants may prevent SUID. Safe sleep education provided during the prenatal period is less often implemented or tested for feasibility, acceptability, or efficacy.

**Methods:** Funded by a Pacesetter grant from the Injury Free Coalition for Kids, we created 120 gift bags with safe sleep educational materials and products for distribution to expectant parents in the prenatal OBGYN clinic during their third trimester "Baby Friendly" visit. Clinic nurses distributed these bags and encouraged participation in REDCap surveys assessing safe sleep planning and intent. Data analysis included both quantitative analyses of the parent surveys as well as qualitative feedback from nurses.

Results: Gift bags were distributed between October 2021 and February 2022. Parent surveys were completed by 22/120 (18.3%) parents. All survey respondents stated they planned to put their baby to sleep in a crib or bassinet, and 13 (59.1%) participants had already purchased items for their infant's sleep environment. Ten (45.6%) parents demonstrated either worry or were unsure about keeping their infant safe while sleeping. All respondents had a better understanding of how to keep their babies safe and planned to do so based on AAP guidelines. Nurse's feedback indicated that this initiative was feasible and well-received by parents and staff members.

Conclusions: Prenatal education is a feasible and acceptable approach to promoting infant safe sleep. Our study showed that though all parents intended for their infant to use a safe sleep space, many parents were worried or uncertain about keeping their baby safe during sleep. A substantial number of parents had not yet purchased items for safe sleep, indicating that the 3rd trimester may be an important time to influence parents to plan for safe sleep and avoid unsafe products. Further evaluation of the delivery of safe sleep education and/or maternal perceptions, anxiety, and receptivity around safe sleep, can serve to develop a longitudinal approach to preventing SUID.

## Objectives:

- 1. Safe sleep education in the prenatal setting has not been widely implemented or tested for feasibility, acceptability or efficacy, though it might be a better time to intervene.
- 2. We promoted infant safe sleep education in the prenatal OBGYN clinic and found that it was well received by clinic staff and parents. Our results suggest that the prenatal period may be a more appropriate time to address parental anxieties regarding infant sleep safety and help parents plan early and avoid purchasing unsafe products.
- 3. Further evaluation of the delivery of safe sleep education and/or maternal perceptions, anxiety, and receptivity around safe sleep can serve to develop a longitudinal approach to preventing sudden unexpected infant death.