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Improving Access to Snowmobiling Safety Information

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IMPROVING ACCESS TO SNOWMOBILE SAFETY INFORMATION

CVPH Family Medicine Center

Sean Taylor

December 2022 and January 2023

SNOWMOBILING AND ITS RISKS

- Rural areas have increased injuries associated with snowmobiles and all-terrain vehicles¹
- American Academy of Pediatric recommendations do not necessarily line up with local laws around use by children and adolescents of these vehicles^{9, 10, 11}
- Presents opportunity to improve awareness of health impacts of these vehicles on those in rural communities, those with fewer resources, and those less likely to engage with the health care community
- Also an opportunity to increase access to information at PCP clinics beyond the normal scope to reach a broader audience and develop relationships with unlikely allies in the community
- In NY, accidents are on the decline (113 in '21-'22) but fatalities have stayed stable over the past six years (19 in '21-'22) ¹²

PUBLIC HEALTH COSTS OF SNOWMOBILE USE

- Amongst Canadian sports and recreation injuries from 2008-2009, snowmobiling injuries had the longest hospital stays associated with them²
- Upwards of 10% of snowmobile injuries occur in those under 15 years of age, and another 25% occur in those between 15 and 24³
- Upwards of 55% of snowmobile injuries involve the extremities, 45% involve head injuries, and 28% involve the spinal column^{5,7} with head injuries being a leading cause of death as a result of injury⁸
- Almost half of pediatric injuries take place on private property, where state or provincial laws often don't apply^{3,6}

INSIGHT FROM COMMUNITY ON ISSUE

On brochures as educational tools: “Brochures have their place, their best use is as a talking point. ..They (providers) can pull out a brochure, to discuss the content with the patient in the room, then they can take it home and share it with their family.”

On designing brochures/handouts: “The hardest part about designing brochures is the images. To have safe pictures with the practices you want shown and with no other errors in the background is really difficult.”

- Abby Beerman from Injury Prevention, UVMHN

On discussing safety with patients: “It’s part of a lot of family’s identities. I’ve not had a lot of luck advocating for not doing it to these families, so I’ll go for the risk reduction approach instead.”

On location and nature of injuries: “It’s pretty common to send off kids on their own property without supervision... If kids ride together, they can rile each other up and lead to an injury...Several kids have gone off trails and go into freezing water, ending up hypothermic... With handled vehicles, we often see liver or spleen injuries in addition to extremities or head injuries.”

- Dr Maia Rutman, Pediatric Emergency Medicine physician

On safety courses: “Many times, students in the courses come from snowmobiling families, but hearing it from the instructors resonates a bit more. Some states are just online with their safety training but New York’s is still in person and we feel like that hands on aspect is important.”

-Anonymous

INCREASING DISTRIBUTION OF SAFETY INFORMATION TO COMMUNITY

- NY Snowmobiling Association and Go Snowmobiling Campaign have safety pamphlets for distribution^{10, 11}
- UVMHC Injury Prevention Team also has existing document that I have modified for the clinic including safety guidelines from professional associations, recommendations for safe riding practices, and where to sign up for free state organized safety courses
- Flyer can be used as a starting point for discussing safer snowmobiling practices with patients and their families with the goal of sparking discussions beyond the office

RESULTS OF INTERVENTION

- Study from 2018, AAOS and AAP statements are often associated with substantial decreases in fractures in the years following their release⁴
- Though the impact of safety courses on lowering the injury rates, information is always helpful for folks³ and Abby Beerman
- Unable to determine results as they are not in place yet, however NY state and the UVMHN keep track of injury data so that is a source to draw on for information on potential effect

HOW TO EVALUATE EFFECTIVENESS OF PROJECT

- Ask state safety trainings for statistics on changes in enrollment numbers before and after intervention
- Keep track of number of pamphlets distributed
- Use deidentified EMR data to assess snowmobile related injury number changes over time

RECOMMENDATIONS FOR FUTURE WORK IN THIS AREA

- Follow up on methods for evaluating effect of intervention
- Engage more recreation associations such as those involved in the riding of ATVs and side-by-sides/UTVs
- Compile lists of such organizations to distribute to those interested in riding with groups instead of alone
- Diversify documents available for use with patients, including more languages, types of recreation, and catered to locations
- Organize meeting with NYSSA and providers to develop understanding of where each is coming from and as potential starting point for designing safety materials together

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