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Internship Overview

- Collaboration between
 - Injury Control Research Center (ICRC)
 - School of Public Health
 - College of Physical Activity and Sports Sciences (CPASS)
 - Morgantown Pedestrian Safety Board (community group)
 - AARP
- WV AARP strongly advocates for Complete Streets (CSs)



- Goal of CSs: Create safe transportation system for all users.
- Purpose of internship: Gain understanding of CSs and generate report for AARP to advocate for CSs in WV.

Learning Objectives

- Acquire knowledge through literature reviews relevant to the internship including, pedestrian- and cyclist-motor-vehicle crashes (MVCs), resulting crash-related injuries, and strategies for preventing such crashes and injuries.
- Develop an understanding of CSs legislation in the United States and the barriers to adoption and implementation of such legislation in West Virginia by working with AARP WV and the National Complete Streets advocacy organization. Activities related to objectives one and two included conducting a review of the scientific and gray literature for information related to pedestrian- and cyclist-vehicle crashes and CS legislation as well as discussions with representatives of WV AARP.
- Generate a report which will describe the incidence of pedestrian- and cyclist-vehicle crashes and injuries in West Virginia, including crash-related-costs so these data can be leveraged to mobilize the adoption of CSs legislation and/or pedestrian- and cyclist-vehicle crash prevention strategies. Activities related to objective three included communicating with professionals at the WV Department of Highways (DOH), obtaining DOH crash data, and conducting an analysis of these data.
- Create an informative presentation from the technical report for legislators, policy advocates, and relevant state agencies that will serve to inform stakeholders and refine my professional public speaking skills. Activities related to objective four included creating a PowerPoint presentation that incorporates information learned during the internship and honed my public speaking skills by presenting it to my preceptors.

Project

Background

- CSs shown to increase transportation options and decrease MVCs
- To effectively emphasize importance of CSs in WV, data can be utilized by advocates of CSs.
- Incidence of pedestrian- and cyclist-MVCs and injury costs can be utilized to lobby legislators and relevant state agencies.

Objective

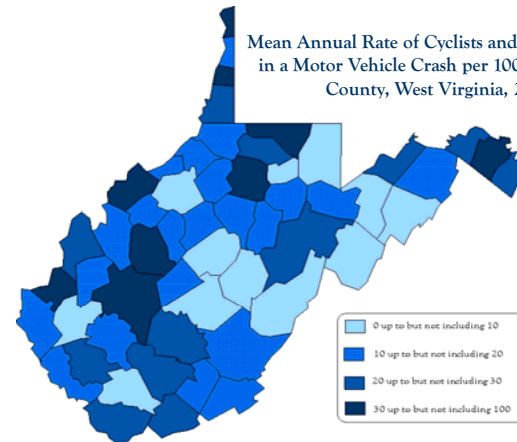
- To quantify the burden of pedestrian- and cyclist-MVCs in terms of injury and cost.

Methods

- Data obtained from the WV Division of Highways (DOH)
- Descriptive statistics for MVCs involving cyclists and pedestrians were calculated.
- Costs calculated based on estimates provided by the Federal Highway Administration.

Results

- Cabell, Kanawha, Wood, Ohio, Berkeley & Monongalia counties experienced the highest rates of pedestrian- and cyclist-MVCs 2002 – 2006 (Figure 1).
- Pedestrian- and cyclist-MVCs are estimated to have cost WV over \$1 billion from 2000 – 2006 due to injury alone (excludes property damage) (Table 1)



Mean Annual Rate of Cyclists and Pedestrians Involved in a Motor Vehicle Crash per 100,000 Population by County, West Virginia, 2002 - 2006

Sum of Economic Loss Associated with Crashes By Injury Type, 2000-2006

Injury*	Bike	Pedestrian	Cost per Injury	Total Cost
A	334	968	\$ 236,000	\$ 307,272,000
B	378	659	\$ 48,000	\$ 49,776,000
C	158	594	\$ 25,000	\$ 18,800,000
K	15	191	\$ 3,400,000	\$ 700,400,000
O	238	455	\$ 0	\$ 0
TOTAL	1123	2867		\$ 1,076,248,000

* Type A Injury – Bleeding wound, distorted member, or had to be carried from the scene.
Type B Injury – Bruises, abrasions, swelling, limping, etc.
Type C Injury – No visible injury, but compliant of pain or momentary unconsciousness
Type O Injury – Not injured
Type K Injury – Killed

Discussion

- The incidence of crashes and injuries coupled with the associated, estimated costs should be utilized by advocates of CSs as a component of their lobby for passage and enactment of this legislation throughout WV.

Summary and Reflections on Internship

- Significant learning experience for a student who has never worked with data first-hand
- Learned about availability and quality of public health surveillance data
- Made me a more prepared professional, because I learned to have multiple ideas and strategies for a project, just in case every piece does not fall in line.
- Provided me with multiple opportunities to increase professional networking skills
- Acquired knowledge on several unfamiliar techniques
- Introduction to the "real working" world
- Will serve as an excellent transition into the field after being a student for so long.

Public Health Impact

- Traffic-related injury and death significantly affect American society in terms of both direct costs and years of productive life lost.
- Lack of physical activity and obesity are significant concerns in WV.
- Several Healthy People 2020 objectives stress increasing legislative policies for improving the built environment to increase access to and engagement in opportunities for physical activity.
- According to the Institute of Medicine's (IOM) 2012 Benchmarking Report, as bicycling and walking levels decrease, overweight and obesity levels increase.
- Through implementation of CSs in WV, the incidence of pedestrian- and cyclist-MVCs could decrease and physical activity levels could increase.
- CSs movement has stated and shown examples that if a policy/program is implemented correctly and adhered to, significant changes can be achieved in all of the previously mentioned areas. Although successful policies and programs have been implemented around the US to reduce the incidence of traffic-related morbidity and mortality, WV is without such a program.
- With the proper support and advocacy, WV may join the top CSs policies and positively affect quality of life of its residents.

Conclusion

- Pedestrian- and cyclist-MVCs in WV associated with significant costs
- Next steps for effective CSs advocacy in WV include:
 - Identify cities in with most pedestrian- and cyclist-MVCs
 - Obtain most current crash data from the WV DOH
 - Update report and presentation with most recent data
 - Create and present legislator-specific brief report
 - Coordinate all activities with AARP

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