Youth and Cycling Safety: Existing Research and Strategies for Improvement

Centre for Youth & Society

UVic

There are many reasons to encourage cycling as a form of active transport for youth; however, it is important to be aware of the growing safety concerns that affect youth cyclists.

WHY THIS MATTERS

While the growth of cycling positively impacts youth, data shows that cyclists increasingly account for more collisions and injuries than other road users.

CYCLING SAFETY

- In 2010/2011, 33% of all visits to Ontario Emergency Departments for bicycling-related injuries were by children and youth, and 19% of all visits were by youth aged 10-14 years.
- Many youth do not understand bike laws. When they are aware of safety protocol, they often do not follow it.
- Teen (12-17 years) and young adult (18-34 years) cyclists are significantly more likely to use portable electronic devices than older cyclists.
- An important factor in cycling safety is cyclist behaviour. Youth are shown to take more risks when cycling.
- A cyclist on the motorway is likely affected by similar distractions as drivers in similar ways, and is even more likely to be injured in the case of an accident because of the exposed nature of cycling.

BENEFITS TO CYCLING

- Improved health, endurance, strength;
- Motor skill competency and cognitive functioning;
- Self-esteem, self-confidence and improved mental health;
- Lower likelihood of depression and anxiety in adulthood;
- Independence;
- Risk assessment and decision making;
- Environmental sustainability.

BARRIERS TO CYCLING

- Fear of theft;
- Road safety concerns;
- Lack of awareness of legislation;
- Anxiety related to operating and maintaining a bicycle;
- Environmental factors and infrastructure.

There is a significant correlation between the use of mobile phones and bicycle crashes or near crashes in youth cyclists.

STRATEGIES FOR IMPROVEMENT

Six areas that communities can focus on: legislation, public awareness, cyclist training, infrastructure, safe parking, and partnerships between community groups.

This can include:

- ❑ Addressing crime by providing safe bicycle parking and access to bike locks;
- ❑ Improving cycling infrastructure with dedicated bike paths/lanes, increased street connectivity, increased lighting, paving, etc.;
- ❑ Introducing traffic calming devices, such as speed bumps, curb extensions, etc.;
- ❑ Developing programs for educating youth on safe cycling, e.g. helmets, laws, bicycle maintenance, etc.;
- ❑ Launching public education campaigns, particularly aimed at drivers who may not be well-versed in strategies and practices for interacting with bicycles on the roadway;
- ❑ Addressing speed issues with increased signage, enforcement of speed limits, etc.

KEY POINTS

- The safety, as well as the perceived safety of the built environment (roads, bike paths, traffic calming devices, etc.) has an impact on youth participation in cycling, particularly cycling as a form of active transport.
- Increasing the total length of cycling/walking paths, improving street connectivity, and installing traffic-calming devices such as speed bumps all positively impact youth physical activity and active transport.

AREAS FOR FUTURE RESEARCH

- ❑ What distractions are most impacting youth cycling safety;
- ❑ Effects of distracted cycling and strategies for addressing this issue;
- ❑ Potential improvements to cycling safety;
- ❑ The effectiveness of community programming;
- ❑ The effectiveness of traffic calming measures and infrastructure development.

Distracted cycling is a growing issue for not only the safety of youth cyclists, but also the safety of others using public roadways and pathways.

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