



June 8, 2020

City of Kelowna  
Integrated Transportation Department  
1435 Water St  
Kelowna, BC V1Y 1J4

**Attention: Matt Worona**

**RE: E-scooters and Health Evidence**

---

On behalf of Interior Health, we are pleased to provide this letter to the City of Kelowna as a response to a request for additional information about the health evidence and impacts to health services from the **shared e-scooter program**. As you know, the health of individuals and populations is influenced by a variety of factors including the social and physical environments. As such, Interior Health is committed to collaborating with the City of Kelowna and other stakeholders to support public policies that contribute to healthy communities.

Active transportation increases physical and mental health of individuals and improves the environment by reducing air pollution. From an equity perspective, alternative transportation options that are less costly than car ownership and enhance city accessibility for a larger number of members in our community. While the benefits of active transportation such as bicycles, carpooling and public transit are well documented, **shared e-scooters programs** are relatively new and evidence is emerging from cities where programs were implemented.

Evaluation of **shared e-scooter programs** in the US and Australia estimated that between 20 to 28 injuries per 100,000 trips required medical attention. Ninety percent of injuries affected riders, and about 70 percent of injuries were either fractures or head injuries. The rate of head injuries more than double the rate experienced by cyclists. Individuals in their teens and twenties and first time riders were overrepresented, and a large proportion of injuries involved alcohol intoxication and not wearing a helmet. According to data from Alberta Health Services, one person was seriously injured and admitted to hospital per 100,000 e-scooter rides. They estimated a much higher number of injuries that didn't result in hospital admissions, at a rate of one per 1,500 rides.

In alignment with experience in other jurisdictions, clinicians at Kelowna General Hospital have also reported that they have observed a rise in injuries among users of the **shared e-scooter program**. This prompted the City of Kelowna to request health information related to the program. As a result, Interior Health is currently exploring the feasibility of utilizing administrative data sources to assess the impact of the **shared e-scooter program** on health services. This retrospective analysis, however, will require manual chart reviews and may take several weeks before the results can be shared with the City of Kelowna. Prospectively, Interior Health is working towards determining opportunities to collect, analyze and disseminate health information related to the **shared e-scooter program**.

Implementation of shared e-scooter and other programs involving rapidly expanding technology in short-distance transportation requires us to consider health data to understand associated effects on public health. The City of Kelowna has a standing partnership with Interior Health in which both agencies collaborate to support healthy environments for community members. Safety strategies to mitigate harms require collaboration with additional stakeholders who have a role in either enforcing, monitoring or responding to issues that arise due to the use of the **shared e-scooter program**. Examples of strategies to mitigate health impacts that were implemented in other jurisdictions include providing safety education, enforcement for disallowed or illegal behaviour, restricting the locations where e-scooters are permitted to ride and park, and built-in e-scooter safety features such as lights, suspension and noise, as well as speed restrictions.

In summary, a **shared e-scooter program** offers a novel, convenient, and fun way to get around and contributes to a vibrant community by expanding recreation options. These are important benefits that can be maximized by balancing prevention and mitigation strategies of any associated risks. We appreciate the efforts of the City of Kelowna in seeking to understand health impacts to implement appropriate regulatory responses to the **shared e-scooter program**.

Please do not hesitate to reach out with questions or concerns.

Sincerely,



Dr. Silvina Mema, MD, MSc, FRCPCP  
Medical Health Officer



Heather Deegan, MSc  
Director, Healthy Communities

---

#### References

- 1) E-Scooter Injuries. Public Health Ontario, January 2021 <https://www.publichealthontario.ca/-/media/documents/e/2021/e-scooter-injuries.pdf?la=en>
- 2) E-Scooter Jurisdictional Scan Rideshare Program Policies. Public Health Ontario, January 2021. <https://www.publichealthontario.ca/-/media/documents/e/2021/e-scooters-jurisdictional-scan.pdf?la=en>
- 3) Injury Matters and Australasian Injury Prevention Network's Scooter Safety Webinar. <https://www.youtube.com/watch?v=eFG0u-8YTWY>
- 4) Basky G. Spike in e-scooter injuries linked to ride-share boom.357-9. <https://www.cmaj.ca/content/192/8/E195>
- 5) Trivedi TK, Liu C, Antonio AL, Wheaton N, Kreger V, Yap A, Schriger D, Elmore JG. Injuries associated with standing electric scooter use. JAMA network open. 2019 Jan 4;2(1):e187381 <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2722574>