



August 4, 2020

Alex Pedersen
Council Member
Seattle City Council

RE: Risks and dangers of E-scooters

Dear Councilman Pedersen,

Thank you for the opportunity to offer some testimony as the City Council considers the issue of establishing a share program for e-scooters.

To put my information in context, I wanted to give you a bit of information about myself. I have been a faculty member at the University of Washington for the last 35 years, and during this time I have treated injured children at Harborview Medical Center and have devoted my career to the study and prevention of injuries to both children and adults. I was the founding director of the Harborview Injury Prevention and Research Center. I was the person responsible for determining that bicycle helmets prevent 85% of head injuries related to bicycling,¹ and spearheaded the promotion of bike helmets both in our community and around the country.

E-scooters are dangerous. There have now been studies published from around the world demonstrating that crashes on e-scooters can result in serious injuries, including brain injuries. A study from Los Angeles found that 40% of injuries requiring treatment in the ER were head injuries, and only 4% of riders wore a helmet². Another study of rental e-scooters injuries in

¹ Thompson RS, Rivara FP, Thompson DC. A case-control study of the effectiveness of bicycle safety helmets. *N Engl J Med.* 1989 May 25;320(21):1361-7. doi: 10.1056/NEJM198905253202101. PMID: 2716781.

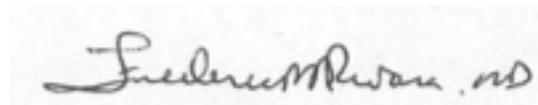
² Trivedi TK, Liu C, Antonio ALM, Wheaton N, Kreger V, Yap A, Schriger D, Elmore JG. Injuries Associated With Standing Electric Scooter Use. *JAMA Netw Open.* 2019 Jan 4;2(1):e187381. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2722574>

Salt Lake City found that 20% had head injuries, and no riders wore helmets.³ Another from Dallas found that 58% involved the head or face, and none wore helmets.⁴ A national study using data collected from the US Consumer Product Safety Commission found that injuries from e-scooters were 3 times more likely to result in a concussion than injuries from e-bikes.⁵

Having e-scooters available as rental devices makes the situation even more dangerous, because the majority of people using them will be unskilled or even first-time riders, and essentially none will wear helmets. Popular scooter rental companies do not promote safety. A study of their Instagram and Twitter posts concluded, “Findings show that modeling and promoting safety is rare on Bird's and Tier Mobility's official social media accounts, which may contribute to the normalization of unsafe riding practices.”⁶

The promotion and use of these devices in the city will pose an unnecessary risk to our community.

Sincerely,

A handwritten signature in black ink that reads "Frederick P. Rivara, MD". The signature is written in a cursive style and is positioned above the typed name and title.

Frederick P. Rivara, MD, MPH
Professor of Pediatrics
Adjunct Professor, Epidemiology
University of Washington

CC: Mayor Jenny Durkan

³ Badeau A, Carman C, Newman M, Steenblik J, Carlson M, Madsen T. Emergency department visits for electric scooter-related injuries after introduction of an urban rental program. *Am J Emerg Med.* 2019 Aug;37(8):1531-1533. doi: 10.1016/j.ajem.2019.05.003. Epub 2019 May 16. PMID: 31104782.

⁴ Trivedi B, Kesterke MJ, Bhattacharjee R, Weber W, Mynar K, Reddy LV. Craniofacial Injuries Seen With the Introduction of Bicycle-Share Electric Scooters in an Urban Setting. *J Oral Maxillofac Surg.* 2019 Nov;77(11):2292-2297. doi: 10.1016/j.joms.2019.07.014. Epub 2019 Aug 1. PMID: 31454504.

⁵ DiMaggio CJ, Bukur M, Wall SP, Frangos SG, Wen AY. Injuries associated with electric-powered bikes and scooters: analysis of US consumer product data. *Inj Prev.* 2019 Nov 11:injuryprev-2019-043418. doi: 10.1136/injuryprev-2019-043418. Epub ahead of print. PMID: 31712276

⁶ Dormanesh A, Majmundar A, Allem JP. Follow-Up Investigation on the Promotional Practices of Electric Scooter Companies: Content Analysis of Posts on Instagram and Twitter. *JMIR Public Health Surveill.* 2020 Jan 23;6(1):e16833. doi: 10.2196/16833. PMID: 32012087; PMCID: PMC7005689.