## ROAD DEATHS AND THE NEXT U.S. PRESIDENTIAL ELECTION

## Donald Redelmeier Nissan Distinguished Keynote Lecture

The US presidential electoral process is remarkable for widespread spending, attention, conflict, and rhetoric. Whether the process has an immediate effect on public health has never been tested. Moreover, such a possibility rarely receives consideration when evaluating voter turnout statistics ranging around 50-60% of eligible Americans.

We studied all US presidential elections for the last 32 years, beginning with Carter in 1976 and ending with Obama in 2008. For each election, we analyzed the national registry of fatal crashes in the US, along with the Tuesday immediately before and after to calculate expected numbers of individuals in fatal crashes for the nation at the time.

Our main finding was that the average election leads to a 19% increase in the risk of a fatal crash during the hours of polling. This equaled about 24 people per election; was remarkably consistent across different ages and locations; and greatly exceeded the risk on New Year's Eve, Super Bowl Sunday, or the chance of casting a pivotal vote.

We conclude that efforts to mobilize the population, along with America's reliance on motor vehicles, results in increased fatal crashes during US presidential elections. We suggest more safety advocacy by electioneers who encourage people to vote. Perhaps the US president, when elected in the aftermath of fatal crashes, might also give more thought to the 100 lives lost each day from crashes in the United States.

Dr. Redelmeier received his MD from University of Toronto in 1984, postgraduate training in Internal Medicine at Stanford University in 1991, and a Masters in Health Services Research as a Robert Wood Johnson fellow at Stanford University in 1990. His research spans a variety of areas, emphasizing the psychology of medical decision making and the epidemiology of motor vehicle trauma. He has published over 100 articles in the scientific medical literature. Some of his notable discoveries include 'Association between cellular-telephone calls and motor vehicle collisions' (NEJM 1997) and 'Traffic-law enforcement and risk of death from motor-vehicle crashes: case-crossover study' (Lancet 2003). He serves as Canada Research Chair in Medical Decision Sciences; Professor of Medicine at the University of Toronto; Director of Clinical Epidemiology at Sunnybrook Health Sciences Centre; staff physician in the Division of General Internal Medicine at Sunnybrook Hospital; and a Senior Scientist at the Institute for Clinical Evaluative Studies in Ontario.