
Local and national governments around the world are considering proposals to eliminate the time change in favour of permanent Daylight Saving Time (DST) or Standard Time. Earlier this year, the BC government invited the public to share their views in a poll but provided no option to vote for permanent Standard Time. Yet, experts in biological rhythms and sleep unanimously agree that Standard Time year-round is the best option for public health and safety (see attached position papers from various biological rhythms societies as well as a list of references to scientific articles).

If DST is kept year-round, sunrise would be later in the winter, leading to decreased exposure to morning sunlight. Under permanent DST, Vancouverites will get 67 fewer days of morning light (sunrise by 0800h) compared to permanent Standard Time (see Figure below). BC children will have to commute to school in the dark for about a third of the school year.

Our body’s internal biological clock needs exposure to morning light. When exposure to sunlight in the morning is reduced, our biological clock drifts later, making it harder to wake up and causing an increased mismatch between the body clock and local time (a condition called social jetlag). DST also exposes people to more evening light, which further delays the biological clock and makes it more difficult to fall asleep. Both sleep deprivation and social jetlag are associated with negative effects on physical and mental health outcomes, including increased risks for diabetes, obesity, heart disease, depression, and some forms of cancer. In children and adolescents, sleep deprivation and social jetlag are associated with poor academic performance, absenteeism and substance use. Lack of sleep and fatigue also increase the risk of accidents during commutes and on the job. Therefore, permanent DST in BC is expected to have adverse long-term implications for public health and safety.

We call upon the Government of British Columbia to reconsider its commitment to permanent DST. As experts in circadian biology, sleep, mental health and safety, we understand that removing the time change in favour of permanent Standard Time is the preferred option.

Sincerely,
Myriam Juda, PhD
Research Associate, Sleep and Circadian Neuroscience Lab, Psychology, SFU

Ralph Mistlberger, PhD
Professor, Psychology, SFU
Director, Sleep and Circadian Neuroscience Lab, Psychology, SFU

Andrea Smit, PhD, on behalf of the Canadian Society for Chronobiology (CSC)
Member of the CSC Board of Directors

Najib Ayas, PhD, MD, MPH, FRCPC
Associate Professor of Medicine, Sleep Disorders Program
Faculty of Medicine, The University of British Columbia

Judy Village, PhD, CCCPE
President, Association of Canadian Ergonomists
Adjunct Professor, School of Population and Public Health, UBC

Raymond Lam, PhD, MD, FRCPC
Professor and BC Leadership Chair in Depression Research
Associate Head of Research, Psychiatry, University of British Columbia
Director Mood Disorders Center, Djavad Mowafaghian Center for Brain Health
Executive Director, APEC Digital Hub for Mental Health