



Turn back the clock on Daylight Savings: Why **Standard Time all year round is the healthy choice**

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Changing our clocks twice a year has little benefit, economic or otherwise, so isn't it time to stop this antiquated practice? The good news is that some provincial legislatures agree and are currently considering bills to adopt permanent time. **As experts on biological rhythms, we support the switch to a permanent time. However, in doing so, we must adopt Standard Time (ST), not Daylight Savings Time (DST, or "summer time").**

There is general agreement that getting rid of the time switch twice a year would be a good idea. After time switches, particularly the "spring forward," there are increased rates of car accidents, heart attacks, strokes and workplace injuries. So why does it matter whether we adopt permanent DST or permanent ST?

All the processes happening in our bodies are co-ordinated by our biological clocks, located in our brains and all other organs. The argument in favour of permanent DST is that there would be more light in the evening. While this is true, we can't change the number of hours of light in the day. **More evening light means less morning light.** But importantly, **it's the light in the morning that is most important** in resetting our biological clocks. Consider this: If we all spent our time outdoors getting plenty of natural light, and could choose when to get up and go to sleep as our ancestors did, our internal clocks would be set by the sun so that we would tend to wake up at dawn, and then, depending on the time of year, stay awake for a while in the evening after dark. Our body clocks would be in sync with the sun clock. The problem is that we live in societies that force us to get up and go to work or school at times that we don't get to choose.

Chronobiologists, the name given to scientists who study biological timing, call this situation “social jet lag,” when the body clock doesn’t match the social clock. Just like the jet lag you get when you fly across time zones and find yourself out of sync with the new local time, **social jet lag can cause many problems including disrupted sleep, increased risk of accidents, lower productivity at work and in school, and increased risk of negative health impacts.** Permanent ST would move “social time” closer to our natural “body time,” while permanent DST would move social time further away.

Can just one hour make such a big difference? We already have evidence from a huge natural experiment that we are all part of: the difference between people living on the western and eastern edges of any time zone. The sun moves continuously across time zones, but we are arbitrarily divided up into one-hour blocks. **People on the western edge are forced to get up an hour earlier than people on the east,** according to sun time. **Analysis of health data from millions of people shows that people on the western edges of time zones get about 19 minutes less sleep every night than people on the east, and also have significantly higher rates of obesity, diabetes and heart attacks than people on the eastern edges.** Even scarier, **cancer rates significantly increase when the sunrise is later on the western edges.** Permanent DST would make sunrise even later for everyone, while permanent ST would make sunrise closer to body time.

Permanent DST was tried in the United States in the past century but was quickly repealed when the public found that waking up in the dark is hard, and energy savings were negligible. Let’s not repeat that failed experiment in Canada. Since Canadians live even further north, the challenge would be even more profound in our country. Recently, several provincial legislatures have considered stopping the switch, with a bill currently on the table in British Columbia, but in all cases the plan is to switch to DST, not ST.

Scientists around the world support this initiative to adopt Standard Time, and statements have been issued by the U.S.-based Society for Research on Biological Rhythms, the European Biological Rhythms Society, and the European Sleep Research Society. As Canadian biological rhythm researchers supporting evidence-based policy, we strongly recommend a switch to permanent Standard Time.