

# Oregon wants to increase sleep deprivation and winter misery

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Finding it difficult to wake up after we “spring” forward to daylight saving time? Oregon has plans to end this biannual ritual. But **if we lock the clock to daylight saving time as Oregon hopes to, our problems will be far worse than just recovering from the jarring consequences of losing one hour of sleep. Instead, we’ll be doomed to losing sleep year-round and gaining weight in the process.**

Science and history tell us this is a recipe for disaster.

**We need healthy sleep all year long to maintain a robust immune system, critical cognitive functions, metabolic health, alertness and mood.** However, the week following our annual “spring” forward, heart attacks and car accidents temporarily increase. This balances out with fewer heart attacks the day after we gain an hour of sleep in the fall.

But **there are chronic problems with staying on daylight saving time, as chronobiologists — those who study sleep and our natural body rhythms — have found. Shifting our social clock forward permanently has far greater implications and lasting impacts on health, including decreased life expectancy, shortened sleep, mental problems and sleep disturbances.** If Oregon wants to get out of the spring-forward, fall-back trap, it **should opt for permanent standard time.**

This is based on a growing body of research.

**Russia essentially conducted an experiment on its entire population from 2011 to 2014, when the country permanently switched to “summertime” — what we call daylight saving time. In the depths of winter it was anything but! Waking up an hour earlier during the coldest and darkest time of the year robbed an entire population of the early morning sunlight that scientists say helps the “body clock” align with earth’s “solar clock.”** The shift had **negative influences on adolescents’ sleep habits, moods and behavior, with the most pronounced effects on those living in Russia’s northern latitudes. Citing health problems and a rise in early morning car accidents,** in October 2014, Russia switched to permanent “wintertime.”

**Permanently shifting sunrise later by an hour increased something scientists call “social jet lag,” the miserable effects similar to when you fly across time zones. Each hour of social jet lag is associated with an 11% increase in the likelihood of heart disease,** according to a 2017 study published in the journal Sleep. These effects are independent of sleep duration.

Scientists have evidence of how **even living on the western edge of a time zone affects people differently than those on the eastern edge.** People on the western edge are **forced to get up an hour earlier than people on the eastern edge, relative to sunrise.** Analysis of health data from millions of people shows that people on

the western edges get on average 19 minutes less sleep every night than people on the east, and have significantly higher rates of obesity, diabetes and heart attacks.

Why is this? Sunset and sunrise are powerful biological triggers. Drops in temperature and evening's fading light cause a natural release of melatonin, a hormone that induces drowsiness. Sunrise and natural early morning light sends a strong wakeup signal to the suprachiasmatic nucleus, the brain region that scientists sometimes call our body's "master clock."

When we shift our social clock to daylight saving time, we are more likely to wake up in darkness and are exposed to more evening light. Darker mornings and brighter evenings push our circadian rhythms later even though work and school times do not change. This mismatch between body and environment influences the associated deleterious health effects.

Here in the Pacific Northwest, permanently delaying sunrise an hour during the winter would lead to months of starting work and school in darkness. In Portland, an 8 a.m. work or school start would now be in darkness for 109 days as opposed to zero days out of the year as we have today. Waking up will become more difficult for adults and school kids, likely worsening mental health conditions such as seasonal affective disorder.

Circadian research also tells us that when high schoolers have later start times aligned with their body clock, their mental health, grades and performance measurably improve and there are significantly fewer car accidents due to drowsy driving. With this in mind, California lawmakers chose to mandate later school start times, but then, in a counterproductive move, also voted for permanent daylight saving time. By delaying their winter sunrise, the circadian health benefit of later school schedules is negated. Shifting when we first get morning sun has consequences for our children, but will also affect adults, leaving us all miserable and groggy.

We need to learn from history. In 1973, the United States wanted to save electricity during the national energy crisis. Congress instituted a plan for almost 16 months of continuous daylight saving time nationwide starting in 1974. But it was wildly unpopular — school officials in Florida blamed the deaths of six children in the first month on their having to go to school in darkness. The effort was cut short after just 10 months.

Oregon is currently in a holding pattern as states are forbidden from increasing time spent on daylight saving time without approval from Congress. It's simpler to switch to year-round standard time as Hawaii and Arizona have been on for over 50 years. It's the only switch endorsed by circadian scientists, and can be done today in Oregon, without an act of Congress.

On the West Coast, Oregon needs to take the lead for its citizens' health and safety and switch to permanent standard time. You can find Save Standard Time's petition here.