

Why Proposition 7 is bad for public health



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Changing the clocks twice a year is indeed bad for our health. But a “yes” vote on Proposition 7, which encourages California’s legislature to adopt permanent daylight saving time, is a cure that is worse than the disease. This plan would force us to wake up an hour earlier all winter long, and research tells us that waiting for a bus in the dark or driving to work before sunrise doesn’t just feel bad, it is actually bad for our health.

Switching from standard time to daylight saving time each year increases accidents, heart attacks, and makes us sleep poorly for several weeks. But we also know from credible research that when we set our clocks matters even more. Getting up too early in the wintertime increases depression, cancer, and obesity.

Year-round daylight saving time would make people wake up earlier than sunrise through the entire winter, with most people driving to work before sunrise. An inflexible daily work and school schedule forces people to get up before the sun, which disrupts the body's daily cycle, known as a circadian rhythm, creating what scientists call "social jet lag." Greater difference between solar time and social time results in greater circadian disruption. This is exactly what would happen during the winter months if permanent daylight saving time were adopted.

Research on human daily rhythms and sleep shows that we need light in the morning, and this perpetual "summer" schedule is harmful. Many people know someone who has depression in the winter, but increased rates of cancer are concerning as well. In a recent study of four million Americans living in more than 600 counties, researchers linked cancer rates to how far east people live in their time zone.

If you live on the eastern edge of a time zone, the sun rises almost an hour earlier for you relative to someone in the west. The results are stunning: for each 20 minutes of later sunrise, breast and prostate cancer increase by 4%, leukemia around 12%, and uterine cancer by 10%. A second study reviewing nearly 60,000 cases found a 7% increase in liver cancer for every 20 minutes later sunrise. For reference, the sun rises 23 minutes later in San Francisco than Los Angeles on election day.

The adverse impacts of permanent daylight saving time would be felt more in the western portion of the time zone. San Francisco and coastal northern California lie to the west of Los Angeles and would be subject to greater circadian impacts than Los Angeles. In addition, more northerly latitudes would experience greater impacts. It is odd that the authors of the ballot measure reside in areas where their constituents would be harmed more than others.

The experiment proposed by Prop. 7 has been tried elsewhere and failed. In 2011, Russia switched clocks to year-round "summer time." It was initially popular, but three years later only a third of Russians wanted to keep the system and it was abolished.

Despite the emotional appeal of a permanent summer, setting our alarm clocks one hour earlier in the winter does not bring us more

light, it just makes us wake up to darkness, depriving people of sunlight critical to our physical and mental health.

Some may vote for this bill hoping for the possibility of permanent standard time, but a bill to do this has already failed in the state legislature. Instead, the sponsors of the proposition have stated in several media interviews and in the proposition itself that their intention is to use permanent daylight time, so this is why we think this proposition is flawed, and we do not think a Yes vote will lead to permanent standard time.

Chronobiologists, the scientists who study circadian rhythms, have issued a statement through their professional societies opposed to Proposition 7 and other similar measures elsewhere in the world. These societies, including the Society for Research on Biological Rhythms, identify that the right and healthy solution, which we also support enthusiastically, is to use standard time year-round. **Evidence is strong that standard time year-round is better for sleep, heart health, and healthy weight. It would reduce cancer incidence and improve psychological well-being of the population as a whole.**

Rather than chasing an illusion of permanent summer, voters should **insist on a scientifically supported solution that benefits public health.**

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