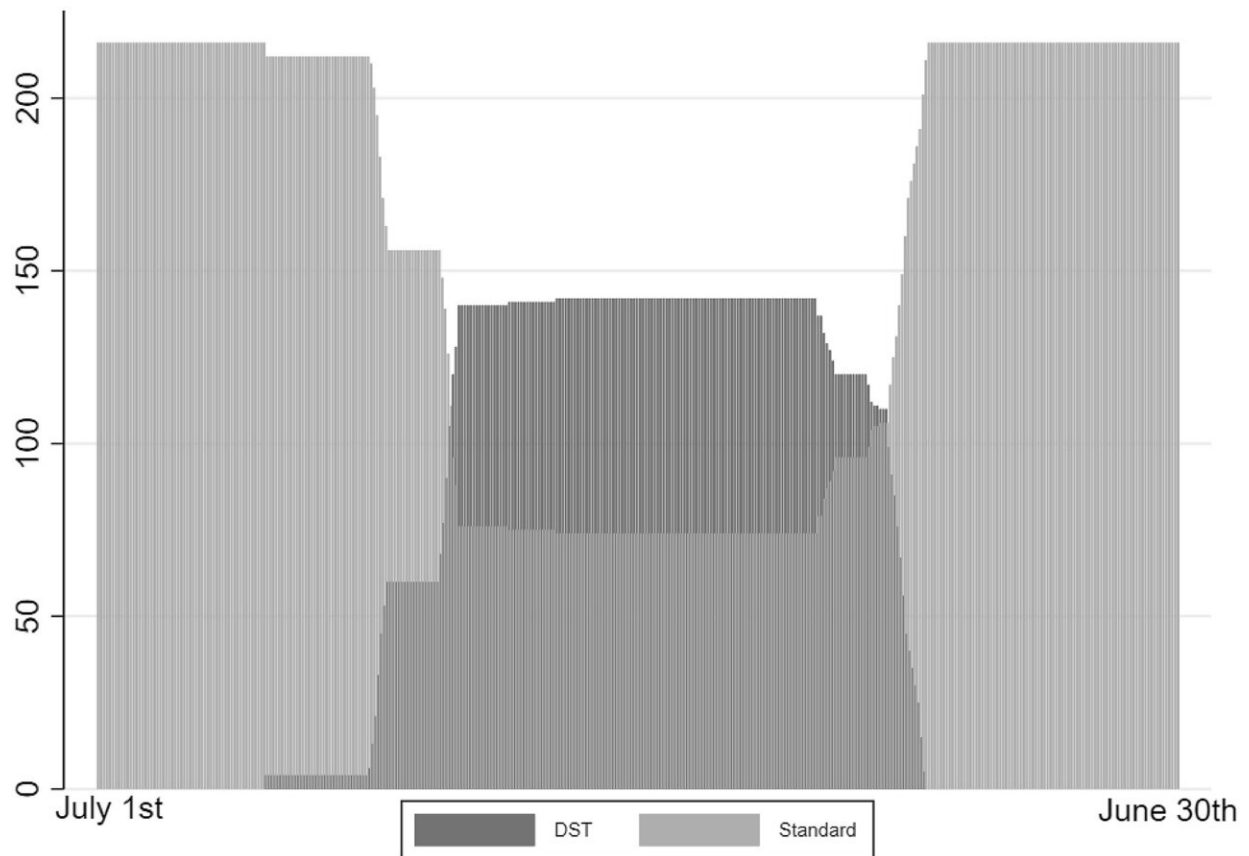


Pushing clocks back in Australia does not increase road traffic accidents, argues study

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Variation in DST coverage. Each bar represents the number of times that date falls under the particular time regime from 1989 to 2015. DST, daylight saving time. Credit: *Economic Inquiry* (2022). DOI: 10.1111/ecin.13130

This Sunday marks the end of 'Daylight Saving Time' (DST) in eastern

Australia as states revert to 'Standard Time' (ST) losing one hour of light at the end of the day.

It's an event many would like to see come to end, claiming that the bi-annual changing clocks ritual poses a [health hazard](#), increasing [road accidents](#) and hospitalizations.

Yet a new study from economists at the University of Bath (UK) argues there is no evidence for this claim. Instead, the researchers suggest, the transition between DST and ST merely spreads accidents at different points throughout the day—there is no overall net increase, even if collision risks are higher at night.

Drawing on extensive administrative data on road traffic collisions over 27 years (from January 1989 to December 2015), comprising over 40,000 fatal road collisions, the researcher tested effects of DST by comparing annual time changes and one-off events, for example when DST was extended for the Sydney Olympics.

This provided comparison data: some calendar days which were subject to DST and some which were not. Their study finds that that there was no effect of DST on fatal collisions across Australia, even though effects have been observed in other countries, including the UK and US.

Lead researcher, Dr. Jonathan James from Bath's Department of Economics, explains, "Many have argued that shifting an hour of daylight from the morning, when there are typically fewer collisions, to the evening, when [collision](#) risk is typically higher, could lead to an overall net reduction in road traffic collisions. However, our study suggests this would not be the case."

"DST does not only have an impact on light, it also has an impact on sleep. Australians do not sleep enough, and this could be impacting

accidents just at different points in the day."

"This study provides one piece of evidence that was missing in the case of the relative merits of implementing DST in Australia. Overall, the change in the clocks in Australia is not leading to an increase in road traffic collisions."

A recent report revealed that 29% of people report driving while drowsy at least once every month and that around one fifth have fallen asleep while driving. The transition to DST has been shown to lead to less sleep and poorer quality sleep too.

While the study does not find the overall number of collisions change, by using the precise time of the accident there is evidence that pattern of accidents changes over the day, with fewer accidents in the evening under DST but more in the earlier parts of the day.

Australia began using Daylight Saving Time (DST) during the first world war in 1916 and still has DST in some states today. Yet changing the clocks is controversial.

The European Union has recently set in motion plans to scrap DST and will allow member states to either move to permanent summertime or permanent wintertime. Similar bills have been put forward in Ireland and US that, if passed, would move the respective countries onto DST all year.

There have been referenda in Australian states to decide whether to keep DST. In 2008, the single-issue [political party](#)—Daylight Saving for South East Queensland was formed, and in 2016 this grew into the Daylight Saving Party.

Access the latest study 'Let there be light: Daylight saving time and road

traffic collisions' via the journal *Economic Inquiry*.

More information: Jonathan James, Let there be light: Daylight saving time and road traffic collisions, *Economic Inquiry* (2022). [DOI: 10.1111/ecin.13130](https://doi.org/10.1111/ecin.13130)

Provided by University of Bath

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