



SAVE STANDARD TIME

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2021 March 3

Education, Health, & Environmental Affairs Committee
Maryland State Senate
Annapolis, Maryland 21401

Re: SB-840—Oppose (Amend to Standard Time)

Dear Honorable Senators,

Please oppose SB-840 and recommend its amendment to permanent Standard Time. Its current form seeks permanent Daylight Saving Time (DST), which history and medicine show is more harmful than clock change. Only permanent Standard Time can improve viral immunity with better sleep, can protect school and work start times with morning sunlight, and is pre-approved by federal law.

Scores of organizations representing thousands of scientists/doctors and millions of teachers/parents oppose permanent DST and endorse permanent Standard Time. Among these are the Maryland Sleep Society, National PTA, National Safety Council, American Academy of Sleep Medicine, American College of Chest Physicians, American College of Occupational & Environmental Medicine, Start School Later, and Society for Research on Biological Rhythms.^{[AASM][CSC][ESRS][SRBR]}

Sleep is essential to viral immunity (including COVID),^{[Meira][Panda][Ray]} and for years the CDC has classified sleep deprivation as an epidemic.^[Jin] Springing clocks forward to DST acutely deprives sleep. Leaving clocks forward on DST chronically deprives sleep (at an estimated average of 19 minutes nightly). Artificial delay of sunrise by one hour (such as by DST) manifests as statistically significant increases in accidents, illnesses, diseases (certain cancers up 12–36%), and healthcare costs, and as statistically significant decreases in alertness, learning, productivity, and wages (down 3–5%). It's not just clock change that harms. Longitudinally correct Standard Time preserves morning sunlight, when human biology needs it most.^{[AASM][Borisenkov][CSC][Curtis][Gibson][Giuntella][Gu][Juda][Roenneberg][SRBR]}

The US Uniform Time Act of 1966 permits permanent Standard Time and forbids permanent DST. Scientific polling shows strong public support to end clock change, with slight preference for Standard Time.^[AP] History shows support for permanent DST reverses to opposition once its dark mornings are experienced.^{[BBC][Ripley][Yorkshire]}

Permanent DST would delay Maryland's sunrises to 8:39am, and past 8am for up to 3.4 months. It would undo the benefits of starting school later, and it would disrupt parents' work schedules.^{[Cell][Skeldon]} Standard Time keeps your sunrises before 8am, when most work and school starts,^{[CDC][Silver]} for healthier sleep, mood, alertness, immunity, and productivity.

Please oppose SB-840 until it is amended to permanent Standard Time—as is federally pre-approved and is best for health, safety, education, and economy.

Sincerely,



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Endorsements of Permanent Standard Time as the Better Year-Round Clock

The following parties reject permanent Daylight Saving Time and endorse permanent Standard Time as the better year-round clock. These are not implied to be endorsements of the Save Standard Time entity.

Organizations (non-comprehensive list)

National PTA
National Safety Council
American College of Chest Physicians
National School Boards Association
B-Society
American Academy of Dental Sleep Medicine
European Sleep Research Society
Agudath Israel of America
Society of Anesthesia & Sleep Medicine
German Teachers' Association
French Society for Sleep Research & Medicine
National Commission for the Rationalization of Spanish Hours
California Islamic University
Society for Light Treatment & Biological Rhythms
Rabbinical Council of California
Agudath Israel of California
Northwest Noggin Neuroscience
California Sleep Society
Michigan Academy of Sleep Medicine
Ohio Bicycle Federation
Wisconsin Sleep Society
Canadian Society for Chronobiology
Southern Sleep Society
Normal Time All the Time
German Society for Time Policy
Missouri Sleep Society
Solaris Fatigue Management
Sleep Medicine Association Netherlands
Chronobiology Lab Groningen
Better Times Platform
Barcelona Time Use Initiative for a Healthy Society
National Education Association
American Academy of Sleep Medicine
American Federation of Teachers
American College of Occupational & Environmental Medicine
Start School Later
Rabbinical Council of America
Society for Research on Biological Rhythms
Florida PTA
World Sleep Society
European Biological Rhythms Society
Society of Behavioral Sleep Medicine
American Academy of Cardiovascular Sleep Medicine
Agudath Israel of Florida
Francophone Chronobiology Society
Association of Canadian Ergonomists
Good Light Group
Agudath Israel of Chicago
Daylight Academy
Kentucky Sleep Society
Maryland Sleep Society
Australasian Chronobiology Society
Cuyahoga Astronomical Association
Adath Israel San Francisco
Tennessee Sleep Society
Curtis Clock Lab
Capitol Neurology
Stephens Memorial Observatory
Dutch Society for Sleep-Wake Research
Dakotas Sleep Society
Abolish Time Change!

Individuals (non-comprehensive list)

Raúl Aguilar-Roblero MD PhD, Laboratory on Circadian Rhythmicity, Institute of Cellular Physiology, Mexico
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Elizabeth B Klerman MD PhD, Associate Professor, Harvard Medical School, Boston, Massachusetts
Michael T Lam MD PhD, San Diego, California
Michael McCarthy MD PhD, Center for Circadian Biology, University of California, San Diego
Thomas E Nordahl MD PhD, Professor Emeritus, University of California, Davis
David K Welsh MD PhD, Professor Emeritus, University of California, San Diego
Amir Zarrinpar MD PhD, Assistant Professor, San Diego, California
Salman Ahsan PhD, San Jose, California
Shimon Amir PhD, Professor, Concordia University, Montreal, Quebec
Sonia Ancoli Israel PhD, Professor Emeritus, University of California, San Diego

Michael Antle PhD, Professor, Hotchkiss Brain Institute & University of Calgary, Alberta
Susanna Barry PhD, College Mental Health Counselor & Sleep Coach, Cambridge, Massachusetts
William Bechtel PhD, Distinguished Professor, University of California, San Diego
Mikhail Borisenkov PhD, Institute of Physiology, Komi Science Centre, Russian Academy of Sciences
Joseph Boyd PhD, Research Scientist, MilliporeSigma, Temecula, California
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Scott Cookson PhD, Quantitative BioSciences, San Diego, California
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Achim Kramer PhD, Professor of Chronobiology, Charité – Universitätsmedizin Berlin, Germany
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Katja Lamia PhD, Associate Professor of Molecular Medicine, Center for Circadian Biology, UC San Diego
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Peter Mansbach PhD, Bethesda, Maryland
Erik Maronde PhD, Scientist, Frankfurt, Germany
Girish Melkani MS PhD, Associated Research Professor, San Diego, California
Martha Meroow PhD, Professor of Chronobiology, Ludwig Maximilian University of Munich, Germany
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Linda Petzold PhD, Professor, University of California, Santa Barbara
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Kendall Satterfield PhD, San Diego, California
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Roger Tseng PhD, Biological Scientist, USDA, Ames, Iowa
Judy Village PhD CCCPE, President, Association of Canadian Ergonomists, British Columbia
Daniel S Whittaker PhD, Los Angeles, California
Anna Wirz-Justice PhD, Professor Emeritus, Centre for Chronobiology, University of Basel, Switzerland
Irving Zucker PhD, University of California, Berkeley
Mariah Baughn MD, San Diego, California
Richard E Cytowic MD, Washington, DC
Mona Ezzat MD, San Diego, California
John F Gottlieb MD, Clinical Assistant Professor of Psychiatry & Behavioral Sciences, Chicago, Illinois
Royan Kamyar MD, Physician, La Mesa, California
Jack Kruse DMD MD, Neurosurgeon, New Orleans, Louisiana
Beth Malow MD MS, Medical Doctor & Researcher, Brentwood, Tennessee
Tessa Sugarbaker MD MFT, San Francisco, California
Nathaniel F Watson MD MSc, Bainbridge Island, Washington
Dr Archana G Chavan, University of California, Merced
Dr Chelsea Gustafson, Assistant Professor, Portland, Oregon
Dr Paul Kelley, Milton Keynes, United Kingdom
Dr Irving Lebovics, Los Angeles, California
Prof Stacey Harmer, University of California, Davis
Betty C Jung MPH RN MCHES, New Haven, Connecticut
Fabian Mohedano, President of Catalan Council for Vocational Training, Former Member of Parliament

Oppose SB-840 (Permanent DST) Amend to Permanent Standard Time For Health, Safety, Learning, & Productivity

"Permanent, year-round Standard Time is the best choice to most closely match our circadian sleep-wake cycle.

Daylight Saving Time results in more darkness in the morning and more light in the evening, disrupting the body's natural rhythm."

Muhammad Adeel Rishi MD
Mayo Clinic & American Academy of Sleep Medicine

<https://aasm.org/american-academy-of-sleep-medicine-calls-for-elimination-of-daylight-saving-time/>

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"The human circadian system does not adjust to Daylight Saving Time.

Sleep becomes disrupted, less efficient, and shortened. Permanent Standard Time is the healthier, more natural choice."

Nathaniel F Watson MD MSc
Neurology Professor, University of Washington, Seattle

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6557642/>

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Most work/school starts at 8am.

How would you rather start your day half the year?



Permanent Standard Time is the safest, healthiest, quickest end to clock change.

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8:03am average school start in the US. CDC, US ED, SASS, 2015. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>
7:55am median work arrival in the US. 538, ACS, USCB, 2014. <https://livethirtyeight.com/features/which-cities-sleep-in-and-which-get-to-work-early/>

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7:55am median work arrival in the US. 538, ACS, USCB, 2014. <https://livethirtyeight.com/features/which-cities-sleep-in-and-which-get-to-work-early/>

"Cancer rates significantly increase when sunrise is later.

"Permanent DST would make sunrise later, while permanent Standard Time would make sunrise closer to body time."

Nicolas Cermakian PhD
President, Canadian Society for Chronobiology

<https://www.theglobeandmail.com/opinion/article-turn-back-the-clock-on-daylight-savings-why-standard-time-all-year/>

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"National PTA is opposed to Daylight Saving Time during the winter months because of the safety factor."

Heidi May Wilson
Spokesperson for the National Parent Teacher Association

<https://www.washingtonpost.com/science/2019/03/08/springing-forward-daylight-saving-time-is-obsolete-confusing-unhealthy-critics-say/>

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SENATE BILL 840 – SUGGESTED AMENDMENT

By: **Senator Ready**

Introduced and read first time: February 9, 2021

Assigned to: Education, Health, and Environmental Affairs

A BILL ENTITLED

AN ACT concerning

General Provisions – Standard Time – Exemption from Daylight Saving Time

FOR the purpose of exempting the State from Daylight Saving Time; making this Act subject to a certain contingency; and generally relating to the State standard time.

BY repealing and reenacting, with amendments,

Article – General Provisions

Section 1–301

Annotated Code of Maryland

(2019 Replacement Volume and 2020 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
That the Laws of Maryland read as follows:

Article – General Provisions

1–301.

(a) The standard time in the State shall be that of the 75th meridian of longitude west from Greenwich.

(b) The standard time described under subsection (a) of this section shall regulate all courts, banking institutions, public offices, and legal or official proceedings.

(c) The State shall be exempt from the advancement of time as provided by 15 U.S.C. § 260a.

SECTION 2. AND BE IT FURTHER ENACTED, That:

(a) Section 1 of this Act is contingent on enacting of a similar act by all of the states, including the District of Columbia, whose geographic boundaries are completely within the eastern time zone.

SECTION 3. AND BE IT FURTHER ENACTED, That, except as provided in Section 2 of this Act, this Act shall take effect December 1, 2021.