MASSACHUSETTS MEDICAL SOCIETY
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TESTIMONY IN SUPPORT OF H.3103
AN ACT ESTABLISHING PERMANENT STANDARD TIME WITHIN THE COMMONWEALTH TO PROMOTE SLEEP AND HEALTH
BEFORE THE COMMITTEE ON STATE ADMINISTRATION AND REGULATORY OVERSIGHT
OCTOBER 24, 2023

The Massachusetts Medical Society (MMS) wishes to be recorded in support of H.3103, *An Act establishing permanent standard time within the Commonwealth to promote sleep and health*.

The MMS is a professional association of over 25,000 physicians, residents, and medical students across all clinical disciplines, organizations, and practice settings. The Medical Society is committed to advocating on behalf of patients for a better health care system, and on behalf of physicians, to help them to provide the best care possible. The Medical Society has policy in support of establishing permanent Standard Time at the state and federal level and opposes seasonal clock change and permanent Daylight Saving Time (DST). As such, the MMS supports H.3101, which would allow Massachusetts to adopt permanent Standard Time, linking its implementation to the passage of similar legislation in four other New England states. Eliminating seasonal time change and adopting permanent Standard Time will enhance overall health and safety for all the Commonwealth's residents.

Research indicates that standard time, which shifts daylight hours earlier in the morning, aligns best with human circadian biology. External cues, including light, trigger the release of hormones alerting the body to wake up and feel tired. When we receive more light in the morning and darkness in the evening, our bodies and nature are better aligned, making it easier for us to wake up for our daily routine and easier to fall asleep at night. Therefore, experiencing the daily cycle of natural light and darkness is the most critical timing cue to synchronize our body's internal clock. Conversely, data show that the sudden change from standard time to DST in March is associated with significant public health and safety risks, including an increased risk of stroke and hospital admissions, and increased production of inflammatory

860 WINTER STREET, WALTHAM, MA 02451-1411
TEL (781) 893-4610 TOLL-FREE (800) 322-2303 FAX (781) 893-8009 WWW.MASSMED.ORG

markers, one of the body's responses to stress.[1][2] Additional risks include increased medical errors, cardiovascular events, and mood disturbances.[3][4][5] One study found a reduction in the rate of cardiovascular events during standard time in particular, suggesting that the chronic effects of DST may lead to a higher risk of adverse health problems when compared with standard time.[6] Some studies suggest that the human body does not adjust to daylight saving time even after a few months. Daylight saving time disrupts our internal clock, leading to sleep loss and poor sleep quality, which is shown to lead to negative health consequences. The spring change to daylight saving time is especially hard on high school students. One study shows that teens lost an average of 32 minutes of sleep per night after the change to daylight saving time, for a total of 2 hours and 42 minutes of lost sleep during the week. During school days after the time change, students also were sleepier, had slower reaction times, and had a hard time paying attention.[7] In addition to health benefits, H.31013 would promote safety by ensuring more light in the morning. Due to our northern latitude, dawn comes particularly late in Massachusetts during DST. For morning commuters and children going to school, dark mornings pose safety concerns. Notably, numerous studies demonstrate that the spring DST transition acutely increases motor vehicle accident risk, attributed in part to sleep deprivation and circadian misalignment.[8]

Standard time promotes restful sleep, which improves cognition, cardiovascular health, public safety, and overall well-being. For these reasons, the Medical Society respectfully urges a favorable report on H.3103. Thank you for your consideration.

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[4] Gianni. (2018, May 23). Daylight saving time and myocardial infraction: Should we be worried? A review of the evidence. European Review. https://www.europeanreview.org/article/14306.

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[7] Adverse effects of Daylight Saving Time on adolescents' sleep and ... (n.d.-b). https://jcsm.aasm.org/doi/abs/10.5664/jcsm.4938

[8] A chronological evaluation of the acute effects of Daylight Saving Time on Traffic Accident Risk. *Cell Press: Current Biology*. https://www.cell.com/current-biology/fulltext/S0960-9822(19)31678-1