

POSITION STATEMENT IN SUPPORT

LD 396, An Act to Provide for a Later Starting Time for High Schools Presented to Maine's Joint Standing Education and Cultural Affairs

As the state's largest grassroots mental health advocacy organization, NAMI Maine supports the passage of *An Act to Provide for a Later Starting Time for High Schools*. There has been significant growth in the research regarding the increase in young people struggling with mental health challenges while also having increased research on the importance of sleep in promoting positive mental health.

Research has found that sleep patterns are not simply a behavioral outcome but result in changes in circadian sleep cycles that alter during adolescence, resulting in biological releases of necessary sleep chemicals in the early morning. 1 While the average adult experiences the release of melatonin and other chemicals at approximately 10 p.m., adolescents experience it on average around 1 a.m. Due to the changes in the circadian rhythm during this time, young people will lose, on average, 90 minutes of sleep each school night. Chronic sleep deprivation has been linked to the body's inability to produce critical chemicals such as dopamine and serotonin, which results in symptoms of depression and anxiety, among other vital physical and mental health functions.² Additional research shows that students at schools with later start times were significantly more likely to get 8+ hours of sleep than their peers at schools with earlier start times. This longer sleep duration has a direct correlation with improved mental health. For instance, following a 30-minute delay in start times, students reported longer sleep and lower levels of depressive symptoms. In fact, depressive symptoms were inversely correlated with sleep duration, further solidifying the connection between sleep and mental health. The importance of adequate sleep extends beyond mental health into risk factors for more severe outcomes. This research also showed that students at schools with earlier start times have higher odds of engaging in suicidal behavior, reporting that students in schools with start times before 8:30 a.m. were 10-11% more likely to attempt suicide compared to those in schools with later start times. 3

NAMI Maine continues to support youth, schools, and communities in the horrific aftermath of suicide deaths, as suicide is now the second leading cause of death in Maine for young people. As we strive to promote the wellness and safety of our young people, we urge this committee to review the research supporting the need to provide later start times for high schools as a means of promoting positive mental health and suicide prevention.

ABOUT NAMI MAINE: Incorporated in 1984, the National Alliance on Mental Illness, Maine Chapter (NAMI Maine) is the state's largest grassroots mental health organization. With support from national and regional affiliates, the agency is dedicated to building better lives for everyone impacted by behavioral health concerns. NAMI Maine engages with leaders and community partners at all levels to improve the state's mental health system through collaboration and education.

¹ Tarokh, L., Saletin, J. M., & Carskadon, M. A. (2016). Sleep in adolescence: Physiology, cognition and mental health. *Neuroscience & Biobehavioral Reviews*, 70(1), 182–188. https://doi.org/10.1016/j.neubiorev.2016.08.008

² Vandergriendt, C. (2018, December 5). What's the Difference Between Dopamine and Serotonin? Healthline; Healthline Media. https://www.healthline.com/health/dopamine-vs-serotonin#sleep

³ Neuroth, L. M., Ma, M., Brooks-Russell, A., & Zhu, M. (2021). The Relationship of School Start Times, Sleep Duration and Mental Health among a Representative Sample of High School Students in Colorado, 2019. International journal of environmental research and public health, 18(11), 5708. https://doi.org/10.3390/ijerph18115708