

# Asleep on Capitol Hill: Telebills, the Golden Hour, and 100 Senators Who Almost Got it Right

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# Accreditation Statement

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The American Academy of Sleep Medicine and the Sleep Professionals of Arkansas & Washington Regional Center for Sleep Disorders. The American Academy of Sleep Medicine is accredited by the ACCME to provide continuing medical education for physicians.

# Disclosures

Michael E. Yurcheshen, MD has no relevant financial relationships with ineligible companies to disclose.

# Objectives

- Appreciate that governmental policy has medical impact
- Understand how telemedicine has impact on access and health care costs, and policy implications
- Understand some health impacts of Daylight Saving Time, and the legislative path to universal Standard Time in the United States

# Policy Has Clinical Impact

QUICK GLANCE STATS		
Apnea/Hypopnea Index (3% scoring criteria): 15.1/hr	Apnea/Hypopnea Index (4% scoring criteria): 3.9/hr	Max Respiratory Event Duration 60.5 sec
Central AHI (3%) 1.06/hr	REM AHI (3%) /hr	Low SpO2 88 %
Sleep Efficiency 85.5%	Sleep Latency 7.4 min.	Arousal Index 20.9 /hr

# Telemedicine Background

- Telemedicine? Alexander Graham Bell in 1876, reportedly used the first telephone as a means of getting help from his assistant Mr. Watson after he spilt acid on his trousers
- Some regular use in the 2010's, depending on location
- With the SARS-CoV-2 pandemic, the age of widespread telemedicine is at hand
- Over 1200% increase in month over month telemedicine use in April, 2020 across all disciplines(1)

1) Whaley CM, Pera MF, Cantor J, et al. Changes in Health Services Use Among Commercially Insured US Populations During the COVID-19 Pandemic. JAMA Netw Open 2020;3(11):e2024984. DOI: 10.1001/jamanetworkopen.2020.24984.

# Telesleep – A Study in Contrasts?



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# VA Telesleep Checks the Boxes

- VA feasibility study-no difference in PAP adherence, functional outcomes, satisfaction, dropout rates (1)

1) Fields B, Behari P, McCloskey S, True G, Richardson D, Thomasson A, et al. Remote Ambulatory Management of Veterans with Obstructive Sleep Apnea. *Sleep*. 2016;39:501-509.



# Tele-IRR Similar to In-person

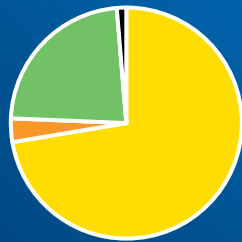
Study	Kappa for Pretest Probability of OSA	Notes
Yurcheshen et al, 2021	0.414	No interview template; In-person to telemedicine rater
Taylor et al, 2018	0.73	Interview template; VA population; In-person raters
Merikangas et al, 2014	0.38	Interview template; Secondary outcome; In-person raters

- 1) Taylor DJ, Wilkerson AK, Pruiksma KE, et al. Reliability of the Structured Clinical Interview for DSM-5 Sleep Disorders Module. *J Clin Sleep Med*. 2018;14(3):459–464.
- 2) Merikangas KR, Zhang J, Emsellem H, et al. The structured diagnostic interview for sleep patterns and disorders: rationale and initial evaluation. *Sleep Med*. 2014;15(5):530–535.

# Pre-2020 Sleep Telehealth-The Patient View

n=67

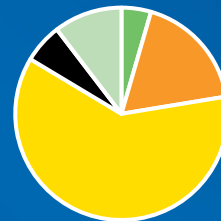
### % Easier



- Easier
- Not Easier
- Not Sure
- No Answer

GOOD

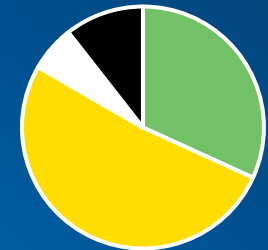
### % Interested



- Not Interested
- Free
- <= Copay
- > Copay
- No answer

CHEAP

### % Repeat



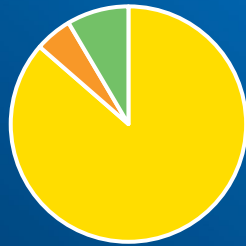
- Wouldn't Mind
- < 4 Weeks
- < 4 Weeks + Copay
- No Answer

FAST

# Post-2020 Sleep Telehealth

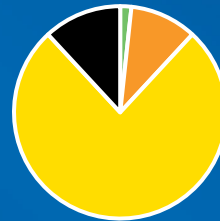
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## % Easier



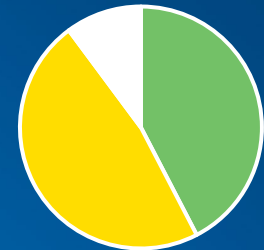
- Easier
- Not Easier
- Not Sure

## % Interested



- Not Interested
- Free
- <= Copay
- > Copay

## % Repeat



- Wouldn't Mind
- <4 Weeks
- <4 Weeks+ Copay

# Telepolicy-Pre-2020 Barriers

- Patients had to reside in federally-designated rural areas
- Patients could only receive telehealth services at a medical facility
- Two-way audio-video telecommunications equipment had to be used
- A limited number of services were on the Medicare Telehealth List, further complicated by local coverage determination (LCD) policies
- Lower reimbursements at facility rates rather than in-office payment rates

# Telemedicine-Private Pay Parity

- Private payers offered telehealth, often through their own platforms. Payer parity was not guaranteed

# Telecare Bills Stalled in Committee

- **H.R. 1843 Telehealth Expansion Act of 2023**
  - 32 Cosponsors, last joining in June 2023
- **S.2016 – Connect for Health Act of 2023**
  - 61 Cosponsors, last joining in November 2023
- **H.R. 824 Telehealth Benefit Expansion for Workers Act of 2023**
  - 10 Cosponsors, last joining in October, 2023
- **Congressional Budget Office has not rendered a cost estimate**

# Telelobby Has Impact

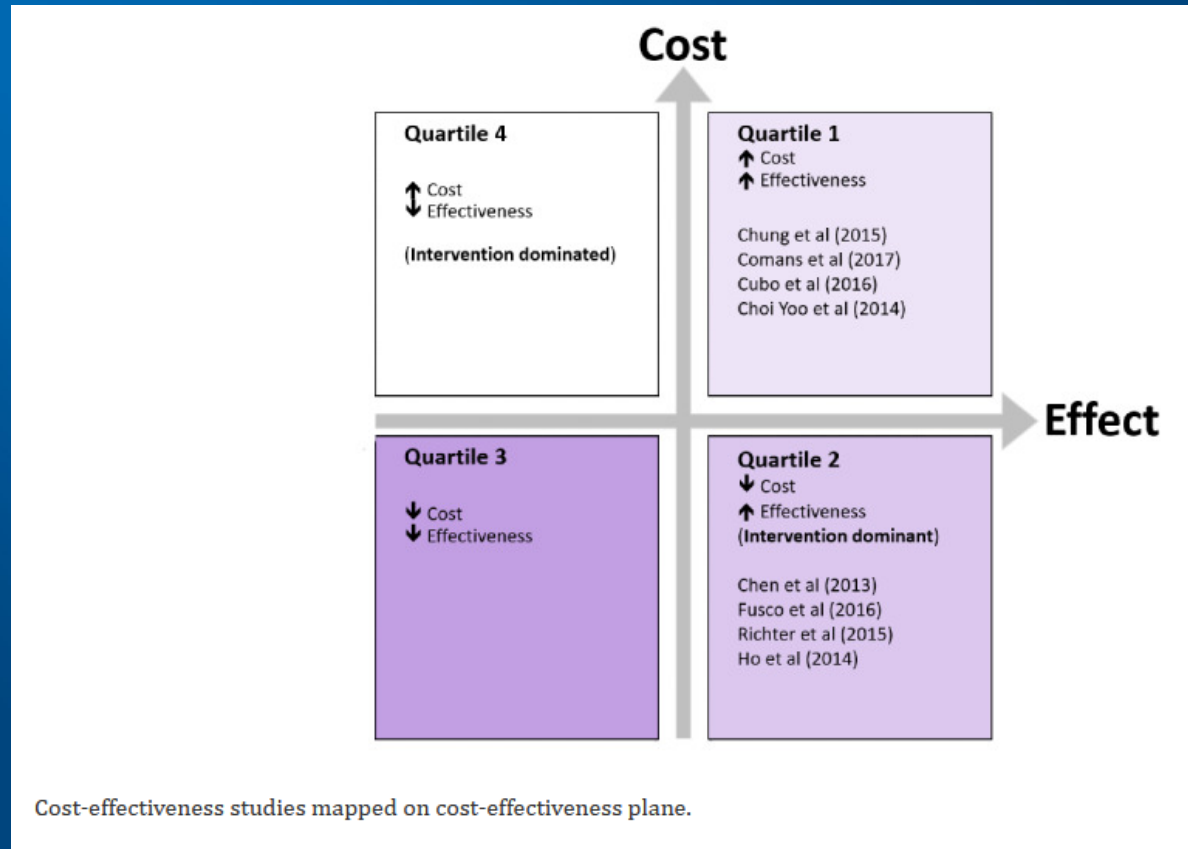
- Letter sent to Congressional leadership 1/31/2022 with 336 signatory organizations for permanent telehealth reform (including American Telemedicine Association and AMA, but not the AASM)
- Letter sent to Congressional leadership 1/31/2022 written by 45 Senators to make temporary provisions more permanent

# Improving Access?

- **Systematic review: Improving Access to Care: Telemedicine Across Medical Domains**
- **Literature review of telemedicine in underserved and/or remote populations for stroke, congestive heart failure, diabetes, pregnancy**
- **Some promising signals, but largely unstudied**



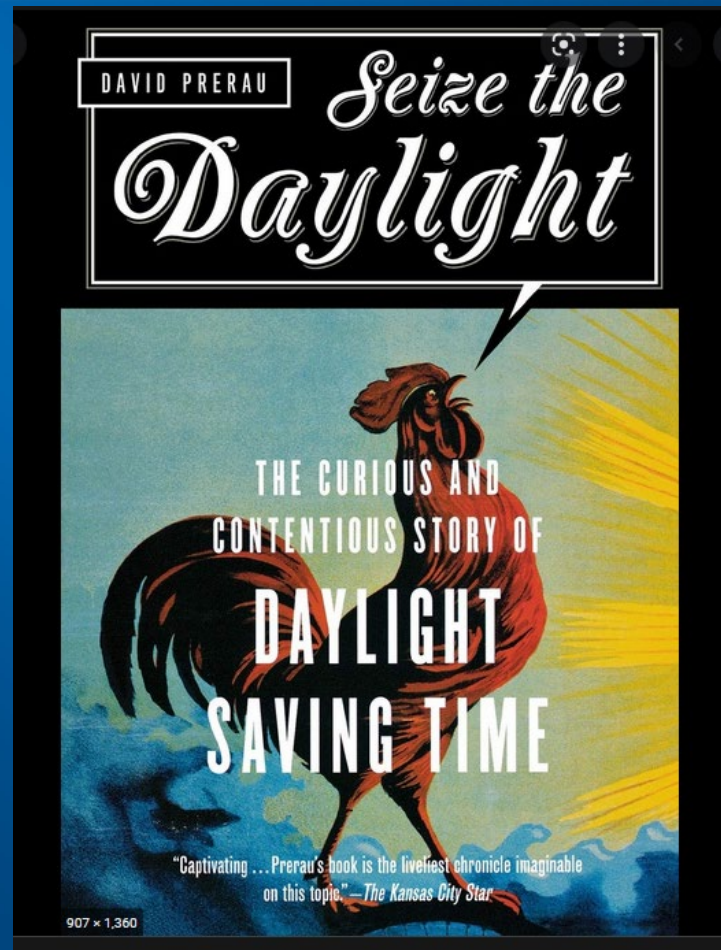
# Cost Effective?



# Legislative Prediction

- Will continue short term approval
- Rolled into bigger or omnibus bill
- Voted as part of a stimulus package
- Will probably enjoy some bipartisan support, with a few legislators being unaware of it

# Seize the Daylight



# Sunshine Protection Act-2022

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Legislation Examples: hr5, sres9, "health care" MORE OPTIONS

Home > Legislation > 117th Congress > S.623 Citation

## S.623 - Sunshine Protection Act of 2021

117th Congress (2021-2022) | [Get alerts](#)

**BILL** Hide Overview

Sponsor: [Sen. Rubio, Marco \(R-FL\)](#) (Introduced 03/09/2021)

Committees: Senate - Commerce, Science, and Transportation

Latest Action: House - 03/16/2022 Held at the desk. ([All Actions](#))

Tracker: **Introduced** → **Passed Senate** → Passed House → To President → Became Law

Summary (2) Text (2) Actions (9) Titles (3) Amendments (1) Cosponsors (18) Committees (1) Related Bills (1)

### Summary: S.623 — 117th Congress (2021-2022)

[Listen to this page](#)

There are 2 summaries for S.623. Passed Senate (03/15/2022) [Bill summaries](#) are authored by [CRS](#).

Shown Here:  
Passed Senate (03/15/2022)  
Sunshine Protection Act of 2021

# Many Sunshine Acts

- Physician Payments Sunshine Act
- Sunshine Forever Act-solar energy
- Sunshine in Product Safety Act
- Sunshine for Regulatory Decrees and Settlements Act
- Others

# How did this happen?

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- Unanimous Consent

# Time-Shift Background

- 1784 Benjamin Franklin estimated that Parisians would save 96 million livres in candles by getting up at sunrise
- Sir Arthur Conan Doyle “It seems very strange that in the course of the world’s history so obvious an improvement should never have been adopted”
- Prior to the mid-1800’s, there were many “local times”, but the railroads made standardization a priority
- Introduced in Parliament in 1908
- Opponents even then-transportation, science, farmers
- First passed in 1918 as part of the war effort, then inconsistently across localities, and again in 1941



# Nature

A WEEKLY

ILLUSTRATED JOURNAL OF SCIENCE

VOLUME LXXVIII

MAY to OCTOBER, 1908

## *THE DAYLIGHT SAVING BILL.*

**I**F anyone is in search of an object-lesson in the necessity for the introduction of some science into general education he will do well to give his attention to the proceedings in connection with the Daylight Saving Bill. He will probably find therein so much confusion of thought that he will feel some training in clear thinking to be imperatively demanded, though there is an off chance that he will be depressed beyond recovery by the contemplation of the report of the Select Committee on the bill which appeared in the newspapers on July 3.

To begin with the original short title—the Daylight Saving Bill—it will be conceded that no action of Parliament will produce any effect upon daylight. One may save gas or electric-light, and make more use of daylight, but to talk of “saving daylight” is metaphor intelligible enough for ordinary purposes, but not suitable for legislation. When a legislative act begins with metaphor it is not matter for wonder if it eventuates in allegory, and sooner or later that must be the end of the bill.

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# Nature

A WEEKLY

ILLUSTRATED JOURNAL OF SCIENCE

VOLUME LXXXVI

MARCH to JUNE, 1911

Next, where does happiness come in if on a cold spring morning you have to get up one hour earlier? What will the wife and children say to the arrangement? Turning out too soon on frosty mornings, groping about at 4 a.m., to find a box of matches to light the fire, may give rise to domestic irritation, bronchial catarrhs, and other illnesses. Thousands upon thousands of workmen in the north of England, to be at work at 6 a.m., when it is really 5 a.m., will have to disturb their households at the time specified. At the commencement of April a man will get up in the dark, walk to his factory in the dark, and commence work by artificial light. Whatever light and fuel has been saved on the previous evening in the house or workshop will be spent in the dark hours of the early morning. For about six months, or 182 days, which I believe is the period over which the new-fangled time is to extend, men will frequently have to rise before the sun; nature will be asleep, but he must be awake and run counter to Divine intentions. As matters now stand during this period workmen get up on 127 days *after* sunrise. The new Bill will reduce the number of these occasions to 52. He will have been robbed of his morning daylight, and have 75 extra days of morning darkness.

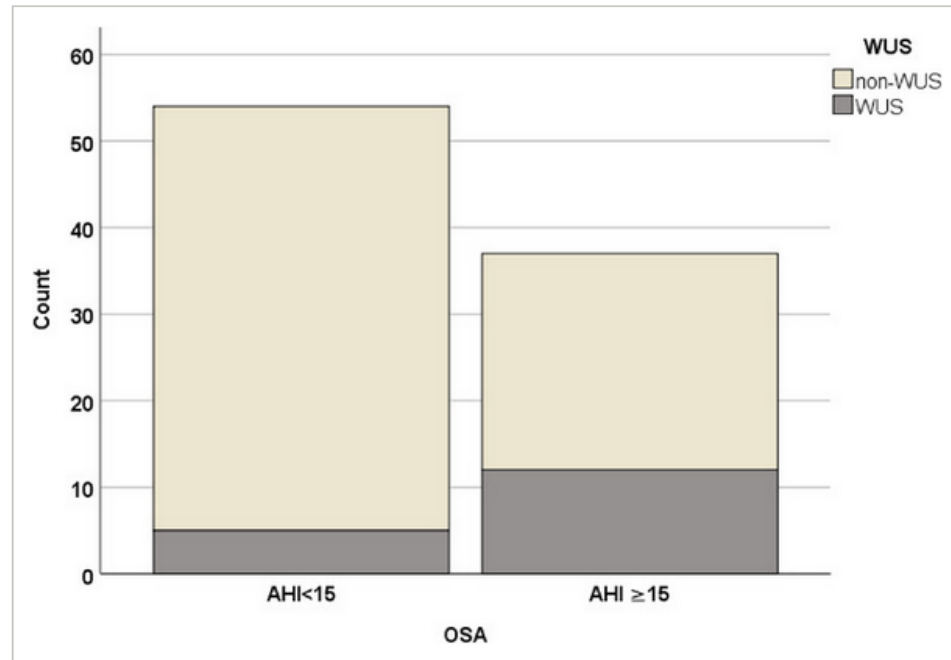
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The Watch on the Line—By Hungerford



# The Clock and Medical Events



**FIGURE 2**

[Open in figure viewer](#) | [PowerPoint](#)

Number of non-wake-up stroke and wake-up stroke patients in obstructive sleep apnea groups (AHI < 15/h and AHI ≥ 15/h)

1) Haula TM, Puustinen J, Takala M, Holm A. Wake-up strokes are linked to obstructive sleep apnea and worse early functional outcome. Brain Behav. 2021 Aug;11(8):e2284. doi: 10.1002/brb3.2284. Epub 2021 Jul 21. PMID: 34291603; PMCID: PMC8413798.

# DST Has Medical Consequences

- Acute loss of sleep (1 hour), transitioning into DST and no more going back to ST
- Transition to DST increases excess mortality for circulatory and total mortality rates for about a week
- Increase in mean atrial fibrillation admissions for first week after DST (but not for ST transition) (2)

1) Stražišar BG, Stražišar L. Daylight Saving Time: Pros and Cons. *Sleep Med Clin.* 2021 Sep;16(3):523-531. doi: 10.1016/j.jsmc.2021.05.007. Epub 2021 Jul 2. PMID: 34325828.

2) Chudow J.J., Dreyfus I., Zaremski L., et. al.: Changes in atrial fibrillation admission following daylight saving time transitions. *Sleep Med* 2020; 69: pp. 155-158.

# DST Has Medical Consequences

- Accident/injury data mixed, but some show higher rates acutely
- Some studies show fewer accidents involving pedestrians and cyclists throughout the summer
- Mental health data mixed, although depression and suicide rates are higher after transition to ST

# ST Lobby-House Hearings

- “Changing clocks from Standard Time to DST is different than flying . . . because in flying from one time zone to another, we are changing our clocks AND our environment”
- “How does that morning dark and evening light affect us? We need light in the morning to help us awaken and be fully alert. While the exact mechanisms of this alerting response of light are not yet known. . .”

Beth Malow, Professor, Vanderbilt University

[https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Updated%20Witness%20Testimony\\_Malow\\_CPC\\_2022.03.09.pdf](https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Updated%20Witness%20Testimony_Malow_CPC_2022.03.09.pdf)



# DST Lobby-House Hearings

- “Our industry has consistently found that commerce increases when the nation moves to daylight saving time. When the clocks change in the spring, people feel as though they have more time after work to engage in a range of activities that increase commerce from eating out to shopping to participating”
- “The golf industry is one specific example. That industry estimated as early as the 1980s that an additional month of daylight saving time would mean hundreds of millions of dollars in revenue to the industry”

# Standard vs. Daylight Saving Time

- The American Academy of Sleep Medicine applauds the Senate for passing a bill to establish a national, fixed, year-round time in the U.S. . . . However, the AASM cautions that making daylight saving time permanent overlooks potential health risks that can be avoided by establishing permanent standard time



# 1974

- December 14, 1973 Congress approved permanent DST, and Nixon signed the next day
- A number of high profile pre-dawn, pre-school accidents across the country made headlines, although data were mixed
- Drop in public sentiment from 79% to 42%, so the measure was changed back by October

# States Abolished Clock Shifting

- Hawaii-1967 (permanent ST)
- Arizona-1968 (permanent ST)
- Indiana-DST “optional” pre-2006
- 15 other states have passed laws to go to permanent DST, but require federal legislation to go into effect

# Sunrise, Sunset . . .

## Michigan UP

Date	Sunrise	Sunset	Daylength
01/01/2022	08:33:26 AM	05:13:44 PM	8h 40m 18s
02/01/2022	08:11:51 AM	05:54:39 PM	9h 42m 48s
03/01/2022	07:26:58 AM	06:36:26 PM	11h 9m 28s
04/01/2022	07:27:01 AM	08:19:20 PM	12h 52m 19s
05/01/2022	06:33:28 AM	08:59:40 PM	14h 26m 12s
06/01/2022	05:59:34 AM	09:35:34 PM	15h 36m 0s
07/01/2022	06:01:05 AM	09:46:12 PM	15h 45m 7s
07/23/2022	06:21:01 AM	09:31:13 PM	15h 10m 12s
07/24/2022	06:22:09 AM	09:30:06 PM	15h 7m 57s
08/01/2022	06:31:36 AM	09:20:08 PM	14h 48m 32s
09/01/2022	07:10:49 AM	08:27:46 PM	13h 16m 57s
10/01/2022	07:49:24 AM	07:28:29 PM	11h 39m 5s
11/01/2022	08:32:34 AM	06:33:42 PM	10h 1m 8s
12/01/2022	08:13:54 AM	05:04:00 PM	8h 50m 6s

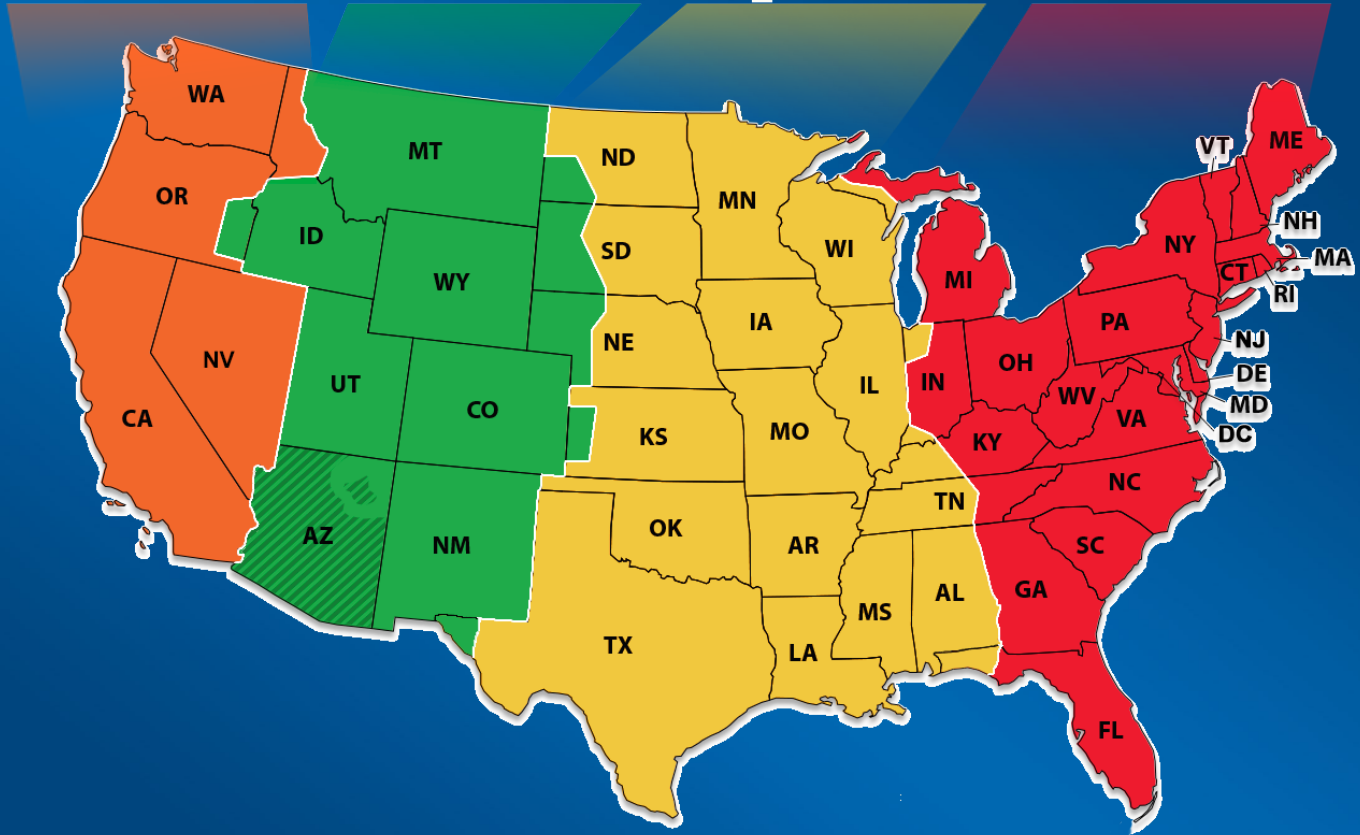
## Little Rock, AR

Date	Sunrise	Sunset	Daylength
01/01/2024	07:16:16 AM	05:09:07 PM	9h 52m 51s
02/01/2024	07:06:40 AM	05:38:21 PM	10h 31m 41s
02/06/2024	07:02:34 AM	05:43:22 PM	10h 40m 48s
02/07/2024	07:01:40 AM	05:44:21 PM	10h 42m 41s
03/01/2024	06:35:59 AM	06:05:49 PM	11h 29m 50s
04/01/2024	06:53:38 AM	07:31:00 PM	12h 37m 22s
05/01/2024	06:16:46 AM	07:54:53 PM	13h 38m 7s
06/01/2024	05:56:15 AM	08:17:42 PM	14h 21m 27s
07/01/2024	05:59:57 AM	08:26:11 PM	14h 26m 14s
08/01/2024	06:19:58 AM	08:10:19 PM	13h 50m 21s
09/01/2024	06:42:53 AM	07:33:58 PM	12h 51m 5s
10/01/2024	07:04:40 AM	06:51:29 PM	11h 46m 49s
11/01/2024	07:30:53 AM	06:14:01 PM	10h 43m 8s
12/01/2024	06:59:09 AM	04:57:48 PM	9h 58m 39s

- 1) [https://sunrise.maplogs.com/upper\\_peninsula\\_of\\_michigan\\_mi\\_usa.233627.html](https://sunrise.maplogs.com/upper_peninsula_of_michigan_mi_usa.233627.html). Accessed 7/24/22
- 2) [https://sunrise.maplogs.com/georgia\\_usa.1038.html](https://sunrise.maplogs.com/georgia_usa.1038.html). Accessed 2/6/24



# Time Zone Susceptibility



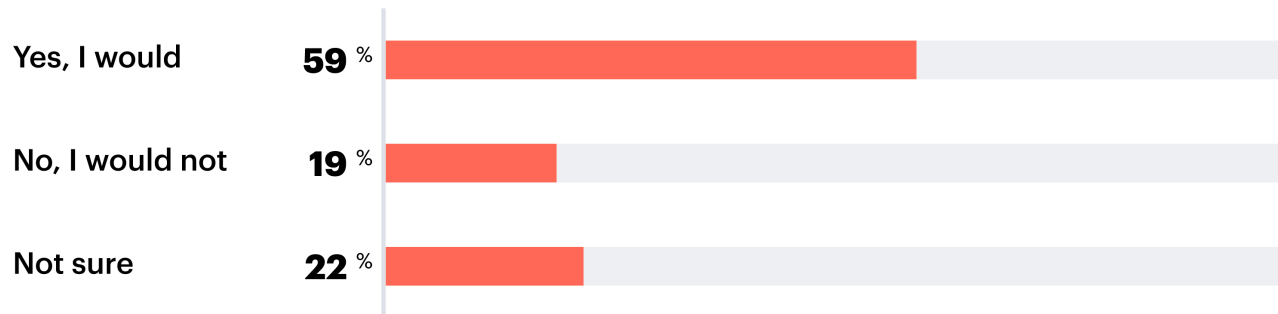
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# US Reaction

## Would you like to see Daylight Saving Time made permanent?

All adults (2234 US adults - Mar 16, 2022)



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# Senate Reaction

- Kyrsten Sinema-”I was surprised that someone didn’t object”
- Tom Cotton: “No comment”

# House Reaction

- “More than four months after the Senate unanimously passed a bill to make daylight saving time permanent in the U.S., the measure has hit a brick wall in the House”
- “The main impediments . . . appear to be fundamental disagreements over its language and a general consensus that other matter take precedence as the House grapples with high inflation, gun massacres and fending off judicial threats on issues such as abortion and marriage equality”
- “I can’t say it’s a priority,’ Rep. Frank Pallone Jr. (D-N.J.), the chairman of the House Energy and Commerce Committee”

# Prediction

- House will vote on this after a long, long delay
- Will vote for Daylight Saving Time rather than Standard Time