

**WORLD SLEEP DAY® (WSD) – WHAT IS IT?**

World Sleep Day is an annual, global call to action about the importance of healthy sleep. The focus of WSD is to bring cognizance to the many burdens of sleep problems, as well as the importance of healthy sleep. WSD publicly displays efforts being taken toward prevention and management of sleep disorders. Created and hosted by World Sleep Society, World Sleep Day is an internationally recognized awareness event bringing researchers, health professionals and patients together to recognize sleep and its important impact on our health.

WSD is co-chaired by Lourdes DelRosso, MD, MS, Associate Professor of Pediatrics, Associate Sleep Medicine Fellowship Director at University of Washington and Professor Fang Han, MD of The Sleep Center, Peking University People’s Hospital in Beijing, China; with support from World Sleep Society’s staff and [WSD committee](http://worldsleepday.org/about-us/committee) members.

WSD events take place globally, but are listed together online at [www.worldsleepday.org](http://www.worldsleepday.org). In the past, World Sleep Day delegates have worked locally to spread awareness of sleep issues by hosting special events, translating materials, distributing booklets and pamphlets on sleep, hosting school events, press conferences and securing media coverage around the world. Delegates also created content such as public lectures and workshops, appearances on local television and radio shows, booklets, pamphlets, promotional videos, and press releases on sleep. Plan your own World Sleep Day activity today on [www.worldsleepday.org/get-involved](http://www.worldsleepday.org/get-involved).

**2021 will mark the 14th annual World Sleep Day on March 19, 2021 and incorporate the slogan: Regular Sleep, Healthy Future.
Appendix A: Official Press Release
Appendix B: Logos**

**KEY MESSAGES**

The following key messages are designed to give a template to work from and can be adapted to suit the media environment and focus within your countries. The key messages should be used as talking points to guide a consistent message with others around the world. Bolded key messages should be viewed as primary messages when time or space is limited.

**Slogan/Theme: Regular Sleep, Healthy Future**

World Sleep Day 2021 will incorporate the slogan, ‘Regular Sleep, Healthy Future, highlighting sleep's important place as a pillar of health, allowing for a healthier future thanks to regular, quality sleep. This focus is purposefully broad in meaning, surrounding the message that quality of life can be improved with healthy sleep. Conversely, when sleep fails, health declines, decreasing quality of life. Sound sleep is a treasured function. World Sleep Society has compiled ten tips for healthier sleep. These recommendations for children and adults can be viewed on [worldsleepday.org under resources](http://worldsleepday.org/10-commandments-of-sleep-hygiene-for-adults).

**2021 Quotes**

WSD is co-chaired by Lourdes DelRosso, MD, MS, Associate Professor of Pediatrics, Associate Sleep Medicine Fellowship Director at University of Washington and Professor Fang Han, MD of The Sleep Center, Peking University People’s Hospital in Beijing, China. WSD co-chair Dr. Lourdes DelRosso expresses, “Sleep medicine physicians do not only treat sleep disorders, we also have a responsibility to promote sleep health. We know that regulating the time you go to sleep and wake up each day is associated with better sleep quality and length. Regular sleep is a great way to start off each day in a healthy way—paving the way for a healthier future.” WSD co-chair Professor Fang Han, states, “We can apply the following principles to achieve regular sleep. First, exposure to natural daylight helps set the body clock. Second, building more activity into everyday life and keeping regular exercise. Third, switching off fully before bedtime will allow for relaxation. Finally, having positive emotions will help with a better overall health and wellbeing, as well as good sleep.”

“It is easier to achieve regular sleep when we set ourselves up for success,” explains Michael A. Grandner, PhD, MTR. “This means getting up at a regular time each day, preferably followed by bright light exposure and some movement to send a reliable daytime signal. Then, in the evening, budgeting sufficient time to wind down and detach is critical for being able to initiate sleep. Finally, maintaining good stimulus control (getting out of bed if you can’t sleep) will help build some resilience in the system. Taking these three things together—starting the morning, setting up the evening, and inoculating against nighttime disturbances—will help in the search for regular sleep.”

**Research**

Scientific evidence has demonstrated a connection between regular sleep and academic performance. Both regular and irregular sleepers slept the same amount, but regular sleepers did better in school. “Differences in academic performance were not associated with average sleep duration in our population, and our data suggest that polyphasic sleep schedules that distribute sleep around the clock may be less effective for students, even if they maintain total sleep time.”

Phillips, A.J.K., Clerx, W.M., O’Brien, C.S. et al. Irregular sleep/wake patterns are associated with poorer academic performance and delayed circadian and sleep/wake timing. Sci Rep **7,**3216 (2017). <https://doi.org/10.1038/s41598-017-03171-4>

**GENERAL FACTS**

* Three elements of good quality sleep are:
	+ **Duration:** The length of sleep should be sufficient for the sleeper to be rested and alert the following day.
	+ **Continuity:** Sleep periods should be seamless without fragmentation.
	+ **Depth:** Sleep should be deep enough to be restorative.
* Better understanding of sleep conditions and more research into the area will help reduce the burden of sleep disorders on society.
* While sporadic changes in sleep and dreaming are normal, and sleep naturally responds to environmental fluctuation, extreme factors and traumatic experiences can lead to severe changes in sleep patterns, including altered dream content or more nightmares.37
* It is shown that sleep supports the formation of emotional episodic memories throughout all the stages that compose memory processing. On the contrary, sleep loss deteriorates both the encoding of emotional information and the emotional memory consolidation processes.38
* The medical benefits to youth conferred by physical activity, balanced nutrition, and quality sleep have been increasingly encouraged by medical and mental health providers.39
* Sleep plays a critical role in emotional processing.38
* Sleep problems constitute a global epidemic that threatens health and quality of life for up to 45% of the world’s population.3
* Most sleep disorders are preventable or treatable, yet less than one-third of sufferers seek professional help.4

**FACTS ABOUT REGULAR SLEEP AND HEALTH**

* In addition to preferred sleep timing, one can also consider how the regularity of the sleep-wake schedule influences sleep. Cross-sectional studies illustrate that high daily lifestyle regularity, including high regularity in sleep timing, is associated with better subjective sleep in college students, young and middle-aged adults, and seniors. Stable bedtimes and rise-times have been found to be related to better sleep quality in retired older adults without the constraints of daytime work.40
* Sleep quality is enhanced when in synchrony with circadian characteristics in the absence of a constricted daytime schedule. 40
* A more stable rise-time correlated with better self-report sleep quality and higher weekday sleep efficiency. 40
* Individuals who frequently change their sleep timing, and consequently their pattern of light/dark exposure, may experience misalignment between the circadian system and the sleep/wake cycle, since the circadian clock takes time to adjust to schedule changes. Such misalignment may have an adverse effect on both cognitive function and health.41
* Regular sleepers have better mood and psychomotor performance, and increased time in REM and slow-wave sleep.41
* Sleep regularity is independent of sleep duration.41
* Irregular sleepers have delayed sleep timing and more daytime sleep.41
* Sleep regularity is positively associated with academic performance.41
* We also found that sleep regularity is positively correlated with academic performance. Sleep regularity was uncorrelated with sleep duration, suggesting that regularity captures another informative dimension of sleep.41
* Good sleep is essential to good health.42
* Sleep health indicates how well an individual or population is doing.42
* Sleep health is best understood in the context of individual, social, and environmental demands, i.e., that good sleep health may not look the same in every situation or every individual.42
* Sleep health should not be defined exclusively by the absence of sleep deprivation or a sleep disorder.42
* Sleep is critical to health.42
* Sleep is a biological requirement for human life, alongside food, water, and air.43
* Because sleep is involved with many physiologic systems, insufficient sleep duration and poor sleep quality have been associated with several adverse health outcomes…mortality, weight gain and obesity, diabetes and metabolism, inflammation, cardiovascular disease, neurocognitive functioning, mental health.43
* Reduced sleep duration has been shown to cause impairments in working memory, executive function, processing speed, and cognitive throughput.43
* Short sleep duration is associated with poor mental health.43
* Existing evidence suggests that most US schools, especially high schools, start too early for most adolescents. Earlier start times not only promote shorter sleep duration among adolescents (who need more sleep than adults) but also do not take into account natural circadian delays that occur in adolescence. It has been proposed that delaying school start times can improve academic performance, improve mental health, and improve overall health in students.43

**FACTS ABOUT SLEEP AND COVID**

* Sleep is adversely affected not only in patients but also in frontline health care workers (HCW ) directly involved in caring for COVID-19 patients.35
* Sleep dysfunction is common in patients admitted to the ICU (related to many factors) under normal circumstances, but is seen more severely in COVID-19 ICU patients and others as well as those in non-COVID-19 units.35
* It is important to be aware of impaired sleep quality and other sleep dysfunctions not only in patients, but also in HCW, particularly frontline workers because impaired sleep may affect their judgement in patient care and timely investigation may improve sleep and the short as well as long-term consequences of sleep disruption.35
* Recent studies have suggested that the sleep hormone melatonin may be beneficial for the treatment of COVID-19. Melatonin may decrease oxidative stress, inflammation and the immune response, which may be particularly important in patients with OSA in whom these pathways are already activated.36
* Melatonin may also improve sleeping quality, which might also be beneficial for better clinical outcomes for COVID-19 patients. 36
* OSA is very prevalent worldwide, and given that the comorbidities of OSA patients are shared with those of COVID-19 patients who experience adverse outcomes it may be of great importance to ensure that OSA patients receive effective CPAP therapy if confronted with COVID-19 infection. 36

**WORLD SLEEP DAY® (WSD) – HISTORY**

The first WSD was held on March 14, 2008, under the slogan “Sleep Well, Live Fully Awake.” The annual awareness day is held the Friday before Spring Vernal Equinox.

* “Sleep Well, Live Fully Awake” – March 14, 2008
* “Drive Alert, Arrive Safe” – March 20, 2009
* “Sleep Well, Stay Healthy” – March 19, 2010
* “Sleep Well, Grow Healthy” – March 18, 2011
* “Breathe Easily, Sleep Well” – March 16, 2012
* “Good Sleep, Healthy Aging” – March 15, 2013
* “Restful Sleep, Easy Breathing, Healthy Body” – March 14, 2014
* “When Sleep is Sound, Health and Happiness Abound” – March 13, 2015
* “Good Sleep is a Reachable Dream” – March 18, 2016
* “Sleep Soundly, Nurture Life” – March 17, 2017
* “Join the Sleep World, Preserve Your Rhythms to Enjoy Life” – March 16, 2018
* “Healthy Sleep, Healthy Aging”– March 15, 2019
* “Better Sleep, Better Life, Better Planet”– March 13, 2020
* “Regular Sleep, Healthy Future”– March 19, 2021

**Media spokespeople**

Where possible, we suggest identifying and preparing a message for an internal spokesperson to front your WSD activities. Depending on time and resources, media/message training may also help to prepare your spokesperson for various media activities such as telephone interviews, live television, or radio. World Sleep Society has a list of spokespeople from countries around the world. Please contact World Sleep Society at info@worldsleepsociety.org for the list or to be considered as a spokesperson.

**TALKING POINTS**

Primary:

* We spend up to one-third of our lives sleeping. Sleep is a basic human need, much like eating and drinking, and is crucial to our overall health and well-being.
* Sleep, like exercise and nutrition, is essential for metabolic regulation in children. There is evidence for a link between sleep duration and childhood obesity. The findings are more apparent in girls. Sleep duration is the effect of day-to-day variability of sleep-wake timing on weight regulation. 19,20
* Breathing regularly during sleep is critical to maintain well-being and health. Persistent interruption of the breathing function during sleep is called sleep apnea. This is a pervasive and common disorder that affects 4% of men and 2% of women.22
* Sleep apnea causes daytime sleepiness and fatigue, and may lead to conditions such as hypertension, ischemic heart disease, stroke 27, and diabetes.
* Lack of sleep or poor quality sleep is known to have a significant negative impact on our health in the long and short term. Next day effects of poor quality sleep include a negative impact on our attention span, memory recall and learning.5 Longer term effects are being studied, but poor quality sleep or sleep deprivation has been associated with significant health problems, such as obesity, diabetes, weakened immune systems and even some cancers.6,7,8
* Lack of sleep is related to many psychological conditions such as depression, anxiety and psychosis.9,10
* Quality sleep is crucial to ensure good health and quality of life.

Importance of Sound, Restorative Sleep:

* Good quality and restorative sleep is essential for day-to-day functioning. Studies suggest that sleep quality rather than quantity has a greater impact on quality of life and daytime functioning.12
* Healthy sleep in children will improve the child’s overall wellness and development. WORLD SLEEP SOCIETY has created a guide with 10 recommendations for children aged birth-12 years old: [**Healthier Sleep in Children**](https://worldsleepday.org/tips-for-children)**.**
* Poor quality sleep has a greater negative impact on health, well-being and satisfaction with life than the quantity of sleep a person gets.9,13
* Quality sleep is responsible for alertness, improved functioning the following day and better quality of life.

Consequences of Sleep Disorders

* Sleep disorders cause significant individual and societal burden and form a serious public health problem.
* Obstructive sleep apnea significantly impacts health and well-being. The drop in oxygen that occurs when breathing stops due to OSA puts a strain on the heart and can lead to a number of serious health conditions.
* Directly or indirectly, disrupted sleep can have a negative effect on family life and relationships by affecting a person’s mood and the way in which they are able to perform daily activities and interact socially.13

Extent of the Epidemic

* 35% of people do not feel they get enough sleep, impacting both their physical and mental health.21
* Obstructive sleep apnea (OSA) affects approximately 4% of the adult population. 21 If not properly managed, OSA can have a significant impact on a person’s health and well-being.
* Restless Legs Syndrome is a common disorder and occurs in between 3-10% of the population, although the number of people affected and the severity of the condition differs between countries.
* People who have OSA stop breathing repeatedly during sleep. OSA is caused by a blockage of the upper airway. The collapse of the airway may be due to factors such as a large tongue, extra tissue or decreased muscle tone holding the airway open.
* Each breathing pause can last from 10 seconds to more than a minute and is accompanied by a drop in oxygen associated with each event. The events may occur 5 to 50 times or more each hour. This puts a strain on the heart and can lead to a number of serious health conditions (U.S. Dept. of Health & Human Services, NIH, 2009).

Known Consequences: Some Statistics

* A US study has estimated the annual costs of insomnia to be between $92.5 billion and $107.5 billion.17
* 71,000 people suffer injuries every year due to sleep-related accidents.16
* 1,550 people die because of sleep-related accidents.16
* 46% of individuals with frequent sleep disturbances report missing work or events, or making errors at work, compared to 15% of healthy sleepers.18

Specific Sleep Disorders:

**Insomnia**

* Insomnia affects between 30-45% of the adult population.3
* Primary insomnia (insomnia with no underlying condition) affects 1-10% of the general population, increasing up to 25% in the elderly.3
* Lack of sleep or poor quality sleep also leaves us more vulnerable to accidents. People who suffer insomnia are seven times more likely to become involved in an accident causing death or serious injury than good sleepers.11
* Studies have shown that people with insomnia suffer from more symptoms of anxiety and depression than people without insomnia.9
* Insomnia has a negative impact in all areas of a sufferer’s life.
* Insomnia can affect work performance, with a change in character and a drop in the quality of work. If the disorder remains untreated, this may even lead to reduced job prospects and loss of employment.13

**Sleep Breathing Problems**

Obstructive sleep apnea is very prevalent, yet under recognized. The Wisconsin Sleep Cohort Study estimated a prevalence of 17% among men and 9% among women in that state in the United States. In northern India, the prevalence of obstructive sleep apnea and obstructive sleep apnea syndrome is 13.7%. OSA is an independent risk factor for hypertension and other cardiovascular ailments. In children, sleep apnea may be the underlying cause of neuropsychological disturbances. Pediatric sleep apnea is typically associated with adenotonsillar hypertrophy.

Untreated sleep apnea may lead to heart diseases, stroke, and vascular dementia. Both adults and children should be formally investigated in sleep centres if sleep apnea is suspected, because both adult and pediatric sleep apnea is treatable and correctable; a correct and precise diagnosis is always required. 26

Sleep apnea is diagnosed with polysomnography in the sleep laboratory. Treatment with non-invasive positive airway (continuous positive airway pressure, or CPAP) ventilation is generally successful. For mild forms of sleep apnea, the application of oral devices can be beneficial. Surgery to remove excessive tissues in the oropharynx may be considered for individuals who cannot tolerate non-invasive equipment or who have obvious obstruction to airflow in the oropharynx by redundant tissue growth or large tonsils. There is proof that successful correction of sleep apnea with non-invasive positive airway pressure ventilation lowers mean blood pressure and may reduce the risk of myocardial infarction and stroke. Excessive daytime somnolence generally improves with successful treatment of sleep apnea.

**HOW YOU CAN TAKE ACTION**

* Join World Sleep Day 2021 as a [delegate](http://worldsleepday.org/become-a-delegate) or a [supporter](http://worldsleepday.org/sponsor).
* Obtain more information at [**www.worldsleepday.org**](http://www.worldsleepday.org)**.**
* Be cognizant that most sleep problems can be managed by changing behaviors around sleep, medical therapy, or cognitive behavioral therapy.
* Be aware that patients suffering from sleep complaints, or who suffer from excessive daytime sleepiness, should see a physician and, if needed, obtain a consultation in a sleep center.

**AVAILABLE VIDEOS**

We have lecture-based presentations covering treatment options, diagnostic criteria and other current information available to share. Expert lecturers will not provide an overview on the various sleep disorders, but delve into the recent changes that have been made in the field in the past 18-months, as well as where the next 18-months may lead. Topics covered include insomnia, sleep apnea, restless legs syndrome, hypersomnia and other sleep disorders: bit.ly/WSSyoutube.

[**Open the World Sleep Society YouTube Channel to view videos in the collection.**](https://www.youtube.com/playlist?list=PLi49YR5thLgNN-w2ij-RpAW70jpP2rVB8)

**PRINCIPLES OF GOOD SLEEP**

Following the guidelines of Sleep Hygiene can help to prevent poor quality nocturnal sleep, short duration of sleep, fragmentation of sleep and serious sleep deprivation in adults.

**Healthier Sleep in Adults**

1. Fix a bedtime and an awakening time.
2. If you are in the habit of taking siestas, do not exceed 45 minutes of daytime sleep.
3. Avoid excessive alcohol ingestion 4 hours before bedtime and do not smoke.
4. Avoid caffeine 6 hours before bedtime. This includes coffee, tea and many sodas, as well as chocolate.
5. Avoid heavy, spicy, or sugary foods 4 hours before bedtime. A light snack before bed is acceptable.
6. Exercise regularly, but not right before bed.
7. Use comfortable bedding.
8. Find a comfortable temperature setting for sleeping and keep the room well ventilated.
9. Block out all distracting noise and eliminate as much light as possible.
10. Reserve the bed for sleep and sex. Don't use the bed as an office, workroom or recreation room.

**Healthier Sleep in Children [Aged Birth-12 Years]**

1. Have your child go to bed at the same time every night, preferably before 9:00PM.
2. Your child should have an age-appropriate nap schedule.
3. Establish a consistent, positive bedtime routine (this can include brushing teeth, songs, bedtime stories).
4. The bedroom should be sleep friendly– cool, dark, and quiet.
5. Encourage your child to fall asleep independently.
6. Your child should avoid bright light at bedtime and during the night, and increase light exposure in the morning.
7. Have your child avoid heavy meals and vigorous exercise close to bedtime.
8. Keep all electronics, including televisions, computers, and cell phones, out of the child’s bedroom and limit the use of electronics before bedtime.
9. Your child should avoid caffeine, including many sodas, coffee, and teas (as well as iced tea), and chocolate.
10. Have your child keep a regular daily schedule, including consistent mealtimes.

**ABOUT WORLD SLEEP SOCIETY**

World Sleep Day is organized by World Sleep Society, an international association whose mission is to advance sleep health worldwide. World Sleep Society hosts a biennial scientific congress on sleep medicine aiming to globally connect sleep professionals and researchers to advance current knowledge on sleep. A job board has also been created for sleep medicine professionals on [www.worldsleepsociety.org](http://www.worldsleepsociety.org/). Follow the excitement on Twitter [@\_WorldSleep](https://twitter.com/_WorldSleep) and [facebook.com/WASMF](https://www.facebook.com/wasmf/).

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**APPENDIX A – PRESS RELEASE**



FOR IMMEDIATE RELEASE

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<http://worldsleepday.org/>

**CELEBRATE WORLD SLEEP DAY® ON MARCH 19
TO ADVANCE SLEEP HEALTH WORLDWIDE**

**ROCHESTER, MN – January 2, 2021—**World Sleep Society is issuing a global call to action about the importance of healthy sleep. Friday, **March 19, 2021** is the 14th annual World Sleep Day®. Created and hosted by World Sleep Society, [World Sleep Day](http://worldsleepday.org) is an internationally recognized awareness event bringing researchers, health professionals and patients together to recognize sleep and its important impact on our health.

World Sleep Day 2021 will incorporate the slogan, ‘**Regular Sleep, Healthy Future**,' highlighting sleep's important place as a pillar of health, allowing for a healthier future thanks to regular, quality sleep. This focus is purposefully broad in meaning, surrounding the message that quality of life can be improved with healthy sleep. Conversely, when sleep fails, health declines, decreasing quality of life. Sound sleep is a treasured function. World Sleep Society has compiled ten tips for healthier sleep. These recommendations for children and adults can be viewed on worldsleepday.org under resources.

WSD is co-chaired by Lourdes DelRosso, MD, MS, Associate Professor of Pediatrics, Associate Sleep Medicine Fellowship Director at University of Washington and Professor Fang Han, MD of The Sleep Center, Peking University People’s Hospital in Beijing, China. WSD co-chair Dr. Lourdes DelRosso expresses, “Sleep medicine physicians do not only treat sleep disorders, we also have a responsibility to promote sleep health. We know that regulating the time you go to sleep and wake up each day is associated with better sleep quality and length. Regular sleep is a great way to start off each day in a healthy way—paving the way for a healthier future.” WSD co-chair Professor Fang Han, states, “We can apply the following principles to achieve regular sleep. First, exposure to natural daylight helps set the body clock. Second, building more activity into everyday life and keeping regular exercise. Third, switching off fully before bedtime will allow for relaxation. Finally, having positive emotions will help with a better overall health and wellbeing, as well as good sleep.”

“It is easier to achieve regular sleep when we set ourselves up for success,” explains Michael A. Grandner, PhD, MTR. “This means getting up at a regular time each day, preferably followed by bright light exposure and some movement to send a reliable daytime signal. Then, in the evening, budgeting sufficient time to wind down and detach is critical for being able to initiate sleep. Finally, maintaining good stimulus control (getting out of bed if you can't sleep) will help build some resilience in the system. Taking these three things together—starting the morning, setting up the evening, and inoculating against nighttime disturbances—will help in the search for regular sleep.”

**CALL TO ACTION**

To participate in World Sleep Day, consider:

* Organizing an event to create excitement and generate interest in World Sleep Day.
* Circulating the official press release with sleep experts and local media.
* Distributing sleep patient literature such as booklets, leaflets and newsletters.
* Finding other ideas at worldsleepday.org.
* Spreading the word on social media about **#WorldSleepDay.**

More information can be viewed on [worldsleepday.org/get-involved/plan](http://worldsleepday.org/get-involved/plan).

Sleep is a basic human need—a crucial component of survival, much like breathing, eating a healthy diet or getting enough exercise.

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**About World Sleep Society**
World Sleep Day is organized by World Sleep Society, an international association whose mission is to advance sleep health worldwide. World Sleep Society hosts a biennial scientific congress on sleep medicine aiming to globally connect sleep professionals and researchers to advance current knowledge on sleep. A virtual meeting is also underway with details on [worldsleepsociety.org](http://www.worldsleepsociety.org/). Follow the excitement on Twitter [@\_WorldSleep](https://twitter.com/_WorldSleep) and [facebook.com/WASMF](https://www.facebook.com/wasmf/).

**APPENDIX B – LOGOS**

Logos for 2021 World Sleep Day and World Sleep Society will be made available to delegates of World Sleep Day. [Become a delegate](http://worldsleepday.org/get-involved/delegate-form) to receive logo instructions of use. The use of the words “World Sleep Day” is copyrighted with the United States Patent and Trademark Office serial number 85274932. Written permission is required to use the words “World Sleep Day” and logos of World Sleep Day and World Sleep Society.



