



“COULD I HAVE SLEEP APNEA?” TOOLKIT



Created by:

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WELCOME!

We are so glad you are here. This toolkit is designed for people and their loved ones who are questioning whether they have signs and symptoms of sleep apnea. Project Sleep created it as part of the **Sleep Apnea Squad** series.

Sleep Apnea Squad is an educational series that explores specific topics relevant to sleep apnea. Project Sleep broadcasts each live event via YouTube, with host Emma Cooksey, Project Sleep's Sleep Apnea Program Manager.

After each live broadcast, we create a corresponding toolkit (like this one!) to capture our collective knowledge and help others later. The toolkit features quotes from panelists and audience members who joined us for the live broadcast.

PLEASE NOTE

The **Sleep Apnea Squad** series is intended for educational and awareness purposes and is not a substitute for medical attention. If anything in this toolkit sparks questions for you about your medical management, please bring those questions to your healthcare provider.



COULD I HAVE SLEEP APNEA?

Sleep apnea symptoms can fly under the radar, even in the doctor's office. Are you questioning if you or a loved one has sleep apnea symptoms? If you are living with sleep apnea, did you experience a delay in diagnosis?

On Tuesday, August 6, 2024, our interactive discussion, "**Could I Have Sleep Apnea?**" took place on Project Sleep's YouTube channel. Host Emma Cooksey was joined by Dr. Sam Kashani, a sleep medicine physician at UCLA, and Bob File, a former MLB player living with obstructive sleep apnea.

In this toolkit, you'll find the latest information on sleep apnea symptoms and stories from people living with sleep apnea to illustrate how sleep apnea symptoms can show up quite differently from person to person.

Watch the **Could I Have Sleep Apnea?** video: project-sleep.com/sleep-apnea-squad-could-i-have-sleep-apnea/

Learn more about **Sleep Apnea Squad**: project-sleep.com/sleep-apnea-squad/



Stumped on a term? See the glossary at the end of the toolkit.



MEET OUR GUESTS



Bob File is a former major league baseball player living with obstructive sleep apnea. He played baseball at Jefferson University and for the Toronto Blue Jays in the MLB. In his career after baseball, he focused on solution engineering and continued to prioritize his fitness. Bob is a proud husband and father who enjoys spending time with his wife and daughter.



Dr. Sam Kashani, M.D., is a sleep medicine physician. He completed his residency at Arrowhead Regional Medical Center, followed by a fellowship in Sleep Medicine at the David Geffen School of Medicine at UCLA. Dr. Kashani serves as President-Elect of the California Sleep Society and is an enthusiastic member of Project Sleep's expert advisory board.



MEET THE HOST

Emma Cooksey is the Sleep Apnea Program Manager at Project Sleep. At the age of 30, she was diagnosed with obstructive sleep apnea as a new mom. Emma is a renowned sleep apnea patient advocate, speaker, podcaster, and writer.



WHAT IS SLEEP APNEA?

Sleep apnea occurs when a person is asleep and experiences disturbances to their breathing, which are called **apneas, hypopneas, and respiratory effort-related arousals**.

Obstructive Sleep Apnea vs Central Sleep Apnea

Sleep apnea causes people to repeatedly stop breathing during sleep. This could be because the airway is repeatedly blocked by the relaxed structures in the throat (**obstructive sleep apnea**) or because the brain does not send the signal to breathe (**central sleep apnea**).

“ With obstructive sleep apnea, there's an obstruction or blockage in the throat or the upper airway, and it's because of this blockage that the person is having these brief episodes of paused or shallow breathing. Whereas with central sleep apnea, you can think of it as faulty signaling between the brain or the central nervous system and the breathing muscles.

- Dr. Sam Kashani

Apnea: breathing stops completely for 10 seconds or more.

Hypopnea: a reduction in airflow of at least 30% for at least 10 seconds with a decrease in the oxygen saturation of at least 3% or an arousal.

Respiratory effort-related arousal (RERA): a reduction in airflow for at least 10 seconds that does not meet the criteria for an apnea/hypopnea and is associated with an arousal.

AHI (apnea-hypopnea index) is used to categorize the severity of obstructive sleep apnea (OSA) into normal, mild, moderate, and severe, depending upon the number of breathing events (apneas and hypopneas) that occur each hour.

RDI (respiratory disturbance index): the number of apneas, hypopneas, and RERAs per hour of sleep.

cAHI (the central apnea-hypopnea index) is used to diagnose people with central sleep apnea.



SIGNS & SYMPTOMS

Signs and symptoms can vary. Each person's experience may look or feel different from another person. Importantly, a person does not have to have all of the signs and symptoms listed below in order to have sleep apnea.



Nighttime Signs & Symptoms

- Loud snoring or gasping while sleeping
- Silent pauses in breathing while sleeping
- Going to the bathroom frequently during the night
- Insomnia or waking often during the night
- Lower sexual desire and erectile dysfunction



Daytime Signs & Symptoms

- Difficulty staying awake during the day
- Feeling tired or low-energy
- High blood pressure
- Waking up with a dry mouth or headache
- Feeling unrefreshed, even after sleeping
- Difficulty concentrating and remembering
- Mental health issues, grumpiness and irritability



SIGNS & SYMPTOMS

“ Snoring is a classic association with sleep apnea, and it's often considered to be synonymous with the condition. However, it's important to note that it may not be present at all in a person with obstructive sleep apnea.

- Dr. Sam Kashani

“ I noticed more daytime than nighttime symptoms, though I always had a lot of awakenings to go to the bathroom. I just thought I must be very hydrated! It's so interesting to hear that it's a symptom of sleep apnea.

- Kristen

“ I knew I needed to get checked for sleep apnea when my husband couldn't sleep because of my snoring.

- Chelsea

“ I had anxiety, depression, and daytime sleepiness so bad that it was affecting my ability to stay awake at work. I had intense morning headaches and multiple bathroom trips every night. Had I known these were sleep apnea symptoms, I would have mentioned them to my doctor sooner.

- Emma

“ I've been fit my whole life, being an athlete. I wasn't a snorer. Two key symptoms kept creeping up on me: frequent urination during the night, getting up three or four times, and night sweats.

- Bob



MULTIPLE SLEEP DISORDERS

Multiple sleep disorders can be present at the same time.

Many people diagnosed with sleep apnea have another sleep disorder in combination with their sleep apnea. It can be challenging to spot additional sleep disorders since the symptoms often overlap.


COMISA = Comorbid Insomnia + Sleep Apnea

“A **highly prevalent** and **debilitating** disorder, which results in additive impairments to patients’ sleep, daytime functioning, and quality of life,”
Sweetman et al., Co-Morbid Insomnia and Sleep Apnea (COMISA), 2019

“ In somebody with untreated sleep apnea, there is often difficulty staying asleep with a fragmented sleep pattern characterized by repetitive brief awakenings. Then, some people with sleep apnea may have nocturnal awakenings characterized by prolonged windows of wakefulness in the middle of the night, which end up cumulatively robbing them of sleep time, resulting in insufficient sleep, on top of the poor sleep quality from their untreated sleep apnea.
- Dr. Sam Kashani

Sleep apnea could be present with **any other sleep disorder**.

“ I thought living with narcolepsy was hard. Developing sleep apnea in addition to narcolepsy has complicated my life in so many ways. Struggling to tolerate CPAP interrupts my already fragmented sleep.
- Chelsea

 **Learn more about symptoms of other sleep disorders: project-sleep.com/sleep-disorders/**



SLEEP APNEA STEREOTYPES

People of any body type can have sleep apnea. There is a public misperception that only people who are overweight or have obesity can have sleep apnea. Being overweight or having obesity are important risk factors, but not the only factors. This is important because many people living with undiagnosed sleep apnea are told that they do not **“look”** like someone who would have sleep apnea.



“Pickwickian Syndrome”

English author Charles Dickens is often credited with first spotting symptoms of sleep apnea in his 1836 novel **“The Pickwick Papers,”** long before sleep apnea had a medical definition.

“In this novel, he introduces the reader to a character, **Joe, the Fat Boy** who is **obese, sleepy, difficult to arouse, snores,** and has peripheral edema.”

Kryger M. Charles Dickens: impact on medicine and society, 2012

“The Characters of Charles Dickens”
Portrayed in a Series of Original Water
Colour Sketches by Kyd.



SLEEP APNEA STEREOTYPES

Researchers first identified sleep apnea as being a problem affecting older, overweight men. However, more recent research has shown that a wide variety of people experience sleep apnea, including **people of all sizes, genders, and ages.**

“ In the case of many people with overweight and obesity, their airways become narrow because of excess fat tissue in the neck which impinges on the airway space in the throat. Nevertheless, obstructive sleep apnea is not uncommon in people who do not have overweight or obesity, but rather have the anatomy that predisposes them to have a narrow airway, such as having a large tongue or a small jaw.

- Dr. Sam Kashani

“ I didn't think I could have sleep apnea as a young person. I was 28 when I got diagnosed and it was incredibly hard.

- Jason

“ There is a myth that sleep apnea only affects men and not women.

- Stacy

Stereotypes may play a role in sleep health racial disparities.

“It is plausible that White sleep clinicians are less likely to refer Black patients for sleep evaluations because of negative beliefs and **stereotypes about Black people**, including being less likely to follow-up with physician-recommended referrals and being less likely to adhere to sleep apnea treatment.”

- Williams NJ et al., 2015



ADVOCATING FOR ANSWERS

Primary care physicians receive little training in sleep.

Most primary care providers only received 1-2 hours of medical school education about sleep, which means that they may not be well-versed with sleep apnea symptoms, testing, or treatment options. If you suspect you or a loved one may be experiencing sleep apnea, it's important to be proactive and advocate for a referral to a sleep specialist and sleep testing.

Primary Care Physician (PCP)



Board-certified Sleep Specialist



“ Even among clinicians who are not sleep physicians, whether primary doctors or other specialists, many of them don't know there are sleep medicine providers like myself, who practice exclusively sleep medicine and treat all sleep disorders.

- Dr. Sam Kashani

“ I had to advocate for myself because I was going to the doctor, thinking there was something wrong with my sleep. Knowing to ask for a referral to a board-certified sleep specialist would have helped me.

- Emma



RESOURCES

Here are some of our favorite resources.

RECOMMENDED READING

- ***“Sleep Interrupted: A physician reveals the #1 reason why so many of us are sick and tired”*** by Steven Y. Park M.D.
- **AASM Sleep Disorders website:** <https://sleepeducation.org/sleep-disorders/obstructive-sleep-apnea/>

PODCASTS:

- [Dr. Michael Breus Does a Deep Dive on Sleep Apnea](#), “Sleep Success” podcast
- [Sleep Apnea Stories](#) podcast

PATIENT ORGANIZATIONS

Major US Organizations:

- Alliance of Sleep Apnea Partners: <https://www.apneapartners.org/>
- American Sleep Apnea Association: <https://sleephealth.org/>
- Project Sleep: <https://project-sleep.com/>
- Reggie White Foundation:
<https://www.reggiwhitefoundation.org/>

International Organizations:

- UK - Hope2Sleep and The Sleep Charity
- France - FFAAIR
- Australia - Sleep Disorders Australia
- Norway - Søvnföreningen
- Austria - Selbsthilfegruppe Schlafapnoe Österreich
- Italy - Associazione Apnoici Italiani
- Iceland - Lungnasamtokin
- Sweden - Apné Sverige



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GLOSSARY

AHI: The Apnea Hypopnea Index is the most commonly used metric for classifying sleep apnea as mild, moderate, or severe.

Apnea: A pause in breathing of 10 seconds or more.

cAHI: Central Apnea Hypopnea Index used to measure the severity of central sleep apnea.

Central sleep apnea: This condition, characterized by interruptions to breathing during sleep, is caused by the brain's failure to send the necessary signals for breathing.

COMISA: Co-morbid insomnia and sleep apnea.

Hypopnea: A period of reduced airflow of at least 30% for at least 10 seconds with a decrease in oxygen saturation of 3% (or more) or an arousal.

Hypoxic burden: This metric, used to classify the severity of obstructive sleep apnea, looks at periods of oxygen desaturation to predict health outcomes more accurately than AHI alone.

Obstructive sleep apnea: Interruptions to breathing during sleep caused by a blockage or collapse of the upper airway.

TDI: The Respiratory Disturbance Index, the number of apneas, hypopneas, and RERAs per hour of sleep.

Respiratory effort-related arousal (RERA): a reduction in airflow for at least 10 seconds that does not meet the criteria for an apnea/hypopnea and is associated with an arousal.

THANK YOU FOR MAKING THIS POSSIBLE

Project Sleep's Sleep Apnea Education & Awareness Program is generously funded by donors like you and by sponsors including:





THANK YOU!

We are so grateful that you took the time to check out this toolkit!

Project Sleep is a 501(c)(3) nonprofit organization dedicated to raising awareness about sleep health, sleep equity, and sleep disorders.

More resources at: www.project-sleep.com