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SNORE LESS

WebMD

The 2023 Snoring and Sleep Report



SURVEY COMMISSIONED BY MUTE SNORING AND EXECUTED IN PARTNERSHIP WITH WEBMD AND ONE POLL, WITH A SAMPLE OF 6000 ADULTS IN DECEMBER 2022.

Methodology

This independent research was commissioned by Rhinomed, consulted by WebMD, completed by OnePoll.com, which surveyed a nationally representative sample of 2,000 adults in each of three countries: Australia, United Kingdom and United States.

Research was conducted online in Australia between 29.11.22-13.12.22, UK between 29.11.22-9.12.22 and in the US between 29.11.22-13.12.22.

This report also includes the findings from the 2022 Annual Sleep & Snoring Report, The Harris Poll and external sources. Please see the final page for exact references.



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Welcome

to our second Global Snoring & Sleep Report. This year we've built on our main themes of snoring and sleep to understand more about why we snore, how badly it affects us and what hacks and tricks we've tried to cure ourselves and/or our partners.

And it seems that even in the relatively short amount of time since we surveyed across our three countries of Australia, the United Kingdom and the USA in 2021, we're definitely continuing to snore – and we're getting even less sleep.

Of course, we live in turbulent times. We're all still recovering from the devastating effects of the pandemic – the physical and emotional stress that caused.

We're also in the middle of economic turmoil that has fuelled inflation and increased the cost of living, and we're all affected by on-going environmental concerns.

Because we're so aware of the stress many people live under, we decided to include some questions on emotional wellbeing in this year's survey. What we found was, quite frankly, shocking: Mental or emotional distress, sadness or worrying disturbs the sleep of nearly a third of people across the three countries we surveyed.

It's no surprise that global issues, teamed with whatever we may have happening in our personal lives, can very easily conspire to disturb our sleep and even make us snore more.

Last year we focused on how loud snoring can be and how the noise can and does effect relationships. This time we spotlight why we, or our loved ones, might snore more than others, how that affects sleep and what the knock-on effect that might have for our health. Also, health experts often tell us that our eating and drinking habits play a role in who snores and how much. The research firmly underlines that people who are overweight, and those who regularly drink more than 10 glasses of alcohol per week, are more likely to be snorers.

Of course, snorers and their families and friends are aware of the problem, but we were still surprised by just how much people are prepared to spend to solve the issues, and equally surprised by some of the, let's call them 'left-field', tactics people have tried to stop their snoring.

I think you'll be as surprised as we were to read about some of the more outlandish things people have tried, but perhaps not so surprised that many of them were not so successful.

We hope that our latest research will provide more food for thought and perhaps some useful information for people looking to snore less and improve their sleep.

The Ins & Outs of Snoring



Snoring is most commonly caused by a partial blockage in the upper airway, which in turn makes the soft palate and other tissues in the throat, nose and mouth vibrate.

The ferocity of our snoring depends on many factors; medical conditions, nasal congestion or restricted airways, weight, alcohol consumption and how and when we sleep all play a part.

Search the word 'snoring' on the internet and some 96 million results come up. Type in 'stop snoring' and you're presented with nearly 30 million results, including everything from the latest science to the downright ridiculous. People who snore are often the butt of jokes; however, it can be a serious issue with side effects, not just on physical health but also on emotional wellbeing.

Snoring is also a major issue for many people because it effects the one thing we all need – sleep. Sleep is vital to physical and mental health; it helps the body to fight illness and underpins emotional wellbeingⁱ.

Last year's report took an in-depth look at global sleeping habits. It found that the average night's sleep in each country was around six hours; 6.2 hours in the States, 6.4 hours in the UK and just 5.8 hours in the States^{iv}.

In fact, 58% of Americans told last year's study that a typical night's sleep was between four and six hours, compared to 51% in Australia and 48% in the UK. Health experts recommend ideally 7.5–8.5 hours of good quality sleep each nightⁱⁱ.

Who Snores?

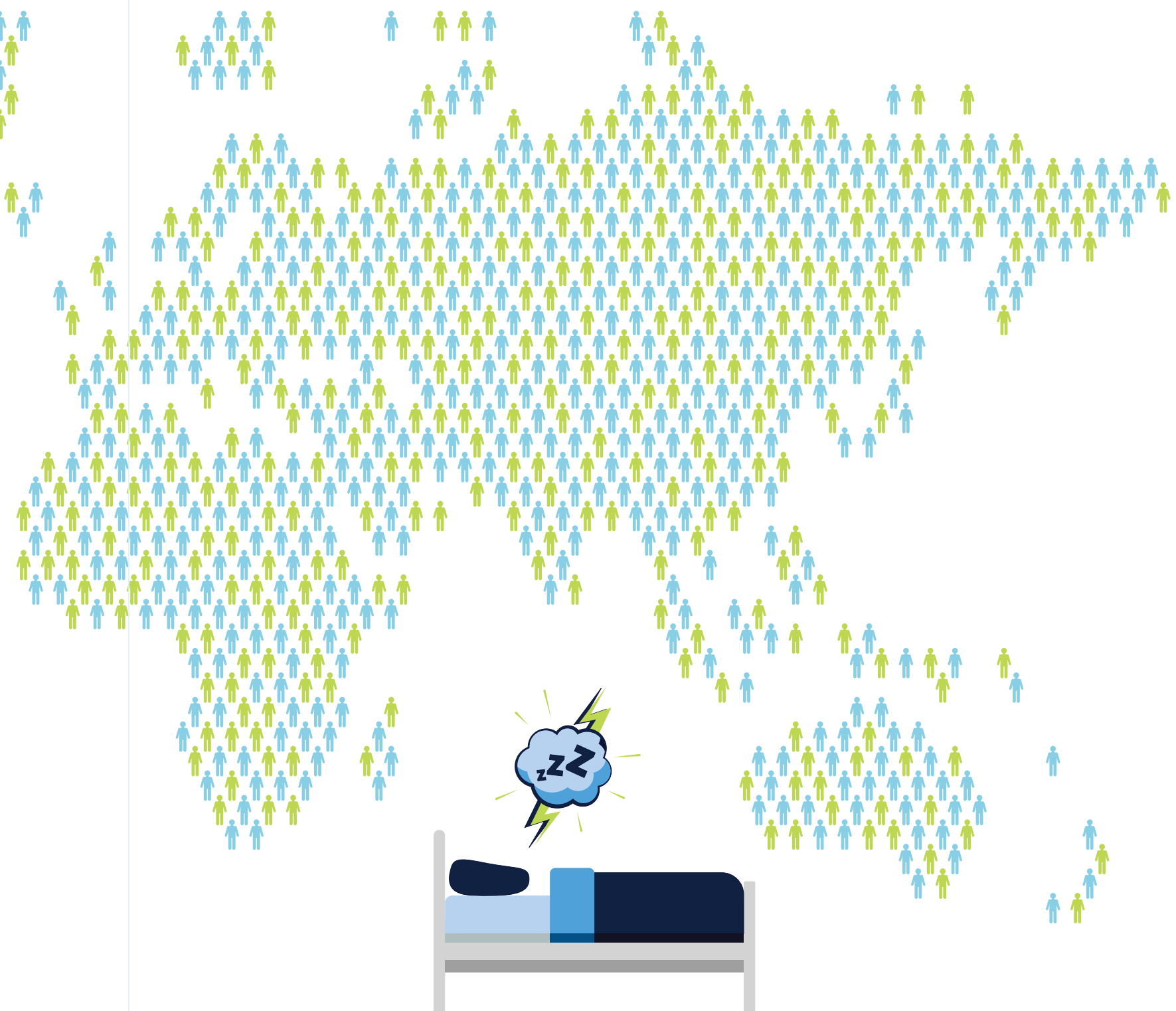
57% of the global population is affected by **snoring**ⁱⁱⁱ

18% of people admit to snoring

19% of people admit to snoring and accuse their partner of snoring

20% of people claim not to snore, but accuse their partner of snoring

Results are broadly similar for each country, except in Australia where 64% of people admit to snoring and/or accuse a partner of snoring.



44% of men admit to snoring compared to 33% of woman

25% of women claim not to snore but accuse their partners of snoring

14% of men claim not to snore but accuse their partners of snoring

It's no surprise that older people tend to snore more: 41% of 18 to 24 year-olds admit to snoring and/or accuse a partner of snoring, compared to 77% of 55 to 64 year-olds.



Disturbed Sleep

83% of men and 89% of women surveyed, report issues affecting their sleep

31%

are troubled at night by mental or emotional distress, such as sadness or worrying. This rises to 39% of women but affects fewer than a quarter (23%) of men. It's also higher amongst younger age groups – 35% for both 18-24 and 25-34 year-olds, and 36% of 35-44 year-olds compared to just 21% of over 65s.

The reasons that people find it difficult to nod-off and then stay asleep are multiple and varied.

The most common thing to interfere with sleep quality affecting half (48%) of respondents, is waking up to use the bathroom (50% of women vs 46% of men). This rises to 65% of the over 65s.

High numbers of people suffer from multiple issues affecting their sleep. And these issues appear to affect women more than they do men.

26% are disturbed by bed mates, pets or children (33% of women, compared to 18% of men)

24% of women feel too hot, or suffer from hot flashes or night sweats even when the room is cool

23% of women have physical pain



Last year's report found that 37% of people who report sleeping difficulties say their own or their partner's snoring is a factor^{iv}.

Broken Nights



FACT:
OF THE 29% OF AMERICANS WHO EXPERIENCE SLEEPING DIFFICULTIES, 1 IN 10 ALSO REPORT BREATHING DIFFICULTIES^{iv}.

33%

of people say they have a diagnosed condition that may impair their sleep^{vi}

11%

are diagnosed with Insomnia. This rises to 17% of US respondents, but affects just 9% and 7% of Australians and Brits respectively

9%

with Restless Leg Syndrome (US 13%, UK 6%, Aus 7%)

8%

with Obstructive Sleep Apnoea (US 14%, UK 5%, Aus 6%)

Nearly 10% of respondents also report other medical conditions. These include Parasomnia, such as sleep terrors, nightmare disorder, sleepwalking or sleep paralysis (7%), Circadian Rhythm Disorder, such as non-24-hour sleep-wake disorder or shift work disorder (6%), and Central Sleep Apnoea (6%).

Staying asleep is a challenge for many^{vii}

Per month, respondents wake on average 9.3 nights, rising to 9.8 nights for women and 8.9 nights for men.

31%

of people wake in the middle of the night on up to four nights

20%

wake between five and 10 nights

20%

wake on more than 20 nights

35%

wake up prior to their scheduled wake up time and cannot get back to sleep on up to four nights, and 19% have had similar issues on between five and 10 nights

Interrupted sleep is having some devastating, even dangerous effects

More than a third of people surveyed (36%) find it difficult to stay awake while driving. A similar number find staying awake during meals or engaging in social activity at night difficult between one to 10 nights in the month. This rises to 51% of 18-24 year-olds.

Nearly a quarter of respondents (23%) say their bad quality sleep accounts for their lack of enthusiasm and motivation to complete basic tasks on between four to seven days of the month^{viii}.

The study respondents seem aware their sleep isn't all that it should or could be



18%
of respondents rate their sleep as very good



24%
rate their sleep as fairly bad



7%
say their sleep is very bad, rising to 10% of 18-24 year-olds

13% of women rate their sleep as very good, compared to 23% of men.

28% of women rate their sleep as fairly bad, compared to 20% of men.

There's little to choose between the sexes when it comes to very bad sleep: 7% of women, compared to 6% of men rate their sleep as very bad.

And so to Bed

The average number of hours spent in bed sleeping has changed little since the previous study at just six hours^{ix}. Interestingly, the average number of hours spent in bed both awake and sleeping is 7.7 hours^x. Women spend marginally longer in bed than men, 7.9 hours, compared to 7.4 hours.

Typically, most study respondents go to bed during the late evening - after 9pm (75%). 14% turn in early – before 9pm (14%)

Just under half (41%) of people routinely share their bed with someone else, rising to 49% of 25-34 year-olds and 35-44 year-olds respectively.

24% of respondents in all three countries have pets that routinely share their bed. Pets are much more likely to share a bed with an American owner (31%) than a Brit (19%), or even an Australian (22%).

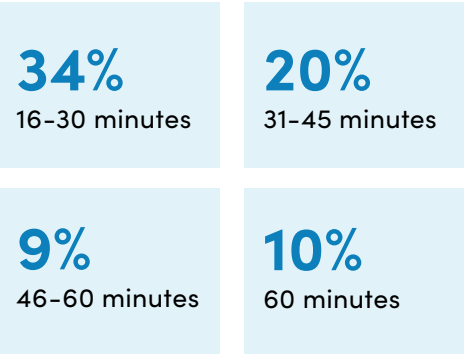


Aside from issues affecting sleep raised in our survey, smartphones and other tech, such as tablets and laptops are also proved to interfere with quality sleep: The light emitted from screens can inhibit the body's ability to release the sleep hormone melatonin¹.

1.5 Studies suggest that using a screen for more than 1.5 hours can effect sleep

Many people have trouble nodding off^{xi}.

Average time it takes people to fall asleep



Sleep Solutions

In a bid to improve the quality of their sleep study respondents have tried many, many solutions^{xiii} ranging from using a weighted blanket to wearing an eye mask, cutting back on caffeine, and cutting back on fluid intake near bedtime. While some methods were more successful than others, not everything works for everyone.

Top 10 Changes

Increasing regular exercise

44% Tried & it helped
15% Tried & it didn't help
40% Never tried

Changing room temp or humidity

43% Tried & it helped
13% Tried & it didn't help
44% Never tried

Reading near bedtime

41% Tried & it helped
16% Tried & it didn't help
43% Never tried

Decreasing caffeine

35% Tried & it helped
16% Tried & it didn't help
43% Never tried

Changing the angle of the bed or number of pillows

33% Tried & it helped
16% Tried & it didn't help
51% Never tried

Sleeping alone or in a separate room

31% Tried & it helped
17% Tried & it didn't help
50% Never tried

Decreasing fluids near bedtime

32% Tried & it helped
18% Tried & it didn't help
50% Never tried

Changing bedtime or sleep schedule

31% Tried & it helped
18% Tried & it didn't help
51% Never tried

Not using screens before bed

28% Tried & it helped
19% Tried & it didn't help
51% Never tried

Changing the type or firmness of the mattress

28% Tried & it helped
12% Tried & it didn't help
60% Never tried

Extreme Measures

46%

of study respondents Strongly Agree or Somewhat Agree they would do anything to stop their own or their partner's snoring^{xiii}

14%

Admit to looking into surgery options^{xiv} for themselves and/or their partner

18%

Have considered surgery, but not yet looked into it

Younger people are more likely to consider surgery; 25% of 18-24 year-olds have looked into it for themselves or their partner, compared to just 8% of 55 year-olds.

Double the number of men (19%) admit looking into surgery than the 10% of women.

Money Talks

People are prepared to throw money at snoring solutions, with those in the United States prepared to pay the most for a permanent solution.

Average spend on snoring solutions

\$45.26^{xv}



- 35% spend between \$1 and \$80 USD
- 19% spend \$81 USD or more

\$596.62 USD

Average amount US respondents are prepared to spend if it could put a stop to their own or their partner's snoring for good^{xvi}.

\$25.50^{xvii}



- 21% spend between \$1 and \$80 AUD
- 9% spend \$81 AUD or more

\$363.34 AUD

Average amount Australians are prepared to spend if it could put a stop to their own or their partner's snoring for good.

£33.20^{xviii}



- 27% spend between £1 and £80
- 8% spend £81 or more

£288.10

Brits are prepared to spend if it could put a stop to their own or their partner's snoring for good.

9% of Americans would be prepared to spend between \$1,000 and \$10,000 to cure their own/their partner's snoring compared to just 5% of Australians and 2% of Brits.

Health & Emotional Wellbeing



We've already seen that mental or emotional distress, sadness or worrying disturbs the sleep of nearly a third (31%) of all respondents. It affects nearly double the number of women than men (39% vs 23%).

Earlier in the report we pointed to the link between good quality, plentiful sleep and emotional wellbeing, and for this report we also asked respondents a little more about their mental health^{xix}.

Nearly half (46%) of respondents have a depression and/or anxiety disorder diagnosis, rising to 54% of American respondents and 52% of Australians and falling to 31% of people in the UK.

Depression and/or anxiety disproportionately affects younger people. 57% of 18–24 year-olds say they have a diagnosis for one or both, followed by 56% of 25–34 year-olds. This falls to 30% of over 65s.



52% and 46% of people in the UK and Australia respectively feel embarrassed by their snoring.

14% say it impacts their confidence and 8% report it affects their mental health^{iv}.

THE WORLD HEALTH ORGANISATION (WHO) REPORTS THAT COVID-19 TRIGGERED A 25% INCREASE IN ANXIETY AND DEPRESSION WORLDWIDE. IT'S GLOBAL BURDEN OF DISEASE STUDY SHOWS THAT THE PANDEMIC HAS AFFECTED THE MENTAL HEALTH OF YOUNG PEOPLE, PUTTING THEM DISPROPORTIONATELY AT RISK OF SUICIDE AND SELF-HARM.

Source: WHO

The 2022 Annual Global Sleep & Snoring Report also found a lack of sleep was responsible for a wide range of emotional issues, including causing people to be snappy or argumentative with other people (47%)^{xx}.

Snoring and a lack of sleep have a detrimental effect on emotional health and relationships, causing frequent arguments between couples/families and housemates.

22%

of Australians argue about snoring three or more times per month

29%

of Brits argue about snoring three or more times per month

20%

of Americans argue about snoring three or more times per month^{xxi}

A Weighty Issue

The study also confirms what health professionals tell us about the relationship between snoring and our weight: **If you are overweight you are MUCH more likely to snore^{xxii}.**

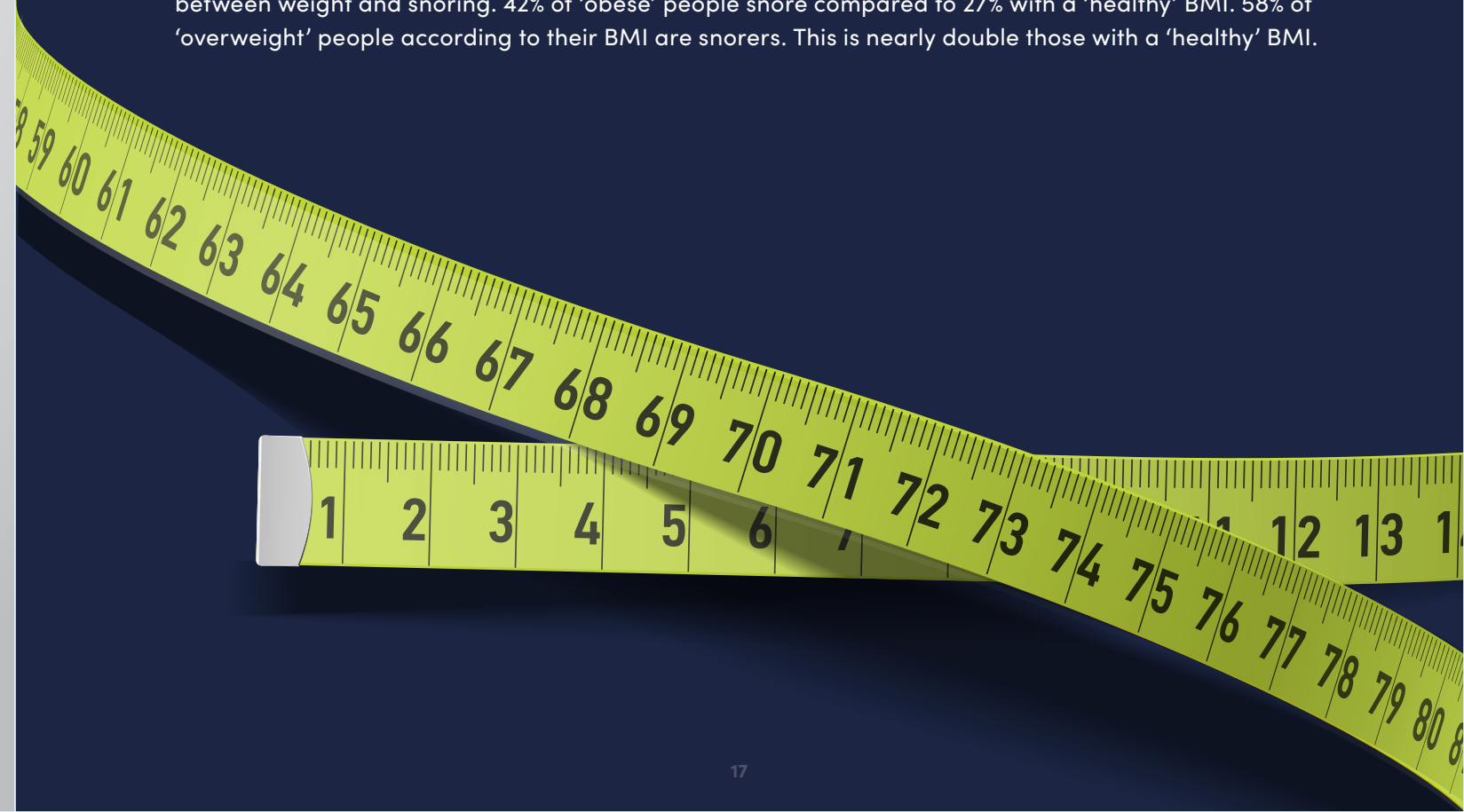
Men are more likely to snore if their neck measures more than 17 inches; for women it's 16 inches^{xxiii}.

Weight by country

In America and Australia: 'Obese' people are nearly twice as likely to be snorers (57%) than those who are a healthy weight (29%) according to their BMI.

It's a similar story in both countries for those people who are classed as 'overweight' according to their BMI: 40% of overweight respondents admit to snoring.

The percentages are a little different in the UK, but nevertheless demonstrate the direct relationship between weight and snoring. 42% of 'obese' people snore compared to 27% with a 'healthy' BMI. 58% of 'overweight' people according to their BMI are snorers. This is nearly double those with a 'healthy' BMI.



To Drink or Not to Drink?

Alcohol is not the friend of snorers. Health professionals advise snorers to cut back on alcohol^{xxiv} and the survey results bear that out



Desperate Times

There's a long and diverse list of things people have tried in a bid to stop themselves or their partner snoring.

People try two and three different methods or 'hacks' on average. Men tend to try more hacks (3.1) than women (2.2).

The older the snorer, the less likely they are to try to stop snoring: 39% haven't tried any hacks, rising to 45% of 55-64 year-olds.

For the 61% who have tried to stop snoring, the top 'hacks' are:

- Avoiding alcohol before bed or completely – 21%
- Using extra pillows – 18%
- Drinking more water – 13%
- Taking a hot shower or bath before bed – 12%
- Having a shower before bed – 11%



Curse or Cure?

Snorers invariably try to stop, or at least limit, their snoring. For some, finding a solution to their night-time noises becomes an obsession.

34% turn to the internet for advice

27% look to health professionals

21% ask friends and family for advice

11% turn to TV shows and books respectively

The internet was, not surprisingly, most popular amongst young and middle-aged respondents:

- 47% of 18-24 year-olds
- 46% of 25-34 year-olds
- 39% of 35-44 year-olds
- 20% of the over-65s turn to the web for solutions



FACT: Nearly 1 in 4 (23%) of adults who have trouble sleeping attribute it to snoring^{iv}.

Survey commissioned by Mute Snoring and executed in partnership with WebMD and One Poll, with a sample of 6000 adults in Dec 2022.

The most effective 'hacks' tried globally^{xxv}

Drinking more water worked for **8%** of the people who tried it



Using extra pillows worked for **14%** of people who tried this

Quack or Hack?



Avoiding alcohol worked for **8%** of those who tried it

Taking a hot bath or shower before bed worked for **8%** of people who tried it



In their desperation, some people threw common sense out of the window, trying a host of extreme solutions

Shock wrist bands



Botox injections in the jaw



Hitting & kicking their partner



Divorce



These results tie in with last year's research^{xxvi} that found that nudging, kicking and elbowing partners were popular ways of stopping a partner snoring.

31% of self-confessed snorers report that they or their partner had taken action in a desperate bid to get away from the noise^{xxvii}.

In this year's study, fewer than a third (27%) of survey respondents believed any snoring 'hacks' had worked.

27% of respondents said they'd sought medical advice either for their own or their partners snoring.

62% of survey respondents say they Strongly Agree or Somewhat Agree^{xxviii} they are resigned to their own or their partner's snoring.

When the hacks don't work

Sadly, for many people, 'hacks' just aren't enough to solve the snoring problem and they are pushed to take more drastic action^{xxix}:

36% have slept in separate bedrooms, compared to just 24% in 2022

18% have taken a sleeping tablet

9% have ended a relationship

For both young and old respondents, snoring can be a relationship breaker:

- 14% of 18-24 year-olds and 13% of over-65s have ended a relationship because of snoring^{xxx}

Women are more forgiving of snorers than men; just 6% have ended a relationship because of snoring, compared to 12% of men.

FACT:

Just 11% of respondents had tried a nasal dilator to help them stop snoring.

Nasal breathing is much more preferable to mouth breathing during sleep:

- Offers better oxygenation and carbon dioxide levels*
- Increases circulation*
- Air is humidified before it reaches the lungs*
- Slows the breathing rate and improves lung volumes*

Dilators are proven to help snorers with difficulties breathing due to nasal obstruction, congestion or narrow airways.

Mute is made from soft, medical-grade polymers. It sits comfortably inside the nostrils to gently (stent) wider the nasal passage to improve airflow during sleep throughout the night.

*Swift et al. 1988 Lancet 1: 73-75)

This, our second **Global Snoring & Sleep Report** confirms that despite comprehensive understanding of the role that sleep plays in our physical and emotional wellbeing, we're still not getting enough.



In fact, when we compare this year's report with last year's, it very much looks like the situation is getting worse rather than better – despite the wealth of knowledge about how much sleep we should have and all the methods and devices to help us, which we all have access to.

We know that people are going to bed later and they're typically getting less sleep each night. Rather worryingly, 13% of the people we surveyed say they get less than four hours sleep each night – a significant jump from the 6% of people who told us that last year.

People are also waking consistently in the middle of the night for almost half the month, and as a result many recognize their sleep isn't all it should be – in fact a quarter (24%) rate their sleep as fairly bad, while 7% say it's very bad.

A third (33%) of people report they have a diagnosed condition that may affect their sleep. These range from Insomnia to Restless Leg Syndrome and Obstructive Sleep Apnoea. Perhaps more shockingly, our research revealed that nearly half (46%) of respondents have a depression and/or anxiety disorder diagnosis. Even more shockingly, this percentage rises to 57% of 18-24 year-olds. The high numbers make us wonder; is our poor emotional wellbeing driven by a lack of sleep or is our lack of sleep driving our poor emotional health?

Our study does underline that people are trying desperately hard to improve their sleep. They're altering the temperature of their bedrooms, decreasing their caffeine and alcohol intakes and putting down their smartphones and tablets before bedtime. Some of these solutions work better than others and our report goes into detail about the top performing solutions.

Snoring is, of course, a significant issue for more than half of the people taking part in our report. 57% are affected by snoring – their own or someone else's. Some are so disturbed by it, they've explored surgery – either for themselves or a partner. And in their bid to find a cure, they're also spending significant amounts of money...and would spend even more if they could find a permanent solution.

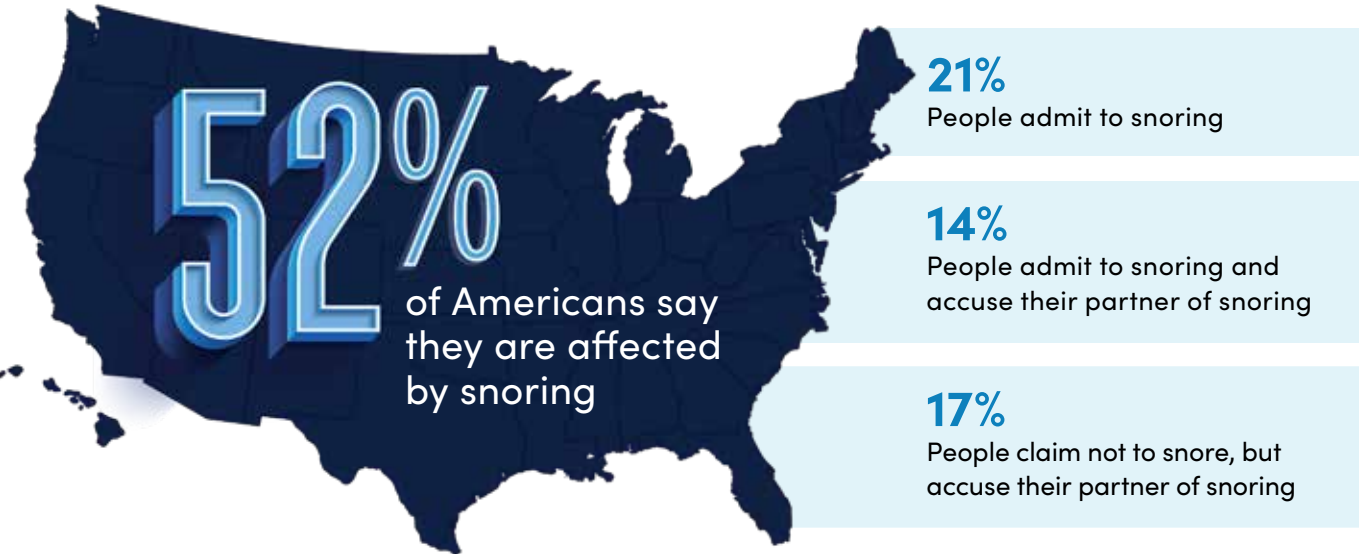
The report also reveals people that drink more and those who weigh more are more likely to snore – something health professionals have warned us about for years. The statistics underline how lifestyles beyond the bedroom can have such a heavy influence on the quality of our sleep.

And it seems that people are prepared to pull out all the stops in a bid to turn down the volume. Extra pillows, avoiding alcohol, even extreme measures such as electric shock wristbands and Botox injections into the jaw!

As surprising as some of those 'hacks' are, we were even more surprised that so few snorers (11%) have tried proven devices for snoring, such as nasal dilators. This is particularly concerning when 36% say snoring has forced them into a separate bedroom from their partner, and nearly 20% have resorted to sleeping pills.

We've also broken down our research by country, and we'd urge you to take a deep dive into the statistics to see for yourself how the three territories stack up against each other, where the key differences are and, of course, the similarities.

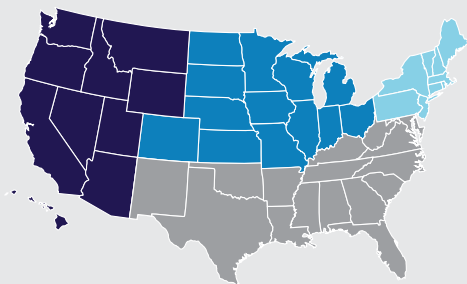
Who Snores in the States?



More men admit they snore (36%) than women (33%). Conversely, more women claim not to snore but accuse their partner of snoring (20%), compared to 15% of men.

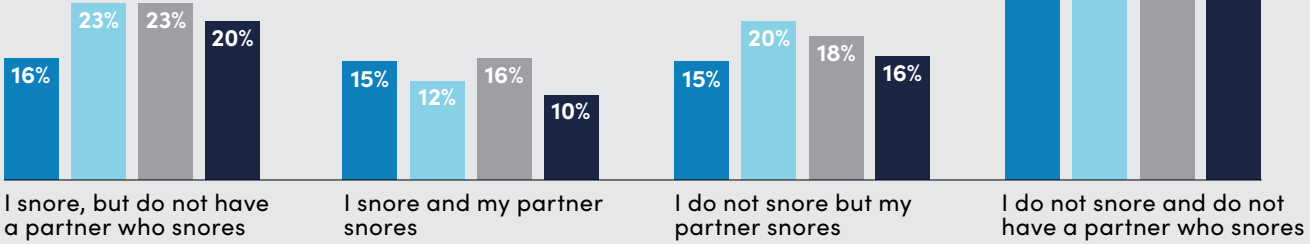
Age is also a factor in snoring. The study shows that older respondents were more likely to snore and accuse their partner of snoring.

Snoring in the USA by age.				
AGE	I snore, but do not have a partner who snores	I snore and my partner snores	I do not snore but my partner snores	I do not snore and do not have a partner who snores
18-24	15%	7%	17%	61%
25-34	19%	11%	18%	52%
35-44	18%	9%	19%	54%
45-54	23%	18%	18%	41%
55-64	29%	19%	18%	34%
65+	21%	16%	14%	49%
USA Total	21%	14%	17%	48%



Regional snoring

Northeast America and the Southern states have the biggest percentage of people who admit to snoring and/or accuse their partner of snoring, 55% and 57% respectively.



- Midwest:** Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
- Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
- South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Mississippi, Maryland, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
- West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

What a Difference Weight Makes

15% of American respondents are diagnosed as obese, so the study also took a closer look at the snoring breakdown in America, according to respondents' BMI scores. Of the people whose BMI classified them as 'obese', **57%** were self-confessed snorers, compared to just **29%** of people with a 'healthy' weight.

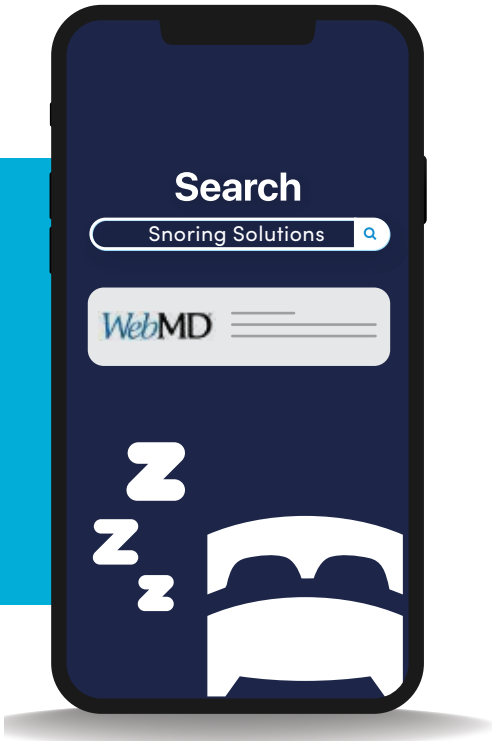
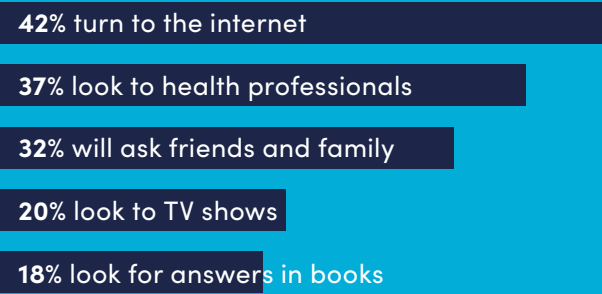
	I snore, but do not have a partner who snores	I snore & my partner snores	I do not snore but my partner snores	I do not snore & do not have a partner who snores
Obese	35%	22%	14%	29%
Overweight	22%	18%	18%	42%
Healthy	18%	11%	18%	53%
Underweight	12%	7%	20%	61%
USA Total	21%	14%	17%	48%





Snoring Solves

Americans follow the global trend when it comes to where they seek help for snoring



Hack or Quack?

A little over a quarter (28%) of American respondents have never tried a hack to stop snoring – significantly less than the 39% of global respondents. This rises to 36% of 55–64 year-olds but falls to 18% of 25–34 year-olds.

For the 72% of all Americans who have tried various tactics, here’s the top 10, and the percentage of people who found them effective

- 1. Using extra pillows – 24% [worked for 14%]
- 2. Nasal dilator – 20% [9%]
- 3. A hot shower or bath before bed – 17% [10%]
- 4. Drinking more water 17% [8]
- 5. Using a room humidifier – 17% [8%]
- 6. Have a shower before bed – 16% [8%]
- 7. Sleeping sitting up – 16% [10%]
- 8. Sleeping with your head at the end of the bed – 16% [9%]
- 9. Avoiding alcohol completely – not just before bed – 15% [9%]
- 10. Avoiding alcohol before bed – 15% [7%]

The average number of hacks tried across all America is 4.2. People in the Northeast have tried the most at 5.2 and those living in the West, the least at 3.8.

Extreme measures

For many desperate Americans, the snoring is a little too much.

53% Strongly Agree or Somewhat Agree they would do anything to stop their own or their partner’s snoring, rising to 59% of respondents in the West

40% of all US respondents have sought medical advice for themselves and/or their partner.

- 23% have considered and looked into surgery for themselves and/or their partner
- 20% have considered surgery but not yet looked into it

Some Americans affected by snoring spend hundreds of dollars to stop either their own or their partner’s snoring.

Looking at the regions, the highest average spend on snoring solutions is US\$53 in Northeast America. The lowest is US\$34.20 in the Midwest.

Northeast respondents would be prepared to spend the most – US\$678.50, if they could put a stop to their own or their partner’s snoring for good, compared to the US\$536 of Americans living in the Southern states.



The average spend across the entire USA is **US\$45.26** but Americans are prepared to spend **US\$596.62** on average to put a stop to their own or their partner’s snoring for good.

Last Resort

Despite the major efforts and money that so many Americans put into trying to stop themselves or their partner snoring, night time is still so problematic that they have to resort to drastic action.

	Slept in separate bedrooms	Taken a sleeping tablet	Ended a relationship
Midwest	36%	19%	11%
Northeast	42%	27%	17%
South	37%	33%	17%
West	40%	28%	15%
USA Total	38%	28%	15%

Midwest:
Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

Northeast:
Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

South:
Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Mississippi, Maryland, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

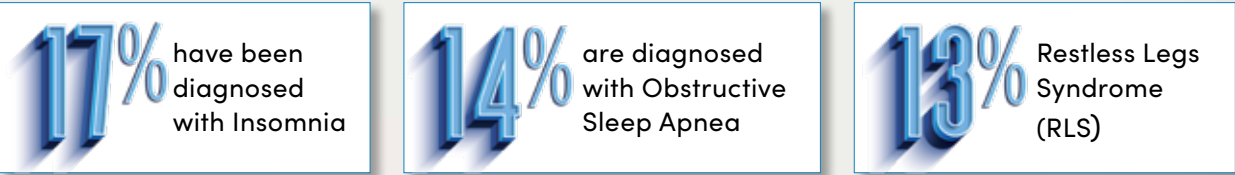
West:
Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Sleep Across the USA

US respondents (71%) typically go to bed between 9:01pm-5am – reflecting the typical time across all three countries.

While most are happy with the quality of their sleep, a third (27%) rate it as bad or very bad.

32% of US women rate their sleep quality as bad or very bad compared to 22% of men.



Bed mates

60% of Americans routinely share a bed with someone else and/or pets

- 44% share with somebody else
- 31% share with a pet/pets. This rises to 35% of women, compared to just 26% of US men

The average night’s sleep for Americans during the month prior to the study was just 5.75 hours each night compared to the 7.61 hours in their bed per night on average, sleeping and awake.

Night watch

In the month before the study, US adults woke in the middle of the night 8.85 times on average

- 83% woke prior to their scheduled or intended wake time and couldn’t get back to sleep 7.31 times on average per month
- 80% were unable to fall asleep within 30 minutes 7.01 times on average per month

Typical reasons for waking in the middle of the night include:

- Getting up to use the bathroom (46%)
- Having mental/emotional distress (34%)
- Feeling too hot, having hot flashes or having night sweats, even when the room is cool (29%)

US SALES CONTACT
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Sleep deprived

This lack of sleep resulted in 54% having trouble staying awake while driving, eating meals or engaging in social activity at night on average 4 times in the month.

US adults directly attribute their poor sleep quality to a lack of enthusiasm/motivation, which they say hindered their ability to complete ordinary tasks on an average 5.55 days in the month prior to the study

- 29% say their ability was hindered on 1-3 days per month
- 27% suffered this on 4-7 days per month
- 23% experienced this on 8 days or more per month



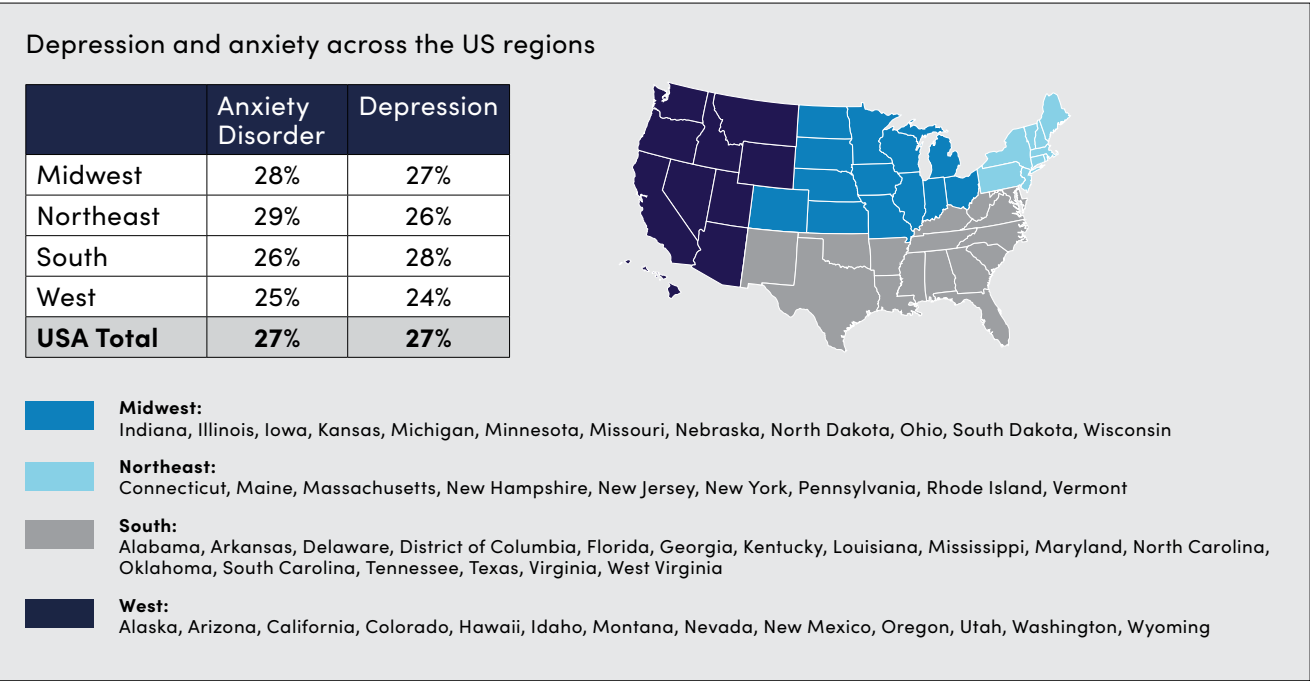
Feeling low

We’ve already shown that 34% of Americans say they wake in the night due to emotional/mental distress, so we asked them a little more about their mental health.

54% of American respondents have a depression and/or anxiety disorder diagnosis. This rises to 58% of US women and falls to 48% of men.

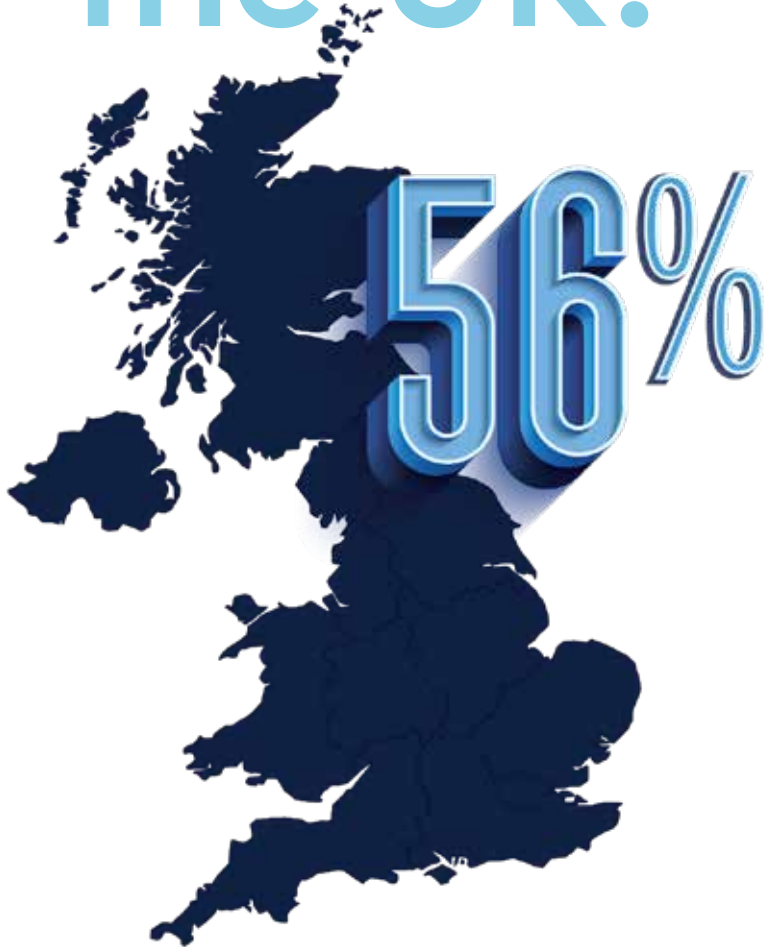
Depression and/or anxiety affects younger age groups more than others

60% of 18–24 year-olds say they have a diagnosis for one or both, followed by 61% of 25–34 year-olds. This falls to 20% of over 65s.





Who Snores in the UK?



56% of Brits say they are affected by snoring

14%

People admit to snoring

21%

People admit to snoring and accuse their partner of snoring

21%

People claim not to snore, but accuse their partner of snoring

More men admit they snore (39%) than women (32%). Conversely, more women claim not to snore but accuse their partner of snoring (27%), compared to 14% of men. Age is also a factor in snoring.

Snoring in the UK by age.

AGE	I snore, but do not have a partner who snores %	I snore and my partner snores %	I do not snore but my partner snores %	I do not snore and do not have a partner who snores %
18-24	7	3	22	68
25-34	11	13	19	56
35-44	18	19	22	41
45-54	14	24	27	35
55-64	15	31	20	33
65+	13	28	18	41
UK Total	14	21	21	44

The UK’s biggest snorers by region

People in the South West of England are the most affected by snoring – their own and/or their partner’s, or both (65%). People living in Northern Ireland are the least affected by their own and/or their partner’s snoring (39%)

	I snore, but do not have a partner who snores %	I snore and my partner snores %	I do not snore but my partner snores %	I do not snore and do not have a partner who snores %
East Midlands	16	26	21	36
East of England	16	19	20	45
London	8	17	23	53
North East	15	16	33	37
North West	12	25	19	44
Northern Ireland	12	18	9	61
Scotland	12	19	23	46
South East	16	25	14	45
South West	17	23	25	35
Wales	14	25	24	35
West Midlands	12	20	24	44
Yorkshire & Humber	14	16	24	46
UK Total	14	21	21	44

The link between obesity and snoring

7% of UK respondents are diagnosed as obese – comparatively fewer than in other countries, however the research still discovered a statistical link between snoring and people whose BMI classified them as obese.

58% of people classified as ‘obese’ were self-confessed snorers, compared to just 27% of people of a ‘healthy’ weight.

	I snore, but do not have a partner who snores %	I snore & my partner snores %	I do not snore but my partner snores %	I do not snore & do not have a partner who snores %
Obese	27	31	19	23
Overweight	13	29	24	34
Healthy	11	16	22	52
Underweight	12	11	20	57
UK Total	14	21	21	44





Snoring Solves

Brits are more likely to seek help from friends & family (18%) than health professionals (17%). 28% turn to the internet, but the majority (55%), don't seek help from anywhere in particular.



Hack or Quack?

46% of UK respondents have never tried a hack to stop snoring – significantly more than the 39% of global respondents.

For the Brits who have tried various tactics, here's the top 10, and the percentage of people who found them effective

- 1. Using extra pillows – 14% [worked for 11%]
- 2. Drinking more water – 10% [8%]
- 3. Nasal dilator – 10% [7%]
- 4. Nasal Spray – 9% [6%]
- 5. Avoiding alcohol before bed – 9% [9%]
- 6. Avoiding alcohol completely – 8% [8%]
- 7. Menthol chest rub – 8% [7%]
- 8. Hot shower/bath before bed – 7% [7%]
- 9. Sleeping sitting up – 7% [5%]
- 10. Sleeping the other way round – 7% [7%]

The average number of hacks tried across all the United Kingdom is 3.1. People in the London have tried the most at 5.1 and those living in the East of England, the least – just two.



Survey commissioned by Mute Snoring and executed in partnership with WebMD and One Poll, with a sample of 2000 UK adults in Dec 2022.

Extreme measures

45% of Brits Strongly Agree or Somewhat Agree they would do anything to stop their own or their partner's snoring , rising to 64% of respondents in London.

22% of all UK respondents have sought medical advice for themselves and/or their partner.

- 15% have considered and looked into surgery for themselves and/or their partner
- 14% have considered surgery but not yet looked into it

Brits spend on average £33 trying to stop their own or their partner's snoring each year.

Looking at the regions, the highest average spend on snoring solutions is £67 in London, the lowest is £19 in the South West and South East respectively.

Snorers and people affected by snoring living in the capital are prepared to spend the most – £648, compared to just £100 that those in the East of England are prepared to spend.



People in the UK are prepared to spend **£288** if it would stop the snoring for good.

Last Resort

Despite the major efforts and money that so many Brits put into trying to stop themselves or their partner snoring, night time is still so problematic they've taken drastic action.

	Slept in separate bedrooms %	Taken a sleeping tablet %	Ended a relationship %
East Midlands	28	7	5
East of England	30	6	7
London	53	39	25
North East	40	17	6
North West	41	12	21
Northern Ireland	50	14	5
Scotland	35	9	9
South East	31	9	5
South West	41	16	13
Wales	44	11	5
West Midlands	40	1	6
Yorkshire & Humber	49	15	12
UK Total	39	13	11



Sleep Across the UK

The average night’s sleep for people in the UK was just 5.7 hours each night, compared to 7.4 hours in their bed per night on average, sleeping and awake.

77% of Brits typically go to bed between 9:01pm–5am – broadly similar to the other countries.

While most are happy with the quality of their sleep, more than a third (38%) rate it as bad or very bad.

32% of UK women rate their sleep quality as bad or very bad compared to 28% of men.

29% of Brits have a diagnosis of something that could affect their sleep. The top three diagnoses are:

- 8% are diagnosed with Parasomnias, such as night terrors
- 7% with Circadian Rhythm Disorder
- 7% with Insomnia

Bed mates

50% of people in the UK routinely share a bed with someone else and/or their pets

- 40% share with somebody else
- 19% share with a pet/pets

Night watch

In the month before the study, UK adults woke in the middle of the night 9.3 times on average

- 79% woke prior to their scheduled or intended wake time and couldn’t get back to sleep 6.3 times on average per month
- 73% were unable to fall asleep within 30 minutes 6.2 times on average per month

Typical reasons for waking in the middle of the night include:

- Getting up to use the bathroom (44%)
- Having mental/emotional distress (24%)
- Disturbance by others or pets (24%)
- Snoring (13%)

UK/EU SALES CONTACT
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Sleep deprived

This lack of sleep resulted in 44% having trouble staying awake while driving, eating meals or engaging in social activity at night on average 2.9 times in the month.

UK adults directly attribute their poor sleep quality to a lack of enthusiasm/motivation, which they say hindered their ability to complete ordinary tasks on an average 4.9 days in the month prior to the study

- 29% say their ability was hindered on 1-3 days per month
- 22% suffered this on 4-7 days per month
- 20% experienced this on 8 days or more per month



Feeling low

24% of Brits say they wake in the night due to emotional/mental distress, so we asked them a little more about their mental health.

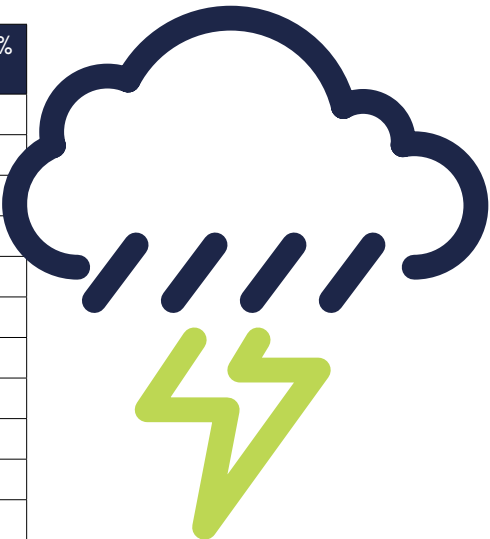
32% of UK respondents have a depression and/or anxiety disorder diagnosis. This rises to 37% of British women and falls to 26% of men.

Depression and/or anxiety affects younger age groups more than others – as in both the US and Australia.

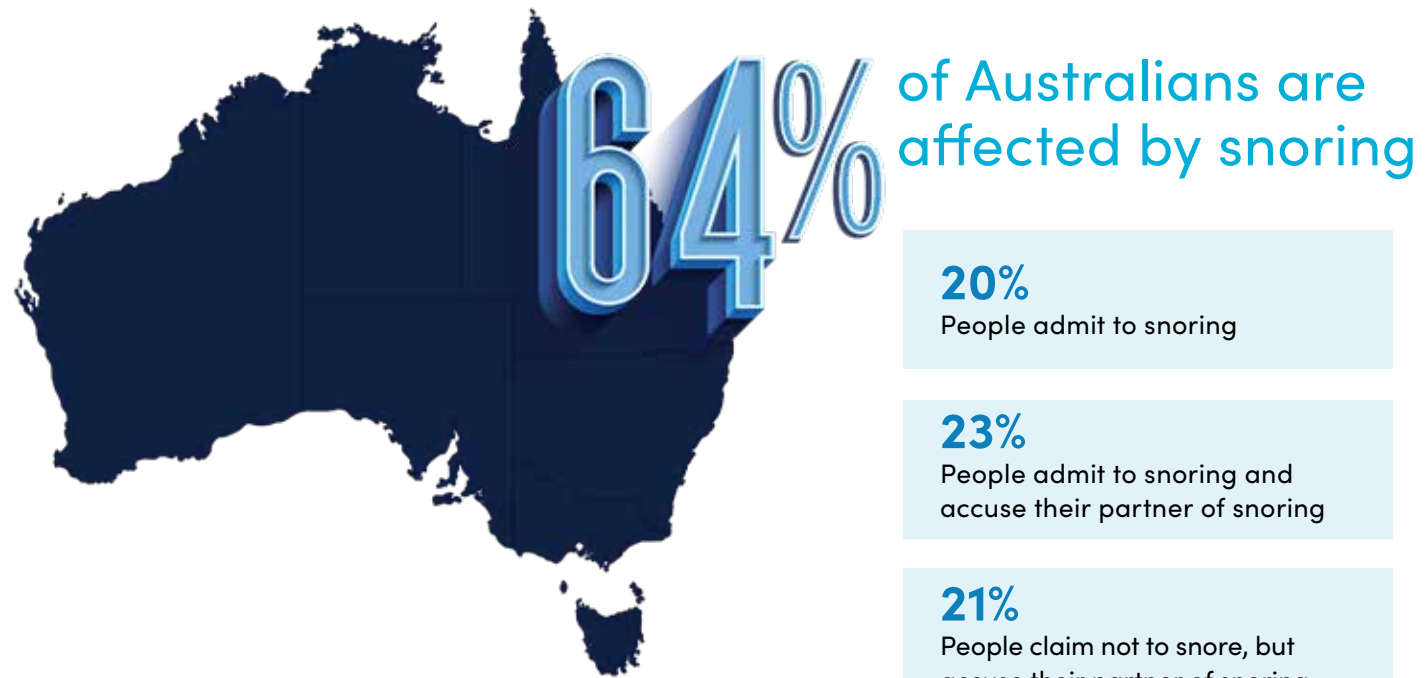
33% of 18–24 year-olds say they have a diagnosis for one or both, followed by 37% of 25–34 year-olds, falling to 24% of over 65s.

Depression and anxiety across the UK regions:

	Anxiety Disorder %	Depression %
East Midlands	16	18
East of England	16	17
London	14	19
North East	11	22
North West	19	21
Northern Ireland	7	12
Scotland	7	11
South East	12	18
South West	21	19
Wales	13	13
West Midlands	8	16
Yorkshire & Humberside	16	22
UK Total	14	18



Who Snores in Australia?



More men admit they snore (51%) than women (36%). Conversely, more women claim not to snore but accuse their partner of snoring (29%), compared to 12% of men. Age is also a factor in snoring.

Snoring by age

AGE	I snore, but do not have a partner who snores %	I snore and my partner snores %	I do not snore but my partner snores %	I do not snore and do not have a partner who snores %
18-24	13	10	26	52
25-34	14	21	23	33
35-44	23	21	23	34
45-54	24	24	17	35
55-64	25	28	16	31
65+	22	28	12	38
AUS Total	20	23	21	37

Australia's biggest snorers by region

66% of people living in Western Australia are affected by snoring – their own and/or their partner's, compared to the 45% living in the Australian Capital Territories.

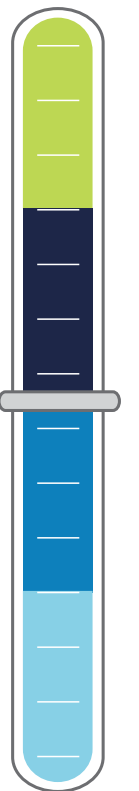
	I snore, but do not have a partner who snores %	I snore and my partner snores %	I do not snore but my partner snores %	I do not snore and do not have a partner who snores %
Australian Capital Territories	9	9	27	55
New South Wales	23	22	18	37
Northern Territory	19	13	31	38
Queensland	17	24	24	36
South Australia	20	18	24	38
Tasmania	28	22	13	37
Victoria	21	23	21	36
Western Australia	19	27	20	33
AUS Total	20	23	21	37

The link between obesity and snoring

11% of Australians are diagnosed as obese.

57% of people classified as 'obese' were self-confessed snorers, compared to just 27% of people with a 'healthy' weight.

	I snore, but do not have a partner who snores %	I snore & my partner snores %	I do not snore but my partner snores %	I do not snore & do not have a partner who snores %
Obese	25	32	16	26
Overweight	24	26	21	30
Healthy	14	13	24	49
Underweight	16	6	21	56
AUS Total	20	23	21	37



Snoring Solves

Australians are more likely to seek help from the internet to find a snoring solve (32%) than health professionals (29%). 15% turn to friends & family.



Hack or Quack?

42% of respondents have never tried a hack to stop snoring – significantly more than the 39% of global respondents.

For those who have tried various tactics, here’s the top 10, and the percentage of people who found them effective

1. Using extra pillows – 17% **[worked for 15%]**
2. Showering before bed – 12% **[8%]**
3. Drinking more water – 12% **[8%]**
4. Hot shower/bath before bed – 11% **[7%]**
5. Avoiding alcohol before bed – 10% **[7%]**
6. Avoiding alcohol completely – 8% **[5%]**
7. Sleeping sitting up – 7% **[5%]**
8. Exercising before bed – 6% **[5%]**
9. Menthol chest rub before bed – 6% **[4%]**
10. Sleeping the other way round – 6% **[5%]**

The average number of hacks tried across Australia is 7.5.



Extreme measures

40% of Australians Strongly Agree or Somewhat Agree they would do anything to stop their own or their partner’s snoring.

- 23% of all Australian respondents have sought medical advice for themselves and/or their partner.
- 8% have considered and looked into surgery for themselves and/or their partner
 - 20% have considered surgery but not yet looked into it

The average spend on trying to stop their own or their partner’s snoring across Australia each year is AUS\$25.50

Looking at the regions, the highest average spend on snoring solutions is AUS\$60 in the Australian Capital Territories, the lowest is AUS\$2 in the Northern Territory

Not surprisingly, snorers and people affected by snoring living in the Australian Capital Territories are prepared to spend the most – AUS\$1103, compared to the AUS\$£235 that those in Western Australia are prepared to spend.

Last Resort

The good news for snoring Australians is that they seem more tolerant of snoring than people in the US or the UK...just 1% say snoring has ended their relationship.

	Slept in separate bedrooms %	Taken a sleeping tablet %	Ended a relationship%
Australian Capital Territories	20	10	0
New South Wales	30	12	2
Northern Territory	20	20	0
Queensland	35	13	2
South Australia	29	10	0
Tasmania	41	10	0
Victoria	35	17	1
Western Australia	31	12	2
AUS Total	32	13	1





Sleep Across Australia

The average night’s sleep for people Australian is 6.5 hours each night, compared to the 8 hours they spend in their bed per night on average, sleeping and awake.

78% typically go to bed between 9:01pm-5am – broadly similar to the other countries.

Most Australians are happy with the quality of their sleep, but more than a third (36%) rate it as bad or very bad.

41% of Australian women rate their sleep quality as bad or very bad compared to 29% of men.

23% are diagnosed with one or more conditions that could affect their sleep.

The top three diagnoses are:

- Insomnia 9%
- Restless Leg Syndrome 7%
- Obstructive Sleep Apnea 6%

Bed mates

60% of people in Australia routinely share a bed with someone else and/or their pets

- 38% share with somebody else
- 22% share with a pet/pets

Night watch

In the month before the study, Australia adults woke in the middle of the night 10 times on average

- 80% woke prior to their scheduled or intended wake time and couldn’t get back to sleep 7.2 times on average per month
- 75% were unable to fall asleep within 30 minutes 7.4 times on average per month

Typical reasons for waking in the middle of the night include:

- Getting up to use the bathroom (53%)
- Having mental/emotional distress (36%)
- Disturbance by others or pets (29%)
- Snoring (13%)

APAC SALES CONTACT
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Sleep deprived

This lack of sleep resulted in 40% having trouble staying awake while driving, eating meals or engaging in social activity at night on average 2.7 times in the month.

Australian adults directly attribute their poor sleep quality to a lack of enthusiasm/motivation, which they say hindered their ability to complete ordinary tasks on an average 6.3 days in the month prior to the study

- 25% say their ability was hindered on 1-3 days per month
- 21% suffered this on 4-7 days per month
- 30% experienced this on 8 days or more per month



Feeling low

36% of Australians say they wake in the night due to emotional/mental distress, so we asked them a little more about their mental health.

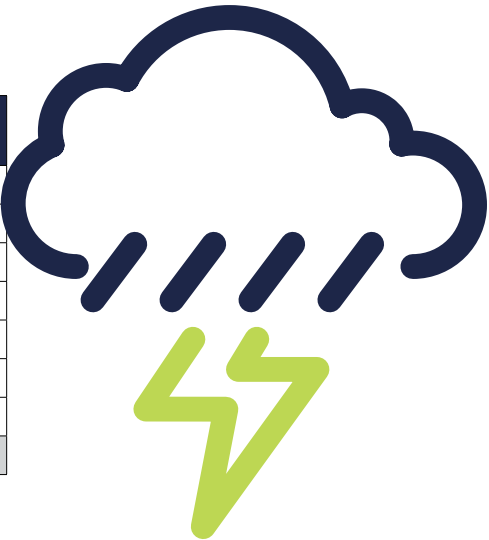
52% of Aus respondents have a depression and/or anxiety disorder diagnosis. This rises to 66% of women, but falls to 37% of men.

While results across our global study show that depression and/or anxiety affects younger age groups more than others – the Australian result is particular shocking.

75% of 18–24 year-olds say they have a diagnosis for depression and/or anxiety disorder, followed by 66% of 25–34 year-olds and falling to 27% of over 65s.

Depression and anxiety across the Australian regions

	Anxiety Disorder %	Depression %
Australian Capital Territories	23	9
New South Wales	25	26
Northern Territory	31	19
Queensland	25	29
South Australia	26	26
Tasmania	26	30
Western Australia	26	28
AUS Total	25	27



R H I N O M E D

Rhinomed is an airway technology company that seeks to radically improve the way you breathe, sleep, maintain your health and take medication. Rhinomed’s patented nasal technology leverages the physiology of the nose to optimise our breathing which is essential to restful sleep and to maintaining good health.

Rhinomed’s vision for the future is to enable medications to be administered through the nose with the aim of improving the efficiency and effectiveness of the therapies, while seeking a reduction in side effects for patients. Rhinomed continues to invest in furthering our knowledge of the role the nose, the upper airways and the olfactory system plays in maintaining health and wellness.

Rhinomed’s technology platform is protected by a family of over 60 patents globally. Rhinomed is listed on the Australian Stock Exchange (ASX: RNO) and headquartered in Melbourne, Australia.

mu:te

Mute is a nasal dilator that sits comfortably inside the nose, increasing airflow, improving breathing and reducing snoring. The winner of a 2021 Health Sleep Award, Mute improved breathing for 78% of users in a product trial and reduced snoring for 75% of users^{xxvi}. Mute is available in three sizes and can be adjusted to each nostril so it fits noses of virtually any size or shape. Mute is available online at www.mutesnoring.com.

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i <https://healthsleep.med.harvard.edu/healthy/matters/consequences>

ii <https://healthsleep.med.harvard.edu/need-sleep/what-can-you-do/assess-needs>

iii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Which of the following best describes you?

iv The 2022 Annual Global Sleep & Snoring Report

v One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Which of the following has interfered with your sleep quality in the past month? [select all that apply]

vi One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Have you ever been diagnosed by a healthcare professional with any of the following conditions [select all that apply]

vii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: In regard to how you sleep, how many nights in the past month would you say...? [select one from each row]

viii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: In regard to how your sleep, how many days in the past month would you say your lack of enthusiasm/motivation hinders your ability to complete ordinary tasks? [select one]

ix One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During the past month, on average, how many hours did you spend in your bed per night in total (sleeping and non-sleeping)

x One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During the past month, on average, how many hours did you actually spend in your bed sleeping per night?

xi One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During the past month, on average, how many minutes has it taken you to fall asleep per night?

xii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: At any time in the past, how much has each of the following helped you to sleep better? [select one in each row]

xiii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: To what extent do you agree or disagree with the following statements?

xiv One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Would you ever consider surgery in a bid to stop you or your partner snoring?

xv One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During an average year, how much do you estimate you spend on different items, medicines etc, to try to stop your own and/or your partner’s snoring?

xvi One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: How much would you be prepared to spend if it meant you could put a stop to your own or your partner’s snoring for good?

xvii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During an average year, how much do you estimate you spend on different items, medicines etc, to try to stop your own and/or your partner’s snoring?

xviii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: During an average year, how much do you estimate you spend on different items, medicines etc, to try to stop your own and/or your partner’s snoring?

xix One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Have you ever been diagnosed by a doctor with any of the following conditions [select all that apply]

xx One Poll Study completed February 2022 in Australia/UK/USA. Question: If yes, how has it impacted your day-to-day life? [Tick all that apply]

xxi The 2022 Annual Global Sleep & Snoring Report

xxii <https://www.nhs.uk/conditions/snoring/>

xxiii <https://www.webmd.com/sleep-disorders/ss/slideshow-stop-snoring>

xxiv <https://www.nhs.uk/conditions/snoring/>

xxv One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Of the options you have tried, which do you consider to be the most successful at helping you or your partner to stop snoring [select five]

xxvi The 2022 Annual Global Sleep & Snoring Report

xxvii The 2022 Annual Global Sleep & Snoring Report

xxviii One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: To what extent do you agree or disagree with the following statements?

xxix One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Have you ever done any of the following things due to your own or your partner’s snoring [select all that apply]

xxx One Poll Sleep & Snoring Study completed November 29–December 9th 2022. UK/US/AUS. Question: Have you ever done any of the following things due to your own or your partner’s snoring [select all that apply]

