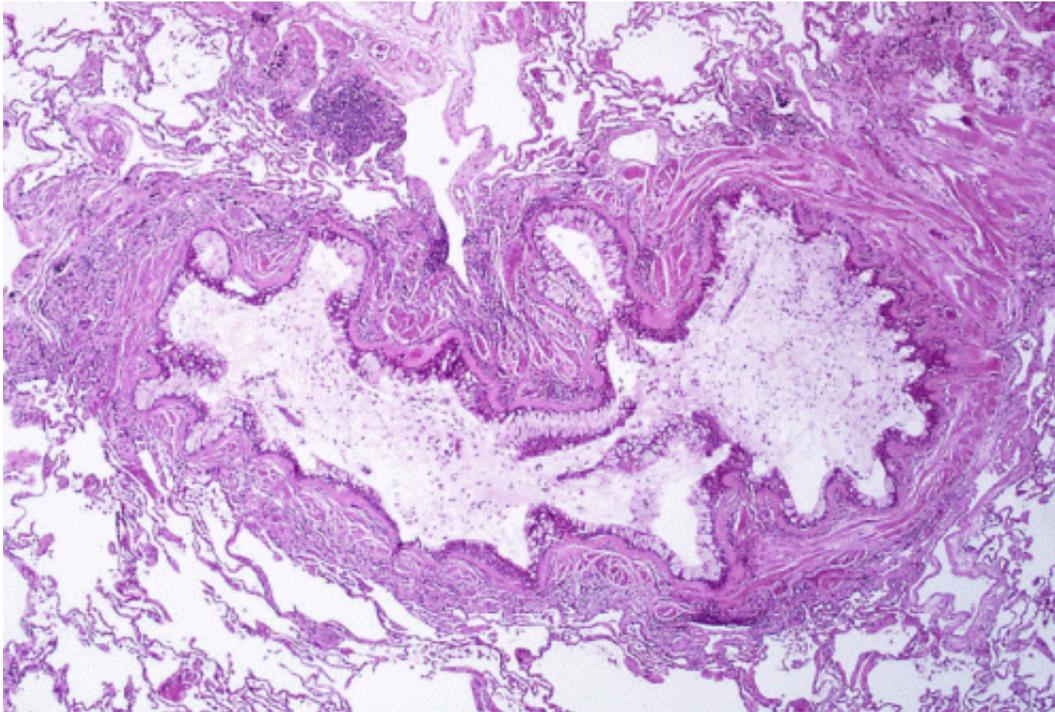


# Insomnia linked to higher risk of developing asthma

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Obstruction of the lumen of a bronchiole by mucoid exudate, goblet cell metaplasia, and epithelial basement membrane thickening in a person with asthma. Credit: Yale Rosen/Wikipedia/CC BY-SA 2.0

People experiencing insomnia symptoms have a higher risk of developing asthma, according to a new study published in the *European Respiratory Journal*.

Asthma affects approximately 300 million people worldwide, with major risk factors including smoking, obesity and air pollution. More recently, symptoms of depression and anxiety have been associated with a risk of developing asthma in adulthood.

Sleep researcher and last author of the study, Dr Linn Beate Strand, from the Department of Public Health and General Practice, Norwegian University of Science and Technology (NTNU), explained: "Insomnia, defined as having difficulties initiating or maintaining sleep, or having poor sleep quality, is common among [asthma patients](#), but whether [insomnia](#) patients have a higher risk of developing asthma at a later stage has not been thoroughly investigated."

Using data from the Nord-Trøndelag Health Study (HUNT), an ongoing health survey of the adult population of the county of Nord-Trøndelag, Norway, researchers investigated the association between insomnia and the risk of developing asthma. The researchers used statistical analysis to assess the risk of asthma among 17,927 participants aged between 20 and 65 years. Participants were asked to report sleep initiation problems, sleep maintenance problems and poor quality sleep. They also reported any [asthma symptoms](#) at the start of the study and at the end of the study.

The results showed that those participants reporting difficulty falling asleep "often" or "almost every night" during the last month had a 65% and 108% increased risk of developing asthma over the following 11 years, respectively.

Similarly, those who reported waking too early without being able to go back to sleep "often" or "almost every night" had a 92% and 36% increased risk of developing asthma. For people who reported poor quality [sleep](#) more than once a week, the risk of developing asthma increased by 94%.

When the researchers looked at patients with [chronic insomnia](#), i.e. they had reported one or more insomnia symptom at the start of the study and ten years earlier, they found that those with chronic insomnia had more than 3 times the risk of developing asthma compared to those without chronic insomnia.

Dr Ben Brumpton, lead author of the study, from the HUNT Research Centre, Department of Public Health and General Practice, NTNU and Department of Thoracic and Occupational Medicine, Trondheim University Hospital, commented: "A key finding in our study is that those people with chronic insomnia had more than three times the risk of developing asthma, compared to those without chronic insomnia, which suggests that any changes in the body due to insomnia may accumulate and result in more severe harmful effects on the airways."

Dr Linn Beate Strand added: "As insomnia is a manageable condition, an increased focus on the adverse health effects of insomnia could be helpful in the prevention of [asthma](#). Further prospective studies are required to confirm the findings of our study."

**More information:** Prospective study of insomnia and incident asthma in adults: The HUNT study, *European Respiratory Journal*, [DOI: 10.1183/13993003.01327-2016](#)

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