

A photograph of a middle-aged man with a grey beard sleeping peacefully in a bed with white pillows and a white blanket. A red balloon is tied to a tag that says 'British Lung Foundation'. A purple tag with the title 'Obstructive sleep apnoea' is also attached to the balloon's string.

Obstructive sleep apnoea

British
Lung
Foundation

www.blf.org.uk/osa

A guide for GPs

The problem

Obstructive sleep apnoea (OSA) occurs when the muscles in the throat relax and cause an obstruction in the airway during sleep, which stops the person breathing ('apnoea'). In severe cases, more than 30 apnoeas occur an hour.

Core symptoms

The core symptoms can be remembered using the **Triple S**:

- **Snoring** when asleep
- **Stopping breathing** or struggling to breathe when asleep
- **Sleepiness** (excessive) when awake

Who is at risk of OSA?

OSA affects men, women and children. Patients most at risk include middle-aged, overweight men, post-menopausal women, and children with enlarged tonsils. Other physical conditions that increase risk include macroglossia, retrognathia and anything else that restricts the upper airway.

Prevalence

OSA is a common, treatable condition, but up to 80 per cent of people with OSA have not yet been diagnosed.

Up to 4 per cent of middle-aged men and 2 per cent of middle-aged women in the UK have OSA. It also affects 3 per cent of children in the general population; and as many as 50 per

cent of children who are obese or have specific disabilities or other health conditions. Older people are even more at risk, with 15 to 20 per cent of those aged 70 and over estimated to have the condition.

This means that OSA is more common than severe asthma, and the numbers affected could be rising due to more people being overweight.

Associated health risks

Untreated, OSA may increase the risk of hypertension, stroke and cardiac arrest. The condition is also associated with Type 2 diabetes. Yet OSA referral levels from GPs to local sleep clinics or services are currently very low, causing unnecessary expense to the NHS because of the cost of treating these associated complications.

People with undiagnosed OSA are also at greater risk of having road traffic accidents:

- 20 per cent of serious road traffic accidents on major roads are thought to be caused by sleepy drivers.
- People with uncontrolled OSA are three to seven times more likely to have a road traffic accident than the general driving population.

The solution

Trained primary care staff can screen for OSA. It is an easy condition to treat cheaply and effectively.

- **Continuous positive airway pressure (CPAP)** is recommended for adults with moderate to severe symptomatic OSA. CPAP is associated with more quality-of-life years and lower costs than non-treatment (NICE guidelines 2008). By comparison, the cost of one fatal road traffic accident is estimated to be as much as £1.5 million.
- **Other treatments include:** mandibular advancement devices (for mild OSA); lifestyle changes, including weight loss and sleep hygiene advice; and, where indicated, surgery (adenotonsillectomy, mandibular advancement or bariatric).

The British Lung Foundation (BLF) is asking GPs to:

- **Look for risk factors and signs of early OSA** in your patients and give advice about lifestyle changes.
- **Use the Epworth Sleepiness Scale on the BLF website, www.blf.org.uk/sleep**, to screen patients who present with snoring, witnessed or suspected apnoeas and daytime sleepiness. Alternatively, ask patients to help you **complete the STOP-Bang questionnaire**, a validated screening tool for OSA (see overleaf).
- **Refer symptomatic patients to your local sleep clinic or service**, and forward the Epworth or STOP-Bang results.
- Find out if you can **be involved in a local screening programme** in partnership with the clinic.
- **Ask patients to contact the BLF:**
Helpline: **03000 030 555**
Email: **helpline@blf-uk.org**
Website: **www.blf.org.uk/osa**



Screening tool for OSA: STOP-Bang

S	Does the patient snore loudly (louder than talking or loud enough to be heard through closed doors)?	Y/N
T	Does the patient often feel tired , fatigued, or sleepy during the day?	Y/N
O	Has anyone observed the patient stop breathing during their sleep?	Y/N
P	Does the patient have, or is the patient being treated for, high blood pressure ?	Y/N
B	Does the patient have a BMI of more than 35?	Y/N
a	Age. Is the patient older than 50?	Y/N
n	Is the patient's neck circumference greater than 40cm?	Y/N
g	Gender. Is the patient male?	Y/N

Scoring: **$Y \geq 3$ = high risk of OSA**
 $Y < 3$ = low risk of OSA

Developed by Chung F, Yegneswaran B, Liao P, Chung SA, Vairavanathan S, Islam S, Khajehdehi A, Shapiro C: *STOP Questionnaire A Tool to Screen Patients for Obstructive Sleep Apnea*, 2008.

One person in five in the UK is affected by lung disease.

The British Lung Foundation offers hope and support at every step, so that no one has to face it alone.

We campaign for positive change in the nation's lung health.

We fund vital research into new treatments and cures.

We are the UK's lung charity.

Leading the fight against lung disease.