

Fact Sheet

OSA comorbidities and the impact on patient health

More than 80% of people with obstructive sleep apnea (OSA) have two or more comorbidities,¹ and people with OSA and any comorbidity have a mortality rate more than ten times greater than those without comorbidities.² This makes the identification and treatment of obstructive sleep apnea (OSA) about more than just a good night’s sleep—it’s also about helping the many comorbidities that are impacted by OSA. Doing this starts with understanding the relationship between OSA and different comorbidities.

Comorbidity	OSA Prevalence	Risk	Benefit treating OSA
Hypertension	<p>~50% of patients</p> <p>up to 80% of patients with resistant hypertension³</p>	OSA is an independent risk factor for hypertension, irrespective of other factors, ^{3,4} with the incidence of hypertension increasing as the severity of OSA increases. ⁵	Reduces the risk of new-onset hypertension ⁵ and lowers blood pressure. ⁶
Cardiovascular disease	<p>40–60% of patients</p>	OSA increases the risk of coronary artery disease, heart failure, arrhythmia and stroke. ⁵ Post heart attack mortality increases for all patients and mortality from cardiovascular disease nearly triples in patients with severe OSA. ^{8,9}	Reduces risk of cardiovascular events ¹⁰⁻¹² and improves neurologic function after stroke. ¹³ Reduces atrial fibrillation (AF) burden after ablation or cardioversion with decreased likelihood of progression to permanent AF. ^{14,15}
Depression	<p>23% of patients</p>	People with OSA have increased risk and higher rates of depression and anxiety; the risk may be higher in women than in men. ²⁶⁻²⁸	Improves depression symptoms ²⁹ and emotional regulation ³⁰ and significantly reduces incidents of self-harm. ³¹

Comorbidity	OSA Prevalence	Risk	Benefit treating OSA
Obesity	40–60% of patients	Increases risk for development of OSA; ¹⁷ obese or severely obese individuals are nearly twice as likely to have OSA as those with normal body weight. ¹⁸ OSA may contribute to weight gain. ⁸	May support weight loss, as found in one study where after only 3 months on PAP therapy, 34% of participants experienced clinically significant weight loss and 47% experienced clinically significant weight loss after 9 months on PAP therapy. ¹⁹
Type 2 diabetes	15–30% of patients with OSA have type 2 diabetes 55–90% of people with type 2 diabetes have OSA ⁹	People with OSA are ~1.5–times more likely to develop type 2 diabetes than those without OSA. ⁹ Untreated OSA is associated with worse control of blood glucose levels in people with type 2 diabetes. ⁹	Improves glycemic variability and glycemia after meals and at night, ^{20–22} and improves glycemic control and insulin resistance even when type 2 diabetes is poorly controlled. ²³ Decreases healthcare resource utilization. ²⁴
Chronic respiratory disease	Asthma: 50–88%; ^{32,33} COPD: 10–30%; ³⁴	Overlap syndrome, in which asthma or COPD co-exists with and exacerbates OSA, is associated with higher levels of morbidity and mortality than OSA or COPD alone. ³⁵	Reduces mortality risk and number of COPD exacerbations. ³⁶ Improves symptoms, peak flow, rescue bronchodilator use, exacerbations, and quality of life, with the greatest quality of life improvements seen in women. ^{37–41}

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