

Suspected COPD-OSAHS overlap syndrome
Investigations and treatment at a sleep service

Prioritise of people with suspected COPD-OSAHS overlap syndrome for rapid assessment by sleep centre:

- severe hypercapnia PaCO₂ over 7 kPa when awake
- hypoxaemia (arterial oxygen saturation less than 94% on air)
- acute ventilatory failure
- a vocational driving job
- a job for which vigilance is critical for safety
- pregnancy
- unstable cardiovascular disease
- undergoing pre-operative assessment for major surgery
- non-arteritic anterior ischaemic optic neuropathy

Diagnosing COPD-OSAHS overlap syndrome

Measure arterial blood gas when awake to assess for ventilatory failure
Perform spirometry if COPD severity not defined (see NICE COPD guideline)
Offer home or hospital respiratory polygraphy
Consider adding transcutaneous CO₂ monitoring with respiratory polygraphy to guide treatment

Discuss appropriate lifestyle changes tailored to the person's needs

OSAHS confirmed
No severe hypercapnia
PaCO₂ equal to or less than 7 kPa

OSAHS or nocturnal hypoventilation confirmed
Severe hypercapnia
PaCO₂ greater than 7 kPa

OSAHS and nocturnal hypoventilation excluded

Consider CPAP
Consider adding heated humidification for upper airway side effects and CPAP-induced rhinitis

Consider NIV

Follow [NICE guidelines on COPD](#)

For people with suspected or confirmed rhinitis see OSAHS rhinitis recommendations 1.8.1 to 1.8.4

Monitor and **optimise** therapy with CPAP and NIV. Offer:

- Face-to-face, video or telephone consultations with telemonitoring (if available)
- Access to sleep clinic service for CPAP users for advice, support and equipment
- Education and supportive interventions by trained specialist to improve adherence

Consider supplemental oxygen in those people with persisting hypoxaemia despite optimised CPAP or NIV

Consider stopping CPAP or NIV and using a **symptom-management approach for severe COPD** if, despite treatment optimisation, CPAP or NIV does not improve their symptoms or quality of life or adds to the burden of therapy