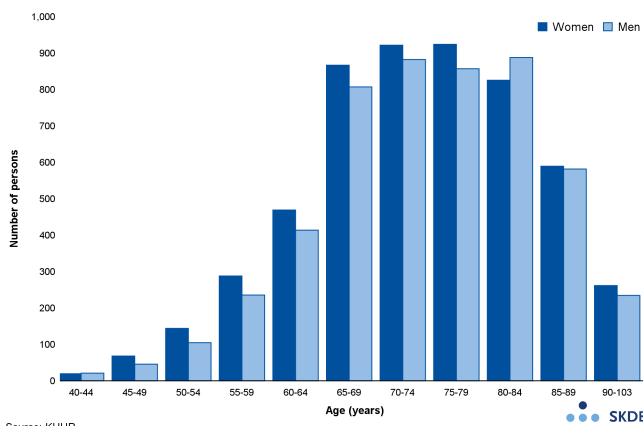


COPD is characterised by episodes of increased respiratory problems known as COPD exacerbations. The airways contract, mucus production increases, the mucus changes colour, and patients find it difficult to move air in and out of their lungs. A COPD exacerbation is often triggered by a respiratory tract infection and requires intervention that will often start outside hospital. Severe COPD exacerbations often require hospitalisation.

Background and sample

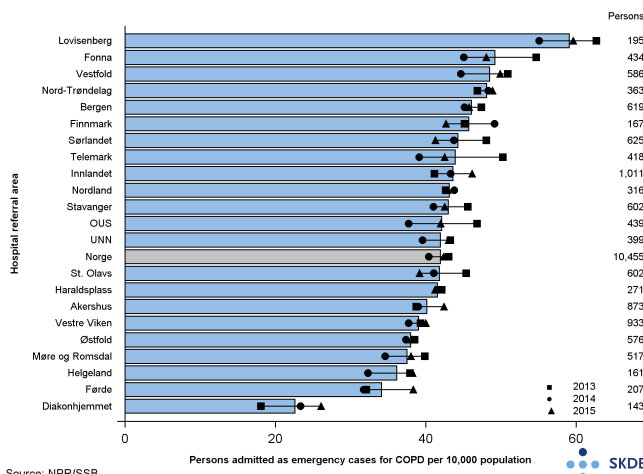
A mild COPD exacerbation requires no treatment other than increasing the dosage of the patient's regular medication and/or other necessary medication. A moderate COPD exacerbation requires treatment with antibiotics or corticosteroids in tablet form. Patients with severe COPD exacerbation often experience respiratory failure with a reduced level of oxygen and/or elevated levels of carbon dioxide in the blood. The patient may need help to breathe in the form of ventilation support.

The analyses include persons admitted as emergency cases for COPD during the period 2013–2015. Ventilation support is defined as BiPAP (Bilevel Positive Airway Pressure) treatment.



Source: KUHR

Persons admitted as emergency cases for COPD, broken down by gender and age. Average number per year.



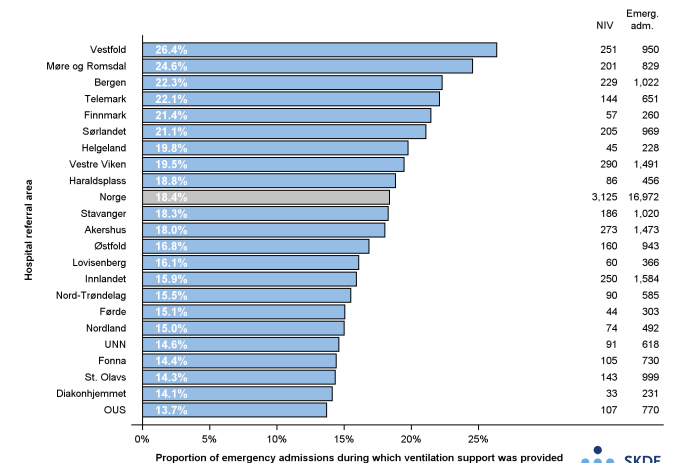
Source: NPR/SSB

Persons admitted as emergency cases for COPD. The numbers are standardised by gender and age per 10,000 population. Average per year.

Findings

On average, approx. 10,500 persons were admitted as emergency cases for COPD per year during the period 2013–2015. Four out of five were older than 65 years. Nearly three times as many persons per 10,000 population were admitted as emergency cases for COPD in Lovisenberg Hospital's referral area as in Diakonhjemmet hospital referral area. The number of emergency admissions per person per year varied from 1.4 to 1.9 between hospital referral areas.

Ventilation support (BiPAP) was administered in connection with more than 3,000 of nearly 17,000 emergency admissions per year. The proportion of emergency admissions where ventilation support was administered varied from 13.7% in the OUS hospital referral area to 26.4% in Vestfold Hospital's referral area.



Source: NPR/SSB

Proportion of emergency admissions for COPD during which ventilation support was provided. Proportion standardised by gender and age. Average per year.

Comments

The number of persons with COPD exacerbations admitted to Norwegian hospitals depends on several factors, including smoking-related morbidity in the population (see the fact sheet [Prevalence of COPD](#)). There is generally a strong correlation between the expected prevalence of COPD and the number of persons admitted as emergency cases for COPD per 10,000 population, but some hospital referral areas stand out. Østfold has a relatively high expected prevalence of COPD and a relatively low number of persons admitted as emergency cases for COPD per 10,000 population. The reverse is the case in Nord-Trøndelag.

Some of the variation in the use of ventilation support could possibly be explained by the fact that different hospitals have different traditions, guidelines and thresholds for admission. Ventilation support is a resource-intensive form of treatment. The resources available for ventilation support may vary between hospitals. The variation in the use of ventilation support is deemed to be unwarranted.