

Chronic obstructive pulmonary disease (COPD) is a common condition both in Norway and in the rest of the world. The main symptom is shortness of breath. In mild cases, breathing difficulties only occur in connection with physical activity. Patients with severe COPD can experience shortness of breath even at rest. Some also have a chronic cough with or without mucus. The disease often leads to secondary problems such as anxiety, depression, nutritional problems, weight loss, muscle wasting and fatigue. COPD is associated with significant functional impairment and a high mortality rate.

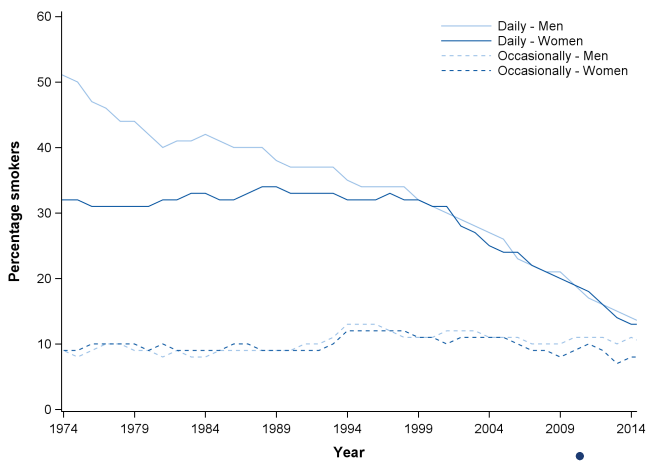
COPD in Norway

We have no exact figures for how many Norwegians suffer from COPD, and many are undiagnosed and therefore unaware that they have the condition. COPD is diagnosed and treated by both the primary healthcare service and the specialist health service. The condition is diagnosed by means of lung function measurement.

Based on estimates from population studies, it is reasonable to assume that at least eight per cent of the population aged 40 years or older have COPD, which corresponds to at least 200,000 people. The absence of exact figures for the prevalence of COPD also means that we do not have an overview of how many people suffer from COPD in different geographical areas in Norway. Since COPD is related, among other things, to smoking habits, air pollution and ageing the prevalence is probably not evenly geographically distributed in different parts of Norway.

Smoking habits

Smoking habits in Norway have changed considerably since the 1970s, when more than half of all men and one third of women were daily smokers. At the turn of the millennium, about 30% of both men and women were daily smokers. Since then, the proportion of daily smokers has dropped markedly among both men and women, and in 2016 only 13% of Norwegian men and 11% of Norwegian women were daily smokers.



Source: SSB

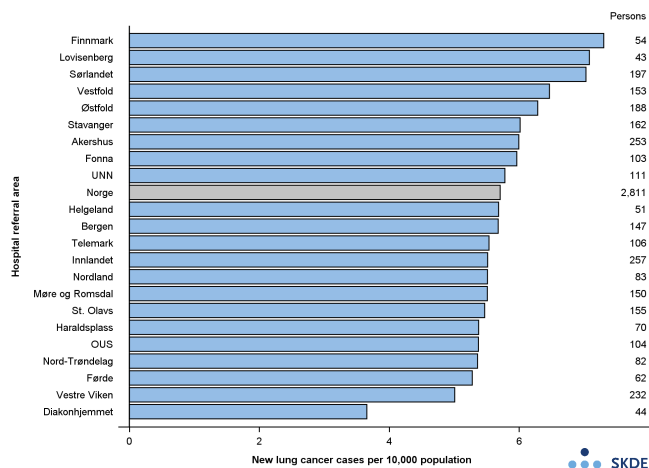
Smoking habits among men and women from 1973 until 2016.

Seen in isolation, it is reasonable to expect the decrease in smoking to have a positive effect on the prevalence of COPD in Norway. However, other factors, including an ageing population, may counteract this effect. It is therefore difficult to estimate how many persons will have COPD in the years ahead.

Lung cancer

Lung cancer and COPD are both strongly related to smoking. It is therefore reasonable to assume that the variation in the prevalence of COPD will reflect new cases of lung cancer. The COPD Healthcare Atlas uses new lung cancer cases as an indirect measure of the prevalence of COPD.

The number of new lung cancer cases varies between the different health trusts' hospital referral areas. Lung cancer is twice as common among residents in Finnmark Hospitals' referral area as among residents in Diakonhjemmet hospital referral area. If the use of health services for COPD reflects the prevalence of COPD, we would expect the distribution among hospital referral areas to be similar to that for new lung cancer cases.



Source: FHI/SSB

Average number of new lung cancer cases per 10,000 population per year during the period 2006–2015. The column shows the average number of persons diagnosed with lung cancer per year.

Interpretation of variation

In previous healthcare atlases, results for most patient samples have been interpreted based on the assumption that there are no significant geographical differences in morbidity. The situation is different for COPD, however, since morbidity is expected to vary between hospital referral areas. Variation in the use of health services is appropriate and must be considered to be warranted if it tallies with corresponding differences in underlying morbidity.

The prevalence of COPD in different hospital referral areas is not known, but we have good data for new cases of lung cancer. We expect to find more people diagnosed with COPD in hospital referral areas with many new lung cancer cases. The observed variation between hospital referral areas in terms of the use of health services for COPD is expected to tally with differences in the number of new cases of lung cancer.