

# COPD and asthma, drug users (45-74 years) (NHC) - users per 1000 inhabitants, age standardised

Year		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Geography	Gender														
Nordland	both genders	87	87	88	87	89	91	92	94	94	96	100	102	107	109
	men	72	71	73	73	75	74	77	78	79	80	84	87	92	95
	women	103	103	104	102	104	108	108	111	111	113	117	118	122	123
Troms	both genders	94	93	93	95	98	100	102	105	106	105	110	112	116	119
	men	77	77	78	80	83	84	86	88	90	88	92	94	98	100
	women	112	109	109	110	113	117	118	123	124	123	128	131	134	140
Finnmark	both genders	97	100	97	100	104	104	104	108	110	113	116	117	123	122
	men	79	82	79	84	87	90	88	90	92	94	95	99	104	103
	women	117	120	117	118	122	120	123	127	129	133	138	136	143	142

## CellMark Legend

- .. Missing data
- . Not possible to calculate
- : Hidden value

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## Description

Users of prescription drugs among 0-79 year olds. Users are defined as people who have been dispensed a prescription in the reporting period.

Four measures are available. Use the Measures menu to select:

1. number of users (shown on national level only due to privacy protection)
2. users per 1000 = number of users per 1000 inhabitants of same sex and age per year
3. users per 1000 age standardised = number of users per 1000 inhabitants of same sex and age per year, age standardised. Age standardisation of rates reduces the effect of differing age distributions when groups are compared over time and between geographical regions.
4. Ratio (Norway=100): The ratio between the standardized rate in the county and the national rate for a given year. A ratio of 130 means that the county rate is 30 % higher than the national rate. A ratio of 87 means that the county rate is 13 % lower than the national level.

In the Norwegian Prescription Database, every individual is registered with a pseudonymous serial number which makes it possible to link drug consumption to individuals without knowing who they are. Even if a person has dispensed a prescription for the same drug several times, they are only counted as a user once.

Drug consumption cannot be assumed to be synonymous with disease prevalence. The exception is the use of drugs to treat diabetes mellitus, which can be considered a good indicator for prevalence of diabetes. A lot of patients use multiple drugs, e.g. both anti-depressives and hypnotics, so will be included in both groups. It is therefore not possible to simply add the number of users in two groups of drugs to find out how many users there are in total.

Figures in Norhealth may vary slightly from the Norwegian Prescription Database because data may have been extracted from the main database at different times.

Drugs are classified according to the ATC system (see below).

The following groups of drugs are included \*:

All drugs in total

Diabetes drugs (A10)

- Insulins and analogues (A10A)

Cardiovascular disease, treatment/prevention (C)

- Cardiovascular disease, treatment/prevention, except Lipid modifying agents (C except C10)

- Lipid modifying agents (C10)

Painkillers (analgetics) (M01A, N02A, N02B)

- Antiinflammatory and antirheumatic products, non-steroids (M01A)

- Painkillers, Opioids (N02A)

- Painkillers, other (N02B)

- Antimigraine preparations (N02C)

Drugs for mental disorders (N05A, N06A)

- Antipsychotics (N05A)

- Antidepressants (N06A)

Hypnotics and anxiolytics (N05B, N05C)

- Hypnotics (N05C)

- Hypnotics, addictive (N05C excl. N05CH01 and N05CD08)

ADHD drugs (Attention Deficit Hyperactivity Disorder) (C02AC02 and N06BA except N06BA07)

Asthma and chronic obstructive pulmonary disease (COPD) drugs (R03 except R03CA)

Antihistamines (allergy medicines) (R06A, R01AC, R01AD, R01B, S01G)

- Antihistamines for systemic use (R06A)

Prescriptions for antibiotics are presented in a separate, neighbouring table.

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Data on Blood glucose lowering drugs, excluding insulins (A10B) are presented under Health and disease/ Disease groups/ Type 2 diabetes, indicators. News, March 2019:

- New subgroup: Hypnotics, addictive - comprising all hypnotics except melatonin and midazolam.
- ADHD drugs now include guanfacin (C02AC02).
- Drugs against asthma and chronic obstructive pulmonary disease (COPD) now exclude R03CA. The former group "Asthma and COPD (R03)" has been discontinued.

Drugs are classified according to the ATC-system (Anatomic, Therapeutic, Chemical classification). By using this international classification system one can make statistics of drug consumption groups at 5 different levels, including from figures that show total use of all preparations classified under a main group (1st level, e.g. group C - Heart and circulation), figures for the different sub-groups (2nd, 3rd and 4th level) and down to figures that show use of each active ingredient.

Further information about the Norwegian Prescription Database can be found at [www.norpd.no](http://www.norpd.no).

See also Drug Consumption in Norway at [www.drugconsumption.no](http://www.drugconsumption.no).

\* Some of the drugs can be bought without a prescription, e.g. in small packages. Such use is not included in the statistics.

## Rationale for indicator

For many diseases, we have insufficient data on prevalence. Drug use is not synonymous with disease prevalence, but can be an indicator for the prevalence of a disease.

## Source

Norwegian Institute of Public Health, Department of Pharmacoepidemiology

## Collection

The Norwegian Prescription Database contains information on all prescriptions dispensed from Norwegian pharmacies for both human and animal use. The register only contains information that directly or indirectly concerns prescriptions. Information about the patient and prescriber is pseudonymous.

## Interpretation and sources of error

Purchases of over the counter drugs from a pharmacy or grocery store are not included. People over 80 years are excluded because there are varying proportions in each county who live at institutions where drugs are provided by the institution rather than via private prescriptions. Figures are also not presented for inappropriate combinations of age and drug groups, for example anti-dementia medicines for children.

## Data quality

The data quality is very good.

## Statistical analysis

Age standardization is done using direct standardization. The standard population is the sum of men and women in each age group in Norway per 1. January 2012.

## When numbers are missing

Statistics based on fewer than five cases are hidden for privacy reasons. The same is done where the population segment from which the data are collected is less than ten.

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If more than 20 per cent of the numbers in a time series are hidden for privacy reasons, the entire time series is concealed so as not to create a false impression of the situation in the county. Time series are also hidden where more than 50 per cent of the numbers in the time series are based on 6 or fewer cases.

## Time periods

2005-2018

## Geographical level

Country, health region, counties

## Gender

Both genders, men, women

## Age groups

0-74 years, 0-44 years (0-17, 18-24, 25-44), 45-74 years. Additionally, 0-79 years and 18-79 years.

## Frequency of updates

Annually

## Last updated

14/03/19

## Keywords

Click on a keyword to search for similar indicators.

- Antibiotics
- Antihypertensives
- Antipsychotics
- Anxiety
- Asthma
- Betablockers
- Blood lipids
- Blood pressure
- Blood sugar
- Calcium antagonists
- Cholesterol
- Contraceptives
- Dementia
- Diabetes
- Drugs
- Estrogen

# COPD and asthma, drug users (45-74 years) (NHC) - *users per 1000 inhabitants, age standardised*

- Hypertension
- Hypnotics
- Insulin
- Medicine
- Menopause
- Obesity
- Prescription database
- Sedatives

## Fact sheets

Below are links to relevant fact sheets, articles and reports. These may describe trends over time in the Norwegian population or differences by sex, age group, geographical region or socioeconomic status:

- [Topic: Drug consumption](#)
- [Topic: Pain](#)
- [Facts on hypertension \(in Norwegian only\)](#)
- [Chronic Obstructive Pulmonary Disease \(COPD\) in Norway - Public Health Report](#)