



KEY FIGURES 2022

Pharmacies and pharmaceuticals in Norway

PHARMACY OWNERSHIP

Norwegian pharmacies are mainly run as private enterprises. Only the hospital pharmacies are owned by the public sector (Regional Health Authorities). Nevertheless, the pharmacies are considered part of the Norwegian health service.

In 2001, Norway liberalized the pharmacy system. The new legislation led to a great change in ownership – one of the greater changes in the sector's 400-year history. Since then, an increasing portion of pharmacies are owned by pharmacy chains. The four main chains are called Apotek 1, Boots apotek, Vitusapotek and Ditt apotek. To manage a pharmacy, you need the appropriate professional training, including a master's degree in pharmacy.

Three large international pharmacy companies, each vertically integrated with a pharmaceutical wholesaler, own about 80 per cent of all pharmacies in Norway.

<i>Pharmacy chain</i>	<i>Wholesaler</i>	<i>Owner</i>
Boots	Alliance Healthcare Norge AS	AmerisourceBergen (USA)
Vitusapotek	NMD	McKesson Corporation (USA)
Apotek 1	Apotek 1 Gruppen AS	Phoenix (German)

Figure 1: Overview of pharmacy chains, wholesalers and owners in the Norwegian pharmacy market

Today the Norwegian pharmacy sector is recognized by:

- Free establishment of pharmacies – no establishment criteria
- Free ownership of pharmacies – except pharmaceutical manufacturers and doctors
- Pharmacy managers must hold a master's degree in pharmacy
- No limit of the number of pharmacies that can be owned by one pharmacy owner – horizontally integrated pharmacy chains are allowed
- Vertical integration between wholesalers and pharmacies/ pharmacy chains is allowed

As a result of the changes in the **Pharmacy Act in 2001**, the public has considerably better accessibility to pharmacies, as the number of pharmacies has increased from 399 in 2001 to a total of 1 045 at the end of 2022.



PHARMACIES

The Norwegian Pharmacy Act defines a pharmacy as a physically accessible place for medicine sale to end-users where medicine-related guidance is provided. Pharmacies ensures safe deliveries of medicines to end users and contributes to the correct medicine use in the population.

By the end of 2022 there were **1 045** pharmacies in Norway, among these **1 012** are community pharmacies and **33** are hospital pharmacies. On average, there were 5,200 inhabitants per pharmacy in 2022. In 2001, there were 11,280 inhabitants per pharmacy.

Community pharmacy is a pharmacy where dispensing of medicines happens under the supervision of a pharmacist.

Hospital pharmacy is a pharmacy co-located with a public or private hospital. Their main task is medicine supply to the hospital.

<i>Year (1st of January)</i>	<i>Number of pharmacies</i>	<i>inhabitants' per pharmacy</i>
2023	1045	5 200
2013	738	6 756

(Figure 2: Number of pharmacies and inhabitants per pharmacy in 2013 and 2023)

EMPLOYEES

In total there were **7 154** man-years working in Norwegian pharmacies. The two main groups are Pharmacists (3 953 man years) and Pharmacy technicians (2 582 man years). Both are trained health-care professionals. The share of employees without professional education is decreasing.

Pharmacist

Pharmacists are entitled to independently dispense prescribed medications and advise customers and other healthcare personnel on the correct use of medications. In Norway we distinguish between a bachelor's degree in Pharmacy and a master's degree in Pharmacy.

Pharmacy technician

Pharmacy technicians are not entitled to dispense prescribed medications, but they have a very important role to play in terms of customer service – speaking to customers, providing information to the public, looking after stock and other administrative tasks.

Pharmacy manager

The pharmacy manager runs the pharmacy and ensure that the requirements of the pharmacy's business are fulfilled. The pharmacy manager is responsible for the professional and financial

¹ Inhabitants in Norway by 31.12.2021: 5 425 270



operation of the pharmacy, and the overall responsibility of the pharmacist's employees. To become a pharmacy manager, one must have a master's degree or Cand.pharm.

<i>Category</i>	<i>Share of total</i>	<i>Man-years</i>
Pharmacist, master's degree	30 %	2 174
Pharmacist, Bachelor's degree	25 %	1 779
Pharmacy Technician	36 %	2 582
Other education	9 %	619
Total	100 %	7 154

Figure 3: Pharmacy employees and their education

PHARMACY EDUCATION

In Norway you can study to become a *pharmacist* at six different universities.

For a bachelor's degree in Pharmacy (three years) you can study at [OsloMet](#), [Nord University](#) and [UiT The Arctic University of Norway](#).

For a master's degree in Pharmacy (five years) one can study at [University of Oslo](#) and [University of Bergen](#). At [UiT The Arctic University of Norway](#) and [OsloMet](#) the students may take a two years master's degree after finishing their bachelor's degree. The Norwegian University of science and technology ([NTNU](#)) also offers a two-year master's degree.

The training for *pharmacy technicians* is a sixth-form college course within health and social sciences.



CONSUMPTION

Defined Daily Dose (DDD) is an international unit of measurement for the assumed average maintenance dose per day for a drug used for its main indication in adults². We use DDD to compare consumption over time and DDD per inhabitant when we arrange the top substances.

DDD per inhabitant

In the period from 2012 to 2022, the use of prescription drugs (DDD per inhabitant) has increased by 27 per cent. The increase can partly be explained by a change in age structure. Older people use significantly more medicines than younger people. From 2012 to 2022, the population in Norway increased by 9 percent, while the population over 70 years increased by 36 percent.

In 2022 the DDD per inhabitant was **581**. That is an increase by **2.6 %** from last year.

Top 10 pharmaceutical 2022 (based on consumption)

The most used non-prescription medicine and prescription medicine in Norway in 2022 are all recurring from earlier years. Compared to 2021, folic acid, which is used against folate deficiency, is new on the list. Ramipril has dropped out from the list.

<i>Substance (example of pharmaceutical)</i>	<i>DDD (per inhabitant)</i>	<i>% change</i>
1. Atorvastatin (Lipitor)	46.4	8.9 %
2. Acetylsalicylic acid (Albyl-E)	20.1	- 2.8 %
3. Kandesartan (Atacand)	16.5	6.8 %
4. Paracetamol (Paracet)	15.4	8.0 %
5. Amlodipin (Norvasc)	14.5	2.5 %
6. Pantoprazol (Somac)	13.0	3.7 %
7. Cetirizin (Zyrtec)	12.7	- 5.6 %
8. Kolekalsiferol (Divisun)	12.5	6.5 %
9. Desloratadin (Aerius)	12.1	1.6 %
10. Folsyre (Folsyre)	10.6	6.5 %

(Figure 4: Medicines with highest DDD per inhabitant)

² <https://www.who.int/tools/atc-ddd-toolkit/about-ddd>

**TOTAL TURNOVER (all figures incl. 25 % VAT)**

Pharmaceuticals contribute to more than ¾ of the pharmacies' turnover. We divide them into prescriptions medicines and non-prescription medicines. The pharmacies also sell other goods related to health and well-being, such as skin care products and medical equipment. We call them “other pharmacy goods”.

Pharmacies' total turnover in 2022 was **NOK 45.6 billion** (+4.9 %). Approx. 5 billion Euro.

For community pharmacies the turnover on prescriptions medicines increased by 6.2 per cent. This is mainly due to an unusually large increase in pharmaceutical consumption. Sales of other pharmacy goods decreased by 0.4 per cent.

In 2021, pharmacies experienced high demand for medical equipment in connection with covid-19, including self-tests and masks. These sales were lower in 2022.

	<i>Community pharmacy</i> <i>(bill. NOK)</i>	<i>Hospital pharmacy</i> <i>(bill. NOK)</i>	<i>Total turnover</i> <i>(bill. NOK)</i>
Prescriptions medicines	23.9 (+6.2 %)	8.0 (+5.6 %)	31.9 (+6.0 %)
Non-prescription medicines	3.3 (+7.4 %)	0.2 (+4.9 %)	3.5 (+7.3 %)
Other pharmacy goods	9.0 (- 0.4 %)	1.3 (+9.0 %)	10.3 (+0.7 %)
Total	36.2 (+4.6 %)	9.5 (+6.1 %)	45.7 (+4.9 %)

(Figure 5: Total turnover, type of pharmacy and medicine type)

Last year, the average turnover per pharmacy was NOK 44.0 million, an increase of 2.0 per cent from 2021. There are large variations between the pharmacies.

Hospital pharmacies have significantly higher turnover than community pharmacies. Hospital pharmacies had an average turnover of NOK 287.4 million, while community pharmacies had an average turnover of NOK 36.0 million in 2022.

Medicines with highest turnover

1. Apiksaban (Eliquis)
2. Liraglutid (Saxenda)
3. Semaglutide (Ozempic)
4. Pembrolizumab (Keytruda)
5. Paracetamol (Paracet)



PHARMACEUTICAL FINANCING

In Norway, prescription medicines are financed by the state through the reimbursable prescription regime, also called “blue prescriptions” and the regional health authorities (H-prescriptions and medicines used in hospitals), by other health institutions and by the patients through self-payment (usually called “white prescriptions”).

The Norwegian state pays approx. 80 per cent of the expenses related to prescriptions medications. 18 percent of the expenses are paid by the patient (deductible on blue prescription and white prescription. The rest is paid by other health institutions, primarily municipal.

Regional Health Authorities³ (RHAs) takes an increasing part of the pharmaceutical costs. One of the main reasons is the inclusion of new medicines in the H-prescription scheme.

In 2022, the **average spending on pharmaceuticals (prescriptions drugs)** was 5 867 NOK per inhabitant (incl. 25 % VAT).

Blue prescriptions

Paid by the state: The National Insurance Scheme (NIS) covers expenses for medicines, medical supplies etc. prescribed by a physician for outside hospital-use. The coverage is limited to the treatment of serious illnesses or of risk factors that are likely to cause or intensify serious illness and where there is a need or risk of recurring treatment over a prolonged period of time.

Paid by the patient: The patients pay a co-payment for blue prescriptions. For 2022 the limit was 2 921 NOK.

H-prescriptions: For some medicines prescribed by hospital doctors, the RHAs are given a special financial responsibility, even though treatment is outside hospitals. This includes disease-modifying, biological drugs for rheumatic disorders - the so-called TNF inhibitors, some medicines for the treatment of multiple sclerosis (MS) and cancer drugs etc.

White prescriptions: Pharmaceuticals not covered by NIS, health authorities or municipalities are called white prescriptions and are generally *paid by the patient*. This often applies to short-term treatment, such as painkillers, sleepers, and antibiotics.

³ Regional health authorities are the four regional institutions owning the public hospitals in Norway.



PRICE-SETTING

The authorities decide the maximum price for prescription medicines in Norway and “trinnpris” for generics.

1. The maximum purchase price for pharmacies is set by The Norwegian Medicines Agency as the average price of the three lowest market prices in nine European countries.
2. The pharmacies’ maximum mark-up consists of a percentage addition to the pharmacies’ purchase price combined with a fixed additional amount per package, as shown in table:

AIP*	% addition	NOK per package	NOK per package (A/B)	Refrigeration addition
All	2.00 %	29 NOK	19 NOK	0.5 %

(Figure 7: Price-setting regime

*Pharmacy purchase price

Price-setting for generics

Medicines that are subject to generic substitution should follow the system of “trinnpris” (“stepped prices”). The authorities have decided that pharmacies shall offer patients at least one generic alternative at a price that is considerably lower than the maximum price. These prices are called “trinnpris” (stepped prices). The prices⁴ are cut up to 96 %.

Hospital medicines and secret prices

Hospital medicines are largely purchased on a tender basis, and affect the medicines available for prescribing. An increasing number of expensive medicines are subject to tender and included in the formulary lists. Prescribing outside of formulary lists will be increasingly difficult. This also applies for H-prescriptions (see above). The trend of transferring high-cost medicines to the H-prescription category is also a trend for less expensive drugs (e.g. for hepatitis B).

The discounts which are achieved through tenders are confidential. Hence, the actual market prices (after discounts) are not publicly available information, but known to doctors, dispensing pharmacists and other groups of health-care personnel.

⁴ Pharmacy purchase price



PHARMACY SERVICES

Pharmacies in Norway provides some health-care services. Since 2016 patients have received guidance on their inhalation technique. In 2018 Norwegian pharmacies started up “New Medicine Service” for heart patients. In 2020 Norwegian pharmacists got the right to prescribe influenza vaccines and in 2022 Norwegian pharmacists got a temporarily right to prescribe vaccines against covid-19.

New Medicine Service

New Medicine Service «Medisinstart» is a new pharmacy service intended for patients with cardiovascular diseases starting up with a new medicine. The service consists of two follow-up consultations with a pharmacist. The first at 1-2 weeks and the second at 3-5 weeks after start of the new medicine.

By the end of 2022, almost 27,000 consultations had been made. The average age of the customers who receive this service is 65 years. Most of the conversations was about the medicines Atorvastatin, Amlodipine, Candesartan or Metoprolol.

In 2022 there was a pilot project regarding patients with diabetes type 2. The pharmacies had a total of 1,656 conversations with patients with diabetes. The experiences so far have been very good, and the conversations revealed that many of the patients have an unmet need for information.

Checking inhaler technique

The patient shows his inhalation technique and receives advice if errors or a need for changes in the inhalation technique are discovered. The purpose of the service is to secure effect of the medicine. This service was officially launched in 2016 by the Minister of Health.

In 2022, there were 81,180 inhalation guides in pharmacies. The average age of customers who receive an inhalation guide is 51 years. More than half of the patients need help to correct their inhalation technique. Since 2016, 422,169 inhaler users have received guidance on correct use.

Vaccination against seasonal flu

Vaccination against seasonal flu in pharmacies has developed from a pilot project in 2017 to a national service in 2020. Despite the authorities' decision to prioritize flu vaccines to risk groups, the interest in taking the flu vaccine in pharmacies has been record high.

In 2022, pharmacies have administered almost 220,000 influenza vaccines. Around 95 per cent of the customers come directly to the pharmacy without a prescription. Many people choose the pharmacy because of accessibility and long opening hours.

Vaccination against covid-19

In 2022, Norwegian pharmacies administered 150,000 vaccines against covid-19. In total, 88 municipalities have made agreements with pharmacies to vaccinate. There are slightly more women than men who get vaccinated in pharmacies, and most are between 65 and 80 years.