



KEY FIGURES 2021

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 February 2001 to a total of 1 031 at the end of 2021.



PHARMACIES

The Norwegian Pharmacy Act defines a pharmacy as a physically accessible place for drug sale to end-users where drug-related guidance is provided. Pharmacies ensures safe deliveries of drugs to end users and contributes to the correct drug use in the population. As of 2020 internet pharmacies can operate in Norway if they are part of a physical pharmacy.

By the end of 2021 there were **1 031** pharmacies in Norway, among these **998** are community pharmacies and **33** are hospital pharmacies.

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 and where drug supply to the hospital is the main task.

<i>Year (1st of January)</i>	<i>Number of pharmacies</i>	<i>inhabitants¹ per pharmacy</i>
2022	1031	5 262
2021	988	5 433
2020	958	5 562
2019	934	5 670
2018	899	5 849
2017	868	6 007
2016	834	6 194
2015	800	6 386
2014	767	6 586
2013	738	6 756
2012	707	6 959
2011	682	7 123

(Figure 2: Number of pharmacies and inhabitants per pharmacy 2011-2021)

On average, there were 5,262 inhabitants per pharmacy as of 1st of January 2022. At the end of 2000, the average number of inhabitants per pharmacy was 11,280.

¹ Inhabitants in Norway by 31.12.2021: 5 425 270



EMPLOYEES and PHARMACY EDUCATION

Most of those working at pharmacies are trained health-care professionals. The two main groups are Pharmacists and Pharmacy technicians. Pharmacists are entitled to independently dispense prescribed medications and are highly qualified to advise customers and other healthcare personnel on the correct use of medications.

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

Pharmacist

A pharmacist is an expert on pharmaceuticals. In Norway we distinguish between a bachelor's degree in Pharmacy and a master's degree in Pharmacy. To become a Pharmacy manager, you need to have a master's degree (five years). In Norway you can study at [University of Oslo](#), [University of Bergen](#), [UiT The Arctic University of Norway](#), [OsloMet](#) and [NTNU](#).

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

Pharmacy technician

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

<i>Category</i>	<i>Man-years (2021)</i>
Pharmacist, master's degree	2 122
Pharmacist, Bachelor's degree	1 766
Pharmacy Technician	2 564
Other education	566
Total	7 023

Figure 3: Pharmacy employees and their education



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.

All prescription medicines: 3 052 million DDD (+4.8 % from 2020). Non-prescription medicines (sold by pharmacies): 194 million DDD (-4.6 % from 2020).

DDD per inhabitant

In the period from 2010 to 2021, the consumption (DDD per inhabitant) has increased by 17 per cent. If we only look at the use of prescription drugs, the use has increased by 27 per cent. The increase can partly be explained by a change in the age structure of the population. Older people use significantly more drugs than younger people.

From 2010 to 2021, the population in Norway has increased by 11 percent, while the population over the age of 70 has increased by 34 percent. In 2021 the DDD per inhabitant was 566.

The 10 most used pharmaceuticals in 2021

The most used non-prescription and prescription drugs in Norway in 2021 are all recurring among in recent years. There are no new drugs on the list compared to 2020.

<i>Substance (example of pharmaceutical)</i>	<i>DDD (per inhabitant)</i>	<i>% change</i>
1. Atorvastatin (Lipitor)	42.6	9.5 %
2. Acetylsalicylic acid (Albyl-E)	20.6	- 1.8 %
3. Kandesartan (Atacand)	15.4	8.1 %
4. Paracetamol (Paracet)	14.3	5.8 %
5. Amlodipin (Norvasc)	14.1	3.5 %
6. Cetirizin (Zyrtec)	13.5	1.9 %
7. Kolekalsiferol (Divisun)	12.6	23.5 %
8. Pantoprazol (Somac)	12.5	5.9 %
9. Desloratadin (Aerius)	12.1	11.2 %
10. Ramipril (Triatec)	10.6	-1.0 %

(Figure 4: Medicines with highest DDD per inhabitant)

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



In 2021 the **total spending on pharmaceuticals (prescription drugs)** was 30 billion NOK (Incl. 25 % VAT), Approx. 3,12 billion Euro. An increase by 9 per cent from 2020.

The **average spending on pharmaceuticals (prescriptions drugs)** was 5 565 NOK per inhabitant (incl. 25 % VAT).

The Norwegian state pays approx. 80 per cent of the expenses related to prescription drugs. 17 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.

TOTAL TURNOVER (all figures incl. 25 % VAT)

Pharmacies' total turnover in 2021 was NOK 43.5 billion (+8.1 % from 2020). Approx. 4,54 billion Euro.

	Community pharmacy (mill. NOK)	Hospital pharmacy (mill. NOK)	Total (mill. NOK)
Prescriptions medicines	22 458 (9.6 %)	7 560 (8.6 %)	30 178 (9.3 %)
Non-prescription medicines	3 114 (6.2 %)	158 (11.4 %)	3 272 (6.5 %)
Other pharmacy goods	9 018 (5.2 %)	1 223 (5.2 %)	10 241 (5.2 %)
Total	34 590 (8.1 %)	8 941 (8.2 %)	43 531 (8.1 %)

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

Medicines with highest turnover

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



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”).

In recent years, the Regional Health Authorities³ (RHAs) have taken an increasing part of the pharmaceutical costs. One of the main reasons is the inclusion of new medicines in the H-prescription scheme. Since 2010, expenses in the H-prescription scheme have risen by 517 %, whereas the expenses in the blue prescription scheme have risen by 38 %.

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 2021 the limit was 2 460 NOK. The total self-payment for prescription drugs in 2021 amounted to NOK 1.4 billion, 10.5 per cent of total sales (13.7 billion NOK) for these drugs.

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 of 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.

	<i>Turnover 2021 (mill. NOK)</i>	<i>Change From 2020-21</i>	<i>Share of total turnover 2021</i>
Blue prescriptions (paid by the state)	11 988	+ 10.2 %	39.8 %
Hospital (Regional Health Authorities) and other institutions (municipal)	5 823	+ 8.9 %	19.3 %
H-prescriptions (Regional Health Authorities)	6 707	+ 14.5 %	21.3 %
White prescriptions	3 534	+ 3.4 %	11.7 %
Blue prescriptions (paid by the patient)	1 490	- 2.5 %	4.9 %
Other prescriptions ⁴	55	+ 8.8 %	1.9 %

(Figure 6: Type of prescriptions by payer and turnover, change in turnover and share of total turnover)

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

⁴ Includes vet. prescriptions



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
2017	NOK 0 - 200 NOK > 200	7.0 % 2.25 %	25 NOK	15 NOK	0 %
2018	All	2.25 %	29 NOK	15 NOK	0,5 %
2019	All	2.00 %	29 NOK	19 NOK	0,5 %

(Figure 7: Price-setting changes from 2017 to 2019)

*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 prices⁵ 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 personnel.

⁵ 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. 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 2021, more than 30,000 consultations had been made. This is an increase by 44 percent from 2019. “New Medicine Service” has continued to be a popular service through the pandemic because the pharmacists were able to do it by phone.

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 and since then over 340 000 technique-guidance’s have been carried out. After a decrease in 2020, we are back on track in 2021. 97 per cent of the pharmacies now have this service.

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 2021, around 970 pharmacies have administered more than 150,000 influenza vaccines, compared to 100,000 influenza vaccines in 2020.

Vaccination against covid-19

The Norwegian Ministry of Health and Care Services adopted a temporary change in regulations that gives pharmacists the right to administer covid-19 vaccines in pharmacies. In December 2021, the first pharmacy signed an agreement with the municipality and administered 150 vaccines during one day.