

LEGEMIDDELSTATISTIKK

2018:2

Reseptregisteret 2013–2017

Tema: Legemidler og eldre

The Norwegian Prescription Database 2013–2017

Topic: Drug use in the elderly

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Forord

Preface

Bruken av legemidler i befolkningen er økende. En viktig målsetting for norsk legemiddelpolitikk er rasjonell legemiddelbruk. En forutsetning for arbeidet med å optimalisere legemiddelbruken i befolkningen er kunnskap om hvilke legemidler som brukes, hvem som bruker legemidlene og hvordan de brukes. For å få bedre kunnskap på dette området, vedtok Stortinget i desember 2002 å etablere et nasjonalt reseptbasert legemiddelregister (Reseptregisteret). Oppgaven med å etablere registeret ble gitt til Folkehelseinstituttet som fra 1. januar 2004 har mottatt månedlige opplysninger fra alle apotek om utlevering av legemidler til pasienter, forskrivere og institusjoner.

Denne rapporten er ellevte utgave av den årlige statistikken fra Reseptregisteret. Årets utgave er et temanummer med fokus på eldres bruk av legemidler. Temakapitlet (del 1 i rapporten) inneholder en del nøkkeltall om legemiddelbruk hos eldre ≥ 65 år og fokuserer på noen utvalgte legemiddelgrupper og bruken av disse hos eldre.

Generell informasjon om Reseptregisteret, legemiddelstatistikk, klassifikasjon av legemidler og måle-metoder finnes i rapportens del 2. Del 3 inneholder nøkkeltall fra Reseptregisteret og et omfattende tabellverk med opplysninger om antall individer som har fått utlevert legemidler etter resept fra apotekene i Norge i siste femårsperiode (2013–2017). ATC (Anatomisk Terapeutisk Kjemisk) klassifikasjon er benyttet i tabellene. ATC-/DDD-versjon gjeldende fra januar 2018 er benyttet i rapporten, se også www.whocc.no.

Reseptregisteret har også en nettside der man kan finne kompletterende informasjon: www.norp.no (engelsk versjon) eller www.reseptregisteret.no (norsk versjon). Det er også mulig å søke om utlevering av data fra Reseptregisteret til forskning eller til andre formål som er i henhold til formålet for Reseptregisteret. Mer informasjon om dette finnes i rapportens del 3 og på nettsiden til Folkehelseinstituttet (www.fhi.no).

Avdeling for legemiddelstatistikk,
Folkehelseinstituttet, juni 2018

The use of drugs in the population is increasing. An important goal of the health policies regarding pharmaceuticals in Norway is rational drug use. In order to improve drug use, knowledge about which drugs are used, how they are used and who uses them is vital. In December 2002, the Parliament decided to establish a national prescription database in Norway (NorPD). The task of building up the registry was given to the Norwegian Institute of Public Health (NIPH). Since January 1st 2004, the institute has received monthly data on drug dispensed to patients, prescribers and institutions from all Norwegian pharmacies.

This report is the eleventh edition of the annual statistics from the NorPD. This year's report is a theme issue focusing on drug use in the elderly population. Part 1 of the report presents some key figures on drug use in the elderly ≥ 65 years and focuses on selected drug groups and the use of these in the elderly population.

General information about the NorPD, drug statistics, classification of drugs and measurement methods is included in part 2 of the report. Part 3 contains selected key figures from the NorPD and the main tables with information about the number of individuals who had drugs prescribed and dispensed from pharmacies in Norway during the last five years (2013–2017). The information includes particular drug substances as well as drug groups. ATC (Anatomical Therapeutic Chemical) classification is used in the tables. The ATC/DDD version of January 2018 is used in the report, see also www.whocc.no.

The NorPD also has a website where you can find additional information: www.norp.no (English version) or www.reseptregisteret.no (Norwegian version). It is also possible to apply for data from the NorPD for research or for other purposes which meet the objectives of the NorPD. More information can be found in part 3 of the report, and at the website of the Norwegian Institute of Public Health (www.fhi.no).

Department of Drug Statistics,
Norwegian Institute of Public Health, June 2018

Del 1

Part 1

1. Legemidler og eldre

1.1 Legemiddelbruk hos eldre (≥ 65 år) – noen nøkkeltall

Denne rapporten har som spesialtema bruk av legemidler hos eldre. I temadelen har vi valgt å definere eldre som aldersgruppen ≥ 65 år. I de fleste vestlige land benyttes denne aldersgrensen som definisjon på eldre (1).

I tabellene i del 3 i denne rapporten har vi imidlertid valgt å definere den eldste aldersgruppen som ≥ 70 år. Denne inndelingen har blitt benyttet i tilsvarende tabeller i alle tidligere utgaver av rapporten. For å kunne sammenligne med tidligere årganger og dermed følge utvikling i legemiddelbruk over tid i alle rapportene, har vi valgt å beholde denne inndelingen i del 3.

Omfattende legemiddelbehandling er vanlig hos eldre, og legemiddelbruken i befolkningen øker med alderen. Legemidler til pasienter i sykehus eller sykehjem er ikke tilgjengelig på individnivå i Reseptregisteret. Dette fører til at tallene fra Reseptregisteret gir for lave estimat for antall legemiddelbrukere, spesielt i de eldste aldersgruppene. Tabell 1.1.a viser andelen av totalbefolkningen ≥ 65 år, fordelt på kvinner og menn og fem års aldergrupper, som hadde langtidsopphold i institusjon (sykehjem) per 31.12.2016. Tallene er hentet fra Statistisk sentralbyrå (IPLOS registeret) og har vært relativt stabile de siste årene. Data over antall individer som hadde langtidsplass i sykehjem i 2017 var ikke tilgjengelig på tidspunkt for

1. Drug use in the elderly

1.1 Drug use in the elderly (≥ 65 years) – some key figures

This report is a theme issue focusing on the use of drugs in the elderly. In the theme section, we chose ≥ 65 years as a definition of elderly. Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or an older person (1).

In the tables in part 3 of this report we chose a definition of ≥ 70 years for the oldest age group. This definition has been used in similar tables in all previous editions of the report. To be able to compare with previous years and to follow the trends in drug use over time in all the reports, we chose to keep this definition in part 3.

Extensive medicinal treatment is common in the elderly and the use of drugs in the population increases with age. Drug consumption by individuals in hospitals and nursing homes is not included at an individual level in the Norwegian Prescription Database (NorPD). This will often provide artificially low figures for the number of drug users, particularly in the oldest age groups. Table 1.1.a shows the proportion of men and women ≥ 65 years who lived in institutions (nursing homes) in 2016 by five-year age groups. The figures are provided by Statistics Norway and have been relatively stable over recent years. Since the figures for 2017 are not yet available, we also used the proportion for 2016 for 2017. The

Table 1.1.a. Total population in Norway in 2017 ≥ 65 years and proportion living in institutions. Source: Statistics Norway.

Age	Women		Men		Total	
	Population July 2017	% living in institutions*	Population July 2017	% living in institutions*	Population July 2017	% living in institutions*
65–69	136 606	0.5	137 028	0.4	273 634	0.5
70–74	126 668	0.9	121 468	0.9	248 136	0.9
75–79	84 349	2.0	73 320	2.0	157 669	2.3
80–84	61 890	6.2	46 714	4.4	108 604	5.4
85–89	47 364	12.6	28 803	8.8	76 167	11.2
≥ 90	35 755	27.8	14 649	17.0	50 404	24.8
≥ 65	492 631	4.7	421 982	2.3	914 612	3.6

* data from 31 Dec 2016 (tjeneste 21 = langtidsopphold i institusjon)

publisering, derfor er andelen for 2016 brukt også for 2017. Andelen er under én prosent i aldersgruppen 65–69 og øker til 25 % blant de over 90 år. Totalt sett er andelen i sykehjem i underkant av fire prosent for alle som er 65 år eller eldre. Ved beregning av andel individ med langtidsplass i sykehjem er det tatt utgangspunkt i antall personer som har hatt langtidsplass i sykehjem i løpet av året (status per 31.12.). På grunn av en viss gjennomstrømming i løpet av året, vil noen av personene ha bodd hjemme deler av året (2). Andelen av befolkningen med langtidsplass angitt i tabell 1.1.a. vil dermed være høyere enn andelen som har bodd i institusjon hele året. Vi har ikke opplysninger om antall personer som har bodd på institusjon hele året. Dersom man justerer befolkningstallene ved å trekke fra antall individer med langtidsplass per 31. desember, vil andelen lege-middelbrukere overestimeres på grunn av at noen individer har bodd hjemme i deler av året og vil være registrert i Reseptregisteret i løpet av det året de får fast plass på sykehjem. Overestimeringen er fortsatt relativt sett mindre enn underestimeringen ved ikke å ta hensyn til at andelen som bor på sykehjem øker med alderen. For flere av legemiddelgruppene som omtales i denne temadelen har vi derfor valgt å estimere prevalens av legemiddelbruk for den delen av befolkningen som bor utenfor institusjon, basert på tallene i tabell 1.1.a.. Det er beskrevet i alle figurer og tabeller i temadelen dersom befolkning utenfor institusjon er benyttet ved estimering av prevalens (adjusted population).

proportion is less than one per cent in the 65–69 age group and increases to 25% among those over 90 years. Overall, just below 4% of people 65 years or older lived in a nursing home in 2016. The figures are based on the number of people living in nursing homes as of 31 December 2016. There is always a certain degree of relocation over the year, and some of the people will have lived at home for part of the year (2). The proportion of the population living in nursing homes given in table 1.1.a will therefore be higher than the proportion who lived in a nursing home for the entire year. We have no information on the number of people living in nursing homes throughout the entire year. Adjusting the population figures by subtracting number of people living in nursing homes will give an overestimation of the prevalence of drug users because some individuals will have lived at home for part of the year and will already be registered in NorPD the year they move into a nursing home. However, this overestimation will be relatively smaller than the underestimation by not accounting for the proportion of elderly living in nursing homes increasing with age. In this theme section we have estimated the prevalence of drug use for the population living outside institutions in many drug groups. All figures and tables in the theme section will state if this population is used (adjusted population).

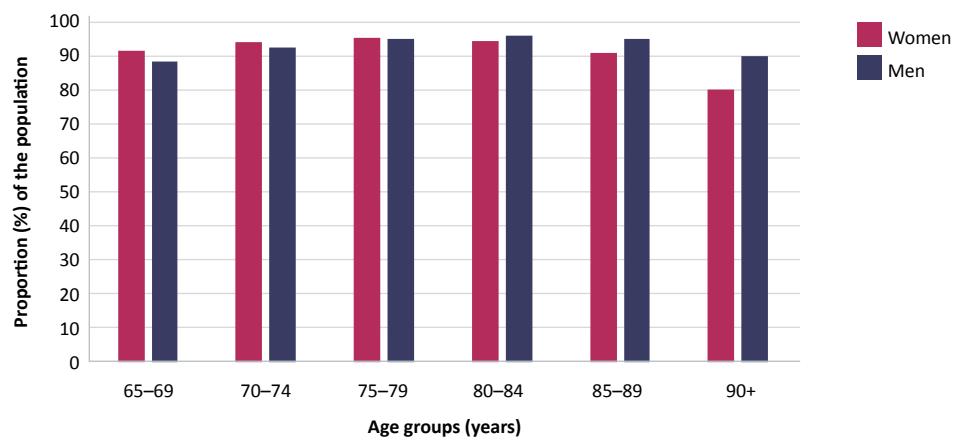


Figure 1.1.a. One year prevalence (%) of dispensed prescriptions in 2017 for men and women aged ≥ 65 years.
Unadjusted population.

Tall fra Reseptregisteret viser at i aldersgruppen 65 år eller eldre har 92 % fått minst ett legemiddel på resept i 2017. Dersom man justerer denne andelen i forhold til hjemmeboende eldre, øker andelen til 95 %. I totalbefolkningen fikk nesten 70 % forskrevet og utlevert minst ett legemiddel i 2017 (tabell 3.1.a). Figur 1.1.a viser at andelen går noe ned hos de aller eldste på grunn av at vi mangler forskrivning til eldre i institusjon. Andelen kvinner som bor i sykehjem er større enn andelen menn, spesielt i de aller eldste aldersgruppene (tabell 1.1.a). Dette kan forklare hvorfor prevalensen hos menn er større enn hos kvinner blant hjemmeboende når man ikke trekker fra andelen med langtidsplass i sykehjem (figur 1.1.a). Ved justering i forhold til hjemmeboende er andelen legemiddelbrukere økende også hos de eldste og ligger på rundt 100 % for eldre over 80 år. Total prevalens for hjemmeboende er vanskelig å estimere grunnet problemene med overestimering, som beskrevet over.

Andelen legemiddelbrukere er størst i de eldste aldersgruppene, og de eldre bruker også flere legemidler og større mengder av legemidlene målt i DDD. I 2017 utgjorde personer 65 år eller eldre 23 % av alle legemiddelbrukere, men kun 17 % av befolkningen. Eldre over 65 år fikk utlevert 48 % av totalt antall DDD som ble utlevert på resept i 2017 (tabell 1.1.b). Størst andel eldre finner vi i ATC-gruppe B (legemidler til forebygging av blodpropp) og ATC-gruppe C (legemidler ved hjerte- og karsykdommer), der andelen eldre legemiddelbrukere er henholdsvis 61 % og 55 %, og de bruker henholdsvis 65 % og 64 % av totalt antall DDD.

Figures from NorPD show that in the ≥ 65 year age group, 92% of the population had at least one drug dispensed on prescription in 2017. If we adjust according to the elderly living at home, the prevalence increases to 95%. In the general population, the prevalence of drug use was nearly 70% in 2017 (Table 3.1.a). Figure 1.1.a shows that the proportion was lower among the oldest age groups because prescriptions for patients in institutions are excluded. The proportion of women living in institutions is higher than for men, especially in the oldest age groups (see table 1.1.a). This may explain why the prevalence of drug use is higher for men than women when the unadjusted population is used (Figure 1.1.a). Adjusting the population by excluding people living in institutions, the prevalence of drug use is increasing with age and will be around 100 % for elderly people over 80 years. The exact total prevalence of drug use is impossible to calculate due to the problems with overestimation described above.

The proportion of drug users is highest in the oldest age groups, with more frequent use of multiple drugs and a higher quantity of each in terms of DDDs. In 2017, the ≥ 65 year age group constituted a share of 23% of all drug users, but only 17% of the population. Elderly people over 65 years had 48% of the total number of DDDs dispensed on prescription in 2017 (Table 1.1.b). The largest proportion of elderly is in ATC group B (anti-thrombotic medicines) and ATC group C (drugs for cardiovascular disease) where the proportion of drug users ≥ 65 years are 61% and 55%, respectively, and they use 65% and 64% of the total number of DDDs.

Table 1.1.b. Number of individuals having a prescription dispensed in 2017 in the major ATC groups and the corresponding sales in total number of DDDs. Proportion (%) in the age group 65 years and older is given in brackets.

	Total number of individuals	Proportion (%) ≥ 65 years	Total million DDDs	Proportion (%) ≥ 65 years
A – Alimentary tract and metabolism	1 081 420	39%	357	47%
B – Blood and blood forming organs	699 782	61%	252	65%
C – Cardiovascular system	1 117 743	55%	790	64%
G – Genito urinary system and sex hormones	876 600	24%	213	20%
H – Systemic hormonal preparations, excl. sex hormones and insulins	463 794	39%	78	43%
J – Antiinfectives for systemic use	1 177 724	24%	32	36%
M – Musculo–skeletal system	963 353	26%	96	42%
N – Nervous system	1 450 941	31%	380	35%
R – Respiratory system	1 374 981	22%	297	33%
Total (all ATCs)	3 688 097	23%	2572	48%

Tabell 1.1.c viser de 30 mest brukte legemidlene utlevert på resept blant eldre i 2017. Acetylsalisylsyre (f.eks. Albyl-E®) som benyttes forebyggende mot blodproppe har i flere år ligget på topp selv om bruken har vært svakt nedadgående de siste årene. 29 % av personer over 65 år fikk acetylsalicylsyre utlevert på resept i 2017. På annenplass ligger paracetamol (smertestillende middel) som i 2017 ble utlevert på resept til 24 % av eldre over 65 år. Paracetamol toppler også listen over de 30 mest brukte legemidlene i totalbefolkingen (se tabell 3.1.c), og selges i tillegg i utstrakt grad reseptfritt i pakninger på 20 tabletter. På tredje plass ligger metoprolol (Seloken®, Selo-Zok®), en betablokker til behandling av høyt blodtrykk, hjertesvikt og andre hjertesykdommer. Som nummer fire og nummer seks på listen ligger henholdsvis atorvastatin (Lipitor®) og simvastatin (Zocor®), begge kolesterolsenkende midler som benyttes til å forebygge kardiovaskulær sykdom, se kapittel 1.3. Det mest brukte sovemedlet i Norge, zopiklon (Imovane®), ble brukt av 17 % av eldre og er nummer fem på listen. Blant de 30 mest brukte legemidlene finner vi foruten zopiklon, fire andre vanedannende medikamenter (kombinasjonen kodein/ paracetamol, tramadol, oxazepam og etylmorphin). Diazepam er ikke lenger på listen over de 30 mest brukte. Andelen eldre ≥ 65 år som fikk forskrevet diazepam er redusert med 40 % over siste 10-årsperiode, fra nesten 8 % til vel 4,5 %. Dette er en ønsket utvikling. Den lange halveringstiden gjør diazepam spesielt uegnet til bruk hos eldre. Se også kapittel 1.6 om bruk av sovemedler og beroligende midler.

Table 1.1.c shows the 30 most used prescription drugs by the elderly. Acetylsalicylic acid (Albyl-E®), used to prevent thrombosis, has been on top of the list for several years even if the use has been slowly decreasing over recent years. 29% of people over 65 years received acetylsalicylic acid on prescription in 2017. Number two on the list is paracetamol (pain-killer), used on prescription by 24% over 65 years. Paracetamol is number one on the list of the most used prescription drugs in the general population (see table 3.1.c), and it is also widely sold without prescription (OTC) in smaller packages (20 tablets). The third drug on the list is metoprolol (Seloken®, Selo-Zok®), a beta blocker for the treatment of high blood pressure, heart failure and other cardiovascular diseases. Number four and six are atorvastatin (Lipitor®) and simvastatin (Zocor®) respectively, both are lipid modifying drugs used to prevent cardiovascular disease, see chapter 1.3. The most used hypnotic in Norway, zopiclone (Imovane®), was used by 17% of the elderly and is number five on the list. Among the 30 most commonly prescribed drugs, in addition to zopiclone we find four other addictive drugs (codeine and paracetamol in combination, tramadol, oxazepam and ethylmorphine). Diazepam is no longer on the list of the 30 most used drugs. The proportion of people over 65 years who were prescribed diazepam declined by 40% over the last decade, from nearly 8% to around 4.5%. This is a positive development since the long half-life makes diazepam especially unsuitable for use in elderly people. See also chapter 1.6 regarding use of hypnotics and anxiolytics.

Table 1.1.c. The 30 most commonly prescribed drugs (defined as ATC 5th level codes) dispensed to individuals aged ≥ 65 years in Norway in 2017. Adjusted population (i.e. excl. the population in nursing homes)

#	ATC code	Active ingredient	Use	Women		Men		Total	
				n	(%)	n	(%)	n	(%)
1	B01AC06	Acetylsalicylic acid	Antithrombotic	117 203	25.0	140 880	34.2	258 083	29.3
2	N02BE01	Paracetamol ¹⁾	Analgesic	137 369	29.3	71 138	17.3	208 507	23.6
3	C07AB02	Metoprolol	Antihypertensive/ cardiovascular diseases	95 245	20.3	99 108	24.0	194 353	22.0
4	C10AA05	Atorvastatin	Lipid-modifying	79 335	16.9	90 614	22.0	169 949	19.3
5	N05CF01	Zopiclone	Hypnotic	104 899	22.3	47 834	11.6	152 733	17.3
6	C10AA01	Simvastatin	Lipid-modifying	73 788	15.7	74 534	18.1	148 322	16.8
7	A02BC02	Pantoprazole ¹⁾	Reflux oesophagitis	62 053	13.2	50 711	12.3	112 764	12.8
8	N02AJ06	Codeine and paracetamol	Opioid analgesic	58 267	12.4	39 900	9.7	98 167	11.1
9	A12AX>>	Calsium, combinations ¹⁾	Calcium/vitamin D supplement	77 957	16.6	16 945	4.1	94 902	10.8
10	H03AA01	Levothyroxine sodium	Thyroxine supplement	74 135	15.8	19 403	4.7	93 538	10.6
11	C08CA01	Amlodipine	Antihypertensive/ cardiovascular diseases	45 320	9.7	45 348	11.0	90 668	10.3
12	H02AB06	Prednisolone	Corticosteroid	47 323	10.1	35 863	8.7	83 186	9.4
13	J01CE02	Phenoxymethylpenicillin	Antibacterial	38 297	8.2	34 736	8.4	73 033	8.3
14	J01CA08	Pivmecillinam	Antibacterial	54 737	11.7	15 419	3.7	70 156	8.0
15	N02AX02	Tramadol	Opioid analgesic	42 484	9.0	26 402	6.4	68 886	7.8
16	A02BC05	Esomeprazole	Reflux oesophagitis	40 751	8.7	27 923	6.8	68 674	7.8
17	R03AC02	Salbutamol	Asthma/COPD	38 929	8.3	27 465	6.7	66 394	7.5
18	G03CA03	Estradiol	Hormone therapy in postmenopausal women	64 487	13.7	14	0.0	64 501	7.3
19	R05DA01	Ethylmorphine	Cough suppressant	37 024	7.9	27 181	6.6	64 205	7.3
20	A11EA	Vitamin B-complex ¹⁾	Vitamin B	33 811	7.2	29 487	7.2	63 298	7.2
21	A10BA02	Metformin	Diabetes	26 906	5.7	34 328	8.3	61 234	6.9
22	C09CA06	Candesartan	Antihypertensive/ cardiovascular diseases	32 413	6.9	27 478	6.7	59 891	6.8
23	N05BA04	Oxazepam	Anxiolytic	42 155	9.0	16 779	4.1	58 934	6.7
24	R06AE07	Cetirizine ¹⁾	Anti-allergic	38 035	8.1	19 802	4.8	57 837	6.6
25	C03CA01	Furosemide	Diuretic	33 452	7.1	22 489	5.5	55 941	6.3
26	S01XA20	Artificial tears and other indifferent preparations ¹⁾	Dry eyes	36 171	7.7	12 406	3.0	48 577	5.5
27	M01AB05	Diclofenac ¹⁾	NSAID/analgesic	25 651	5.5	21 336	5.2	46 987	5.3
28	R05CB01	Acetylcysteine ¹⁾	Mucolytic	25 121	5.4	21 364	5.2	46 485	5.3
29	C09AA05	Ramipril	Antihypertensive/ cardiovascular diseases	17 535	3.7	28 367	6.9	45 902	5.2
30	B01AF02	Apixaban	Antithrombotic	21 096	4.5	23 580	5.7	44 676	5.1

¹⁾The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

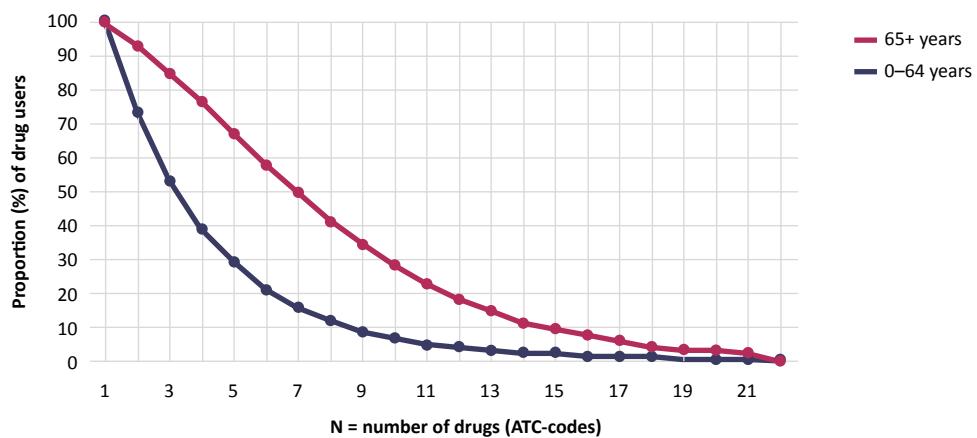


Figure 1.1.b. Proportion (%) of total drug users according to number of drugs dispensed (ATC 5th level codes) in 2017 in the age groups 0–64 and ≥ 65 years.

Figur 1.1.b viser fordelingen av antall legemidler (definert som ulike ATC 5. nivåer) utlevert i 2017 til legemiddelbrukere 65 år eller eldre sammenlignet med resten av befolkningen (0–64 år). 58 % av eldre legemiddelbrukere fikk utlevert mer enn fem legemidler, mens for de under 65 år var andelen 21 %. I 2017 fikk 23 % av legemiddelbrukere over 65 år mer enn 10 ulike legemidler på resept i løpet av året. Denne andelen har økt fra 19 % i 2007. For de under 65 år var andelen som brukte over 10 legemidler 5 % i 2017.

Figur 1.1.c viser andel eldre legemiddelbrukere som fikk utlevert 15 legemidler eller mer per år i perioden 2004–2017 sammenlignet med legemiddelbrukere under 65 år. Det er viktig å presisere at dette ikke nødvendigvis betyr at alle legemidlene brukes samtidig. Noen av legemidlene kan være til korttidsbruk eller akuttbehandling, for eksempel behandling av infeksjoner med antibiotika. Bytte av legemidler i løpet av et år vil også medføre at antallet per pasient kan bli høyt. Andelen kvinner 65 år eller eldre som fikk 15 legemidler eller mer økte fra 7 % til 10 % i perioden. Økningen for eldre menn i samme periode var fra 5 % til 8 %. For de under 65 år har andelene som bruker over 15 legemidler ligget på rundt en prosent for menn og to prosent for kvinner og det har også i denne aldersgruppen vært en økning i perioden. Evidensbaserte retningslinjer anbefaler ofte flere legemidler for behandling eller forebygging av sykdom. Dersom et individ i tillegg behandles for flere lidelser, vil vedkommende ofte bruke mange legemidler. Tallene fra Reseptregisteret viser at mange eldre må forholde seg til mange legemidler og

Figure 1.1.b shows the percentage distribution of the total number of individuals by the number of drugs (defined as different ATC 5th levels) that were dispensed during 2017 to users 65 years or older, compared to the rest of the population (0–64 years). 58% of the elderly drug users used more than five drugs compared to 21% for those under 65 years. In 2017, 23% of drug users over 65 years were prescribed more than 10 different drugs during the year. This percentage has increased from 19% in 2007. For those under 65 years, the proportion was 5% in 2017.

Figure 1.1.c shows the proportion of drug users over 65 years with more than 15 different drugs dispensed per year in the period 2004–2017 compared to drug users 0–64 years. It is important to emphasise that use of many drugs during a year does not necessarily mean that all the drugs are used simultaneously. Some drugs may be prescribed for short-term use or for acute treatment, for example a course of antibiotics for infections. Changes of treatment during a year will also increase the total number of drugs per patient. The proportion of female drug users over 65 years with 15 or more drugs increased in the period from 7% to 10%. The increase for elderly men in the same period was from 5% to 8%. For drug users under 65 years, the proportion using 15 drugs or more has been about one per cent for men and two per cent for women, and there has been an increase also in this age group in this period. Evidence-based guidelines often recommend several medicines to treat or prevent disease. Individuals treated for several illnesses will often use multiple drugs. The

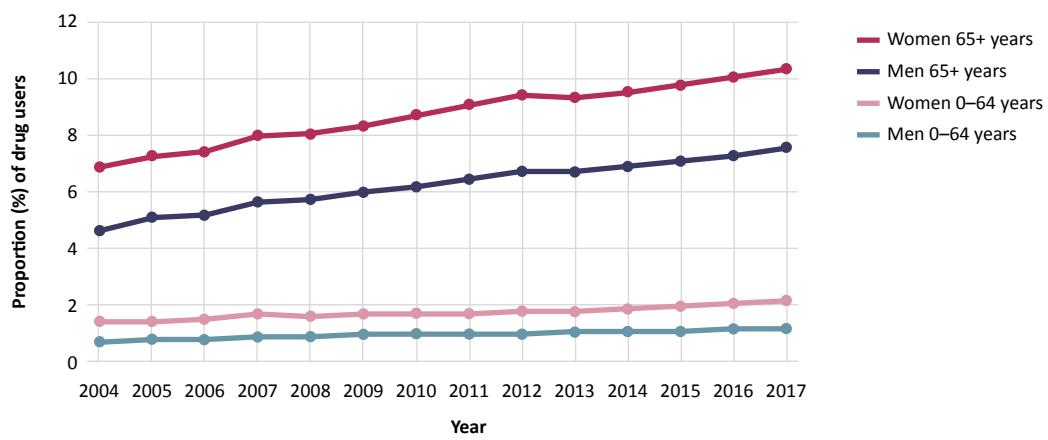


Figure 1.1.c. Proportion of drug users who were dispensed ≥ 15 drugs (ATC 5th level codes) in 2004–2017 in the age groups 0–64 and ≥ 65 years by gender.

det kan øke faren for feilbruk. Det er bl.a. publisert flere studier omkring denne problematikken basert på data fra Reseptregisteret (3,4,5,6). Polyfarmasi hos eldre pasienter kan gi økt risiko for uhensiktsmessig legemiddelbruk, bivirkninger, interaksjoner, sykehussinnleggelse og død (7). Den viktigste prediktoren for uhensiktsmessig forskrivning til eldre er antall forskrevne legemidler. Det har de senere årene vært økt fokus på *deprescribing* (avmedisinering), et tiltak som er særlig aktuelt for eldre for å avdekke de tilfelene der risikoen ved å ta mange legemidler overstiger nytten (8).

figures from NorPD show that many elderly people will need to cope with many drugs, increasing the risk of misuse. Several studies using data from NorPD have focused on this issue (3,4,5,6). Polypharmacy in elderly people imposes a risk of inappropriate drug use and increases the risk of adverse drug reactions, interactions, hospital admissions and death (7). The single most important predictor of inappropriate prescribing in older patients is the number of prescribed drugs. In recent years, there has been an increased focus on deprescribing, a process which may be important in elderly people to define cases where the risk of taking multiple drugs outweighs the benefit (8).

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1.2 Bruk av legemidler mot aldersdemens

Rundt 60 % av pasienter med demens har Alzheimers sykdom og dette er den vanligste formen for aldersdemens, mens vaskulær demens som resultat av kardiovaskulære sykdommer er den nest hyppigste med 20 % (1–3). Det er anslått at forekomsten av demens i Norge ligger på rundt 80 000–104 000 personer (3).

De første legemidlene mot Alzheimers sykdom kom på markedet i Norge rundt år 2000 og i dag er det fire legemidler godkjent. Donepezil (Aricept®), rivastigmin (Exelon®) og galantamin (Reminyl®) har lignende virkemåte (kolinesterasehemmere), mens det fjerde, memantin (Ebixa®), virker på en litt annen måte. Alle legemidlene har begrenset effekt og kan ikke stoppe utviklingen av sykdommen, bare bedre noen av symptomene. Kliniske studier har vist at effekten av disse legemidlene varierer og det betyr at noen pasienter kan ha god effekt, mens andre har liten eller ingen effekt. Det finnes fortsatt ingen kriterier som gjør det mulig å vite på forhånd hvilke pasienter som vil ha effekt av demenslegemidler. Legemiddelverket har satt som krav for refusjon av demenslegemidlene at «effekten av behandlingen skal kontrolleres og dokumenteres i journal minst hver 6. måned».

Totalt var det 14 564 hjemmeboende eldre ≥ 65 år som fikk minst ett demensmiddel (ATC-gruppe N06D) i 2017. Antallet som fikk utslevert ett demensmiddel har vært relativt konstant over tid. 95 % av alle som fikk demensmidler i 2017 var 65 år eller eldre. Andelen i befolkningen over 65 år som brukte demensmidler har gått svakt ned fra 1,8 % i 2013 til 1,6 % i 2017. 60 % av alle som fikk demensmidler i 2017 var kvinner. Basert på den estimerte forekomsten på mellom 80 000–104 000 personer med demens i befolkningen er det en relativt liten andel av disse som bruker demenslegemidler. Det var totalt 4 484 nye brukere av demensmidler i 2017. Nye brukere er definert ut fra at de ikke fikk utslevert

1.2 Use of anti-dementia drugs in the elderly

Around 60% of patients with dementia have Alzheimer's disease, the most common form of dementia. Vascular dementia due to cardiovascular disease is the second most common and accounts for 20% (1–3). The number of patients with dementia in Norway is estimated to be around 80 000–104 000 (3).

The first drugs for the treatment of Alzheimer's disease were introduced in Norway around the year 2000. Four drugs are currently approved; donepezil (Aricept®), rivastigmine (Exelon®) and galantamine (Reminyl®) all act in a similar way (cholinesterase inhibitors), whereas memantine (Ebixa®) has a different mechanism of action. All drugs have limited efficacy and cannot halt disease progression, only improve the symptoms. Results from randomised clinical trials with anti-dementia drugs have shown great variation in efficacy that implies that some patients show a positive effect, while others have little or no effect. However, it is impossible to know in advance which patients will have positive effects of treatment. The requirement for reimbursement of anti-dementia drugs set by the Norwegian authorities is that "the effect of treatment should be monitored and documented in the patient's medical records at least every 6 months".

In 2017, there were a total of 14 564 users of anti-dementia drugs (ATC group N06D) in the elderly population aged ≥ 65 years living at home. The number of users has remained relatively stable over time. 95% of all patients using anti-dementia drugs in 2017 were older than 65 years. The proportion of users in the population above 65 years has been slightly reduced from 1.8% in 2013 to 1.6% in 2017. 60% of all patients using anti-dementia drugs in 2017 were women. Based on the estimated numbers of dementia patients of around 80 000–104 000, a relatively low proportion are treated with anti-dementia drugs. The number of new users of anti-dementia drugs was

Table 1.2.a. Number of men and women (≥ 65 years) with at least one dementia drug dispensed in 2017, distributed according to the total number of drugs (ATC codes) dispensed during 2017. Unadjusted population.

Gender	1–5 drugs n (%)	6–10 drugs n (%)	11–15 drugs n (%)	≥ 16 drugs n (%)	Total
Men	1556 (27)	2588 (44)	1207 (21)	475 (8)	5826 (100)
Women	2278 (26)	3731 (43)	1939 (22)	790 (9)	8738 (100)
Total	3834 (26)	6319 (43)	3146 (22)	1265 (9)	14564 (100)

disse legemidlene i 2016. Både antall nye brukere og totalt antall brukere har holdt seg relativt uforandret i perioden 2013–2017 og dette innebærer at det er like mange som avslutter behandlingen og som starter behandling i løpet av et år. Manglende effekt av behandlingen og bivirkninger kan være noen av årsakene til at behandling avsluttes. I tillegg flytter personer med demens til sykehjem eller dør i løpet av året og dette er det heller ikke tatt hensyn til. 80 % av de med langtidsplass i sykehjem har en demenssykdom (2).

Forskrivning av legemidler til individer i institusjon er ikke med i tallene som presenteres i denne rapporten. Basert på antall solgte doser (DDD) til sykehjem i 2017 er det beregnet at rundt 30 % av alt salg av demensmidler kan tilskrives sykehjemsbeboere. Tallene er beregnet ut fra totalomsetning av demensmidler basert på Folkehelseinstituttets Grossistbaserte legemiddelstatistikk (5). Denne andelen var også rundt 30 % i 2011 (4).

Antall brukere for de ulike demenslegemidlene er vist i tabell 3.13, s 117.

Svenske data viser at andelen brukere av demensmidler blant eldre over 65 år var 1,9 % i 2016, og bruken har økt svakt over tid og det er store geografiske forskjeller (6). Tallene i Sverige er noe høyere enn i Norge, men det er vanskelig å vurdere hva som er et optimalt nivå av legemiddelbehandling av demenspasienter.

4 484 in 2017. New users of anti-dementia drugs were defined as those who had not been dispensed drugs in this class in the preceding year, i.e. 2016. The annual number of new users and the total number of users have remained relatively unchanged in the period 2013–2017, implying that there is a balance between the numbers who start and stop treatment during a year. Lack of efficacy and adverse events can be reasons for stopping treatment. In addition, patients who are admitted to nursing homes or those who die in the course of the year will not be registered in the NorPD. 80 % of the patients with long-term stay in nursing home have a dementia diagnosis (2).

Data on drug prescriptions to individuals in nursing homes are not included in the figures presented in this report. Based on the sales in number of doses (DDD) in 2017, it is estimated that around 30% of total sales of anti-dementia drugs can be attributed to use in nursing homes. This figure is based on the total sales of anti-dementia drugs from the Norwegian Drug Wholesale Statistics (5). This proportion was also around 30% in 2011 (4).

The number of users for the various anti-dementia drugs are given in table 3.13, p 117.

Data from Sweden showed that the proportion of users of anti-dementia prescriptions among the elderly over 65 years was 1.9% in 2016 with a slight increase over time, and that there are geographical differences in use (6). The figures in Sweden are slightly higher than in Norway. However, it is difficult to assess what would be the optimal level of drug treatment of dementia patients.

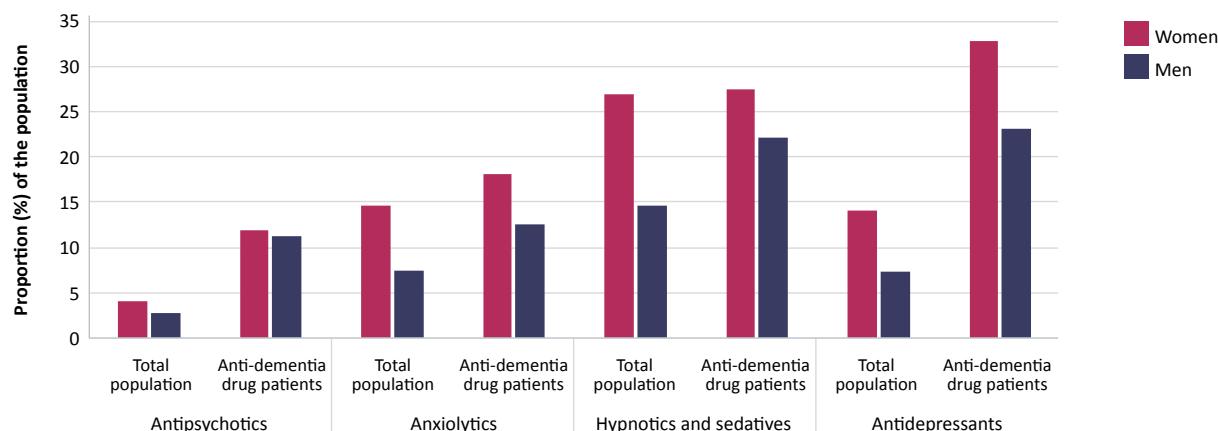


Figure 1.2.a. Proportion (%) of use of antipsychotics (N05A), anxiolytics (N05B), hypnotics/sedatives (N05C) and antidepressants (N06A) in the elderly population who were dispensed anti-dementia drugs in 2017 compared to the total Norwegian population aged ≥ 65 years. Unadjusted population.

Tall fra Reseptregisteret viser at de som får demensmidler også bruker mange andre legemidler. Tabell 1.2.a viser fordeling for kvinner og menn ut fra antall legemidler som ble utlevert i løpet av 2017, hvorav minst ett var demenslegemiddel (N06D). Antall legemidler er definert som ulike ATC koder (på virkestoffsnivå). Noen av legemidlene kan være gitt som akutt behandling for eksempel behandling av infeksjoner med antibiotika, mens andre legemidler er for behandling av kroniske sykdommer. Dette innebærer at ikke alle legemidlene nødvendigvis er forskrivet til samtidig bruk. Bytte av legemiddelbehandling i løpet av et år vil også medføre at antall legemidler til en pasient kan bli høyt. Totalt fikk rundt 30 % av alle som fikk demensmidler over 10 legemidler i 2017. Andelen som fikk over 10 legemidler i 2017 er på samme nivå som i 2011 (4). Legemiddelrelaterte problemer kan øke ved bruk av mange legemidler samtidig.

Figur 1.2.a viser andelen som fikk utlevert minst ett antipsykotikum (N05A), middel mot angst (N05B), sovemiddel (N05C) og/eller antidepressivum (N06A) hos eldre brukere av demensmidler i 2017 sammenlignet med tilsvarende andeler i hele befolkningen av eldre. Andelene som bruker ovenfor nevnte midler var høyere i demenspopulasjonen. Dette gjelder særlig midler mot depresjon og antipsykotika. I demensgruppen fikk 33 % av kvinnene også midler mot depresjon, mens gjennomsnittet i befolkningen var 14 %. For menn var tilsvarende andeler 23 og 7 % (figur 1.2.a). Det er som forventet at bruken av psykofarmaka er høyere i demensgruppen, da dette er en spesielt sårbar gruppe med mye angst, depresjon

Figures from the NorPD show that patients using anti-dementia drugs also use many other drugs. Table 1.2.a shows the distribution of women and men according to the number of drugs that were dispensed in 2017, where at least one was an anti-dementia drug (N06D). The number of drugs is based on counting the different ATC codes (active ingredient level) dispensed. Some of the drugs dispensed can be used for acute short-term disease e.g. antibiotics for treatment of infections, while other drugs are intended for chronic diseases. This implies that not all drugs are necessarily prescribed for concurrent use. Changes to drug therapy will also influence the total number of drugs dispensed to a patient during a year. Overall, around 30% of all dementia patients had more than 10 drugs dispensed during 2017. This proportion is similar to the figures presented for 2011 (4). The use of multiple drugs will increase the risk of drug-related problems.

Figure 1.2.a shows the proportion who had at least one antipsychotic (N05A), anxiolytic (N05B), hypnotic and sedative (N05C) and/or antidepressant (N06A) among elderly users of anti-dementia drugs in 2017 compared to the total population aged 65 years or older. The use of the specified drug groups was higher in the dementia population compared to the total population. The differences were particularly visible for the use of antidepressants and antipsychotics. In the dementia group, 33% of women used antidepressants compared to 14% in the total population. For men, the corresponding figures for antidepressants were 23 and 7% (Figure 1.2.a). As expected, the use of psychotropic drugs is higher in

og uro. Diskusjon rundt bruk av dempende midler hos demente er viktig både for å oppnå optimal bruk og unngå overmedisinering. Blant de som brukte demensmidler har andelen som fikk psykofarmaka gått noe ned sammenlignet med 2011 (4). Det er mindre kjønnsforskjeller i demensgruppen enn i den generelle befolkningen.

the dementia group as this is a particularly vulnerable group of patients with a lot of anxiety and depression. Focus on the optimal use of psychotropics among dementia patients is important to avoid unfavourable over-treatment. The proportions using psychotropics have been slightly reduced compared to 2011 among the patients using anti-dementia drugs. There are fewer gender differences in the use of psychotropics in those using anti-dementia drugs compared to the general population.

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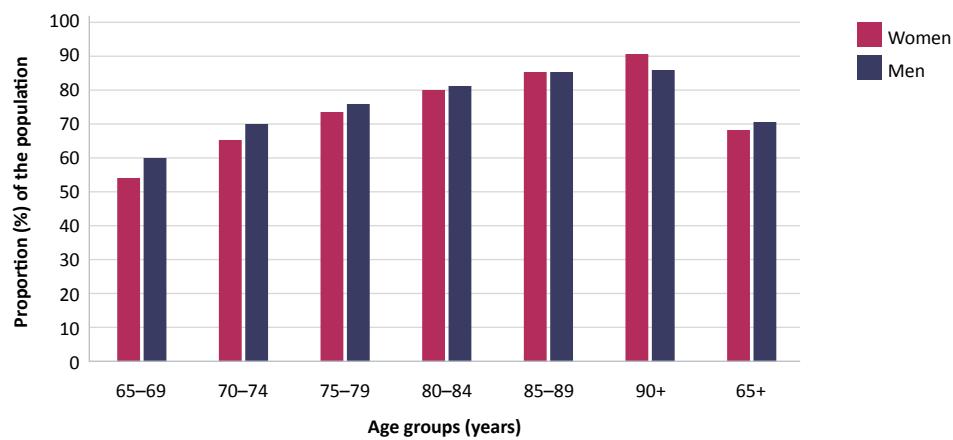


Figure 1.3.a. Proportion (%) of the population in Norway ≥ 65 years with cardiovascular prescriptions (ATC group C) dispensed in 2017. Adjusted population (i.e. excl. the population living in nursing homes).

1.3 Bruk av legemidler ved hjerte- og karsykdommer og antitrombotiske lege-midler hos eldre

Hjerte- og karsykdommer øker med alderen og dette kapitlet fokuserer på bruk av legemidler blant eldre over 65 år. Legemidler klassifisert i ATC-gruppe C brukes til behandling av blant annet høyt blodtrykk, hjertesvikt, angina pectoris og høyt kolesterol. Lege-midler i gruppe B01 omfatter legemidler til behan-dling og forebygging av blodpropp.

Totalt fikk 610 022 eldre menn og kvinner ekspedert minst én resept på et medikament innenfor ATC-gruppe C i 2017. Dette tilsvarer en ett års prevalens på 68 % hos kvinner og 70 % hos menn blant den hjemmeboende befolkningen (figur 1.3.a). Prevalensen har vært relativt stabil de siste fem årene. Andelen som bruker slike legemidler øker med alderen (figur 1.3.a).

Bruk av legemidler ved behandling av høyt blodtrykk og andre hjerte- og karsykdommer

Legemidler innenfor gruppene diuretika (C03), beta-bloktere (C07), kalsiumkanalblokkere (C08) og ACE-hemmere/ARB (angiotensin II-reninblokkere) (C09) brukes til behandling av ulike sykdommer hvorav de mest vanlige er høyt blodtrykk, angina, ødemer og hjertesvikt.

I 2017 fikk over halvparten av den eldre hjemmeboende befolkning ekspedert minst én resept på et legemiddel i ovenfor nevnte grupper (59 % kvinner og 62 % menn).

1.3 Use of cardiovascular drugs and anti-thrombotic drugs in the elderly

Cardiovascular disease increases with age and this chapter focuses on the use of medicines among the elderly aged 65 years or older. Drugs classified in the ATC group C are used to treat different diseases such as hypertension, heart failure, angina pectoris and high cholesterol levels. Agents classified in group B01 include medicines used to treat and prevent thrombosis.

In 2017, a total of 610,022 elderly men and women had at least one prescription dispensed for a drug in ATC group C. This corresponds to a one-year prevalence of 68% in women and 70% in men in the population living outside institutions. These proportions have been relatively stable over the latest five years. The proportion using these drugs increases with age (Figure 1.3.a).

Use of drugs to treat hypertension and other cardiovascular disease

Drugs in groups such as diuretics (C03), beta blockers (C07), calcium channel blockers (C08) and ACE inhibitors/ARB (angiotensin II renin blockers) (C09) are used to treat different diseases, most commonly hypertension, angina, oedema and heart failure.

In 2017, over half of the elderly population living at home had at least one prescription dispensed for a drug in one of the these groups (59% women and 62% men).



Figure 1.3.b. Proportion (%) of the population in Norway ≥ 65 years with prescriptions of diuretics (C03), beta blockers (C07), calcium channel blockers (C08), ARBs/ACE inhibitors (including combinations) (C09) and lipid modifying agents (C10) dispensed in the period 2013–2017. Unadjusted population.

Figur 1.3.b viser ettårsprevalensen for bruk av de ulike legemiddelgruppene i perioden 2013–2017 hos henholdsvis kvinner og menn. Oppdaterte retningslinjer for forebygging av hjerte- og karsykdom ble publisert i 2017 (3). Dette er en oppdatering av retningslinjene fra 2009 og de nye retningslinjene er basert på en ny risikotabell, NORRISK 2 (4, 5). Legemiddelbehandling er viktig både i primær- og sekundærforebygging av hjerte- og karsykdom. Andelen eldre som bruker diuretika (ATC C03) har gått gradvis ned over tid. Dette gjelder i særlig grad antall brukere av «high-ceiling diuretika» (furosemid/bumetanid). Tiazider i faste kombinasjon med ACE-hemmere/ARB (C09) er blitt mer vanlig (se tabell side 79). Andel som bruker betablokkere har også gått noe ned over tid. Betablokkere er viktig i behandlingen av hjertesvikt, men er ikke lenger førstevælg ved behandling av høyt blodtrykk. Andelen som bruker kalsiumkanalblokkere (C08) har vært stabilt, og det er nå flere som får faste kombinasjoner med en ARB/tiazid (se tabell side 80). Totalt har andelen som får ACE-hemmere/ARB (C09) vært relativ stabil hos kvinner, mens andelen øker hos menn.

Behandling av høyt blodtrykk hos nye brukere

En artikkel basert på data fra Reseptregisteret fra 2009 viste at tiazider og ARB var de vanligste legemidlene som ble foreskrevet ved oppstart av behandling hos pasienter med høyt blodtrykk (6). De nyeste retningslinjene gir ingen anbefalinger om valg av legemiddel. Det viktigste er reduksjon av blodtrykket. Økningen i antall brukere av ARB tyder imidlertid på at disse legemidlene fortsatt ofte er førstevælg ved behandling av høyt blodtrykk.

Figure 1.3.b shows the prevalence of use of the various groups in the period 2013–2017 in women and men. The updated guidelines for prevention of cardiovascular disease were published in 2017 (3). This is an update of the 2009 guidelines and is based on a new risk score table, NORRISK 2 (4, 5). Pharmaceutical treatment is important both in primary and secondary prevention of cardiovascular disease. The proportion of elderly patients using diuretics (ATC C03) has gradually decreased over time. The greatest reduction is observed for the high-ceiling diuretics (furosemide /bumetanide). Thiazides in fixed combination with ACE inhibitors /ARB (C09) have become more common (see table page 79.) The proportion of users of beta-blockers has also decreased somewhat over time. Beta-blockers are important to treat heart failure, but are no longer the drug of choice to treat hypertension. The proportion of users of calcium channel blockers (C08) has been stable, while more users receive fixed combinations of calcium channel blockers with an ARB / thiazide (see table page 80). In total, the proportion using ACE-inhibitors / ARB (C09) has been relatively stable in women, while the proportion is increasing in men.

Treatment of hypertension in new users

An article based on 2009 data from the NorPD showed that thiazides and ARB were the most common drugs prescribed at the initiation of treatment in new patients with hypertension (6). The latest guidelines provide no recommendations related to selection of drugs. The most important is the reduction of the blood pressure. However, the increase in the number of ARB users indicates that

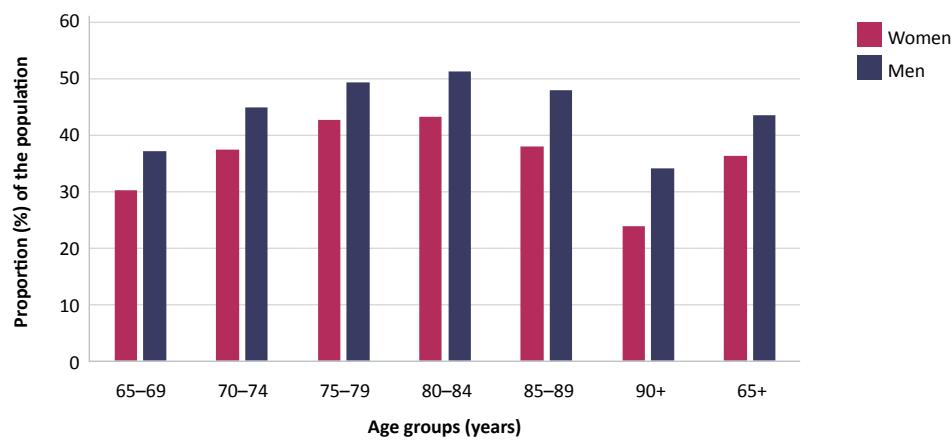


Figure 1.3.c. Proportion (%) of the population in Norway ≥ 65 years with prescriptions of lipid-modifying agents (C10) dispensed in 2017. Adjusted population (i.e. excl. the population living in nursing homes).

Lipidsenkende legemidler (statiner)

Behandling av høye kolesterolverdier er viktig for å forebygge hjerte- og karsykdom. Statiner er den viktigste legemiddelgruppen, hele 98 % av de som bruker lipidsenkende legemidler bruker et statin. Bruken av statiner varier mellom land i Europa og Norge har et relativt høyt forbruk (7).

I 2017 fikk 35 % av kvinner og 43 % av menn i alderen 65 år eller eldre utlevert minst én resept på et lipidsenkende legemiddel (figur 1.3.c). Andelen som bruker lipidsenkende legemidler har økt jevnt over tid og er høyere hos menn enn hos kvinner. Andel brukere øker med alderen opp til 84 år (figur 1.3.c). I aldersgruppen 75–79 år var andelen henholdsvis 43 og 50 % hos kvinner og menn. I de høyeste aldersgruppene går andelen som bruker lipidsenkende legemidler ned og da særlig hos de eldste over 90 år. Dette kan indikere at det er mindre bruk av lipidsenkende legemidler som sekundærforebygging for å redusere antall nye hjerte- og kar tilfeller og redusere dødelighet hos de aller eldste. Populasjonen er redusert med antall personer som bor i sykehjem slik at andelen gjelder hjemmeboende eldre.

De nye retningslinjene anbefaler atorvastatin 20 mg ved oppstart av statinbehandling (3). Antall som får atorvastatin øker og de nye retningslinjene kan ha påvirket det. For detaljert oversikt over antall brukere av statiner se tabell side 81. De fleste statin-brukere bruker også andre hjerte- og karlegemidler.

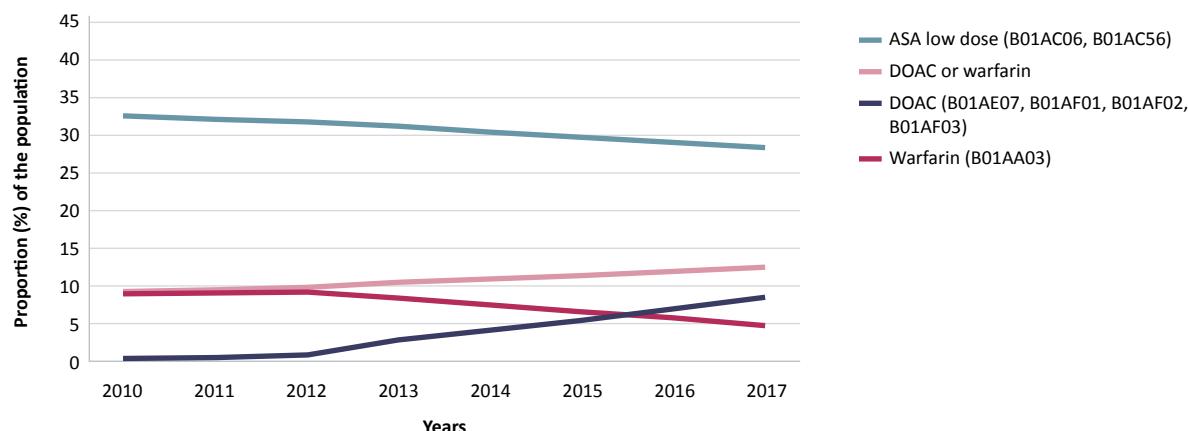
these drugs are still often the first choice in the treatment of hypertension.

Lipid-modifying agents (statins)

Treatment of hypercholesterolemia is important to prevent cardiovascular disease. 98% of patients on lipid-modifying treatment use statins. The use of statins varies between countries in Europe, and Norway has a relatively high consumption (7).

Among the elderly population, 35% women and 43% men in Norway were dispensed at least one statin prescription in 2017 (figure 1.3.c). The proportion using statins has increased steadily over time and men use more than women. Usage increases with age up to 84 years. In the 75–79 year age group, the proportion was 43% in women and 50% in men. The prevalence of statin use declines in the oldest age groups and particularly in those aged over 90 years. This may indicate that there is less secondary prevention with statins for reducing new cardiovascular events and mortality among the oldest population. The population is adjusted by the number of people living in nursing homes, so the proportion of the population refers to the elderly people living at home.

The new guidelines recommend atorvastatin 20 mg as the drug of choice when starting statin treatment (3). The number of patients receiving atorvastatin is increasing and the new guidelines may have contributed to this increase. For a detailed overview of the



Figur 1.3.d. Proportion (%) of the population in Norway ≥ 65 years with prescriptions of the antithrombotic drugs warfarin, direct-acting oral anticoagulants (DOAC incl. dabigatran, rivaroxaban, apixaban and edoxaban), low dose acetylsalicylic acid (ASA) dispensed in 2010–2017. Unadjusted population.

Rundt 80 % av statinbrukerne fikk utlevert minst ett annet legemiddel innenfor ATC-gruppe C i 2017.

Antitrombotiske legemidler

Andelen brukere av antitrombotiske legemidler blant eldre har vært relativt konstant i perioden 2010–2017 (se figur 1.3.d). Det har imidlertid vært en endring i hvilke legemidler som benyttes. De nye direktevirkende orale antikoagulantia (DOAC) brukes i økende grad og i 2017 brukte 8 % av eldre en DOAC. Andelen som bruker warfarin er nesten halvert fra 9 % i 2010 til 5 % i 2017. Totalt har andelen som bruker warfarin eller DOAC økt i samme periode. Acetylsalisylsyre i lave doser brukes blant annet forebyggende for å redusere risikoen for tromboser. Andelen brukere av ASA er redusert i perioden 2010–2017.

Over 90 % av de som brukte et antitrombotisk middel (ATC B01) fikk også minst ett annet hjerte- og kar-legemiddel (ATC-gruppe C).

number of statin users see table page 81. Many statin users are also dispensed other cardiovascular drugs. Around 80% of statin-users had at least one other ATC group C drug dispensed in 2017.

Antithrombotic drugs

The proportion of users of antithrombotic drugs among the elderly ≥65 years have been relatively stable over the period 2010–2017 (see figure 1.3.d). However, there has been a shift in the choice of drugs being used. The new direct-acting oral anticoagulants (DOAC) are increasingly used and in 2017, the proportion of users of DOAC among the elderly was 8%. The proportion of users of warfarin is nearly halved from 9% in 2010 to 5% by 2017. Overall, the proportion of users of warfarin or DOAC increased during the same period. Low dose acetylsalicylic acid is also used to prevent the risk of thrombosis. The proportion of users of ASA has decreased in the period 2010–2017.

In the elderly population around 90% of those using an antithrombotic drug (ATC B01) had at least one other ATC group C drug dispensed in 2017.

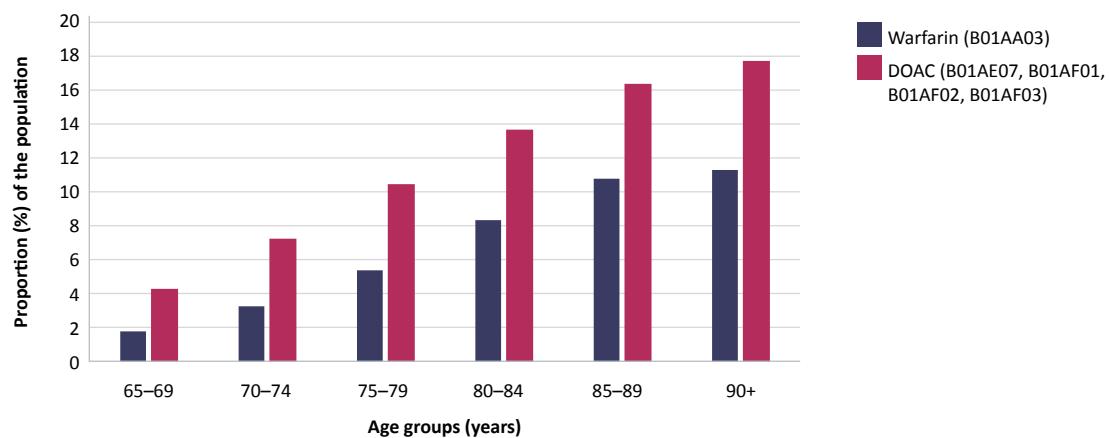


Figure 1.3.e. Proportion (%) of the population in Norway ≥ 65 years with prescription for anti-coagulation drugs warfarin and DOAC (dabigatran, rivaroxaban, apixaban and edoxaban) dispensed in 2017. Adjusted population (i.e. excl. the population living in nursing homes).

Bruken av antitrombotiske legemidler øker med alderen (figur 1.3.e). I 2017 var andelen warfarin-brukere knapt 2 % blant 65–69 åringer og vel 11 % hos de eldste over 90 år, mens andelen DOAC brukere var henholdsvis rundt 4 % og 18 % i de samme aldersgruppene.

Folkehelseinstituttet har nylig publisert Folkehelse-rapporten Helsetilstanden i Norge (8). I rapporten inngår et kapittel om hjerte- og karsykdommer i Norge. Kapittelet er omfattende og gir nyttig informasjon dagens situasjon og utviklingen av hjerte- og karsykdommer i Norge, inklusive statistikk.

The use of antithrombotic drugs increases with age (Figure 1.3.e). In 2017, the proportion of warfarin users was around 2% among 65–69 year olds, and 11% for the elderly over 90 years, while the proportion of DOAC users was approximately 4% and 18% respectively in the same age groups.

The Norwegian Institute of Public Health recently published the Public Health Report – Health Status in Norway (8). The report includes a chapter on cardiovascular disease in Norway. The chapter is comprehensive and provides useful information on the current situation and the development of cardiovascular disease in Norway, including statistics.

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1.4 Bruk av legemidler mot osteoporose hos eldre

Årlig opplever omtrent 9000 nordmenn et hoftebrudd og 15 000 får et underarmsbrudd. Et stort antall får også sammenfallsbrudd i ryggvirlene (1). I perioden 1999–2013 har det vært en nedgang i forekomsten av hoftebrudd, men antallet er forventet å stige i årene fremover pga økningen i antall eldre (2).

Hoftebrudd er det mest alvorlige bruddet en osteoporopasient kan oppleve, og ca. 250 sykehussenger vil til enhver tid ha en hoftebruddpasient. Dødeligheten etter hoftebrudd er høy, og en av tre hjemmeboende 85-åringar bodde på institusjon ett år etter hoftebruddet (3–5). Forebygging av mange av disse bruddene er mulig, både gjennom livsstilsendringer og gjennom medikamentell behandling. Dette kan potensielt spare samfunnet for unødvendige utgifter og ikke minst pasientene for unødig smerte, lidelse og tap av livskvalitet.

De siste tiårene er det flere legemidler som er kommet på det norske markedet for behandling av osteoporose: bisfosfonater (M05BA, M05BB), teriparatid (H05AA02), kalsitonin (H05BA01), raloxifen (G03XC01) og denosumab (M05BX04, kun Prolia®)

Tidligere var kun østrogen tilgjengelig behandling mot osteoporose, men det er ikke lenger anbefalt til langtidbehandling av denne pasientgruppen på grunn av bivirkninger. Strontium ranelat brukes til en viss grad i behandlingen av osteoporose i andre land, men er ikke markedsført i Norge og følgelig ikke omtalt. I denne rapporten omtales følgende som «legemidler mot osteoporose»: raloxifene (G03XC01), kalsitonon (H05BA01), teriparatid (H05AA02), etidronat (M05BA01), alendronat (M05BA04), ibandronat (M05BA06), risedronat (M06BA07), zoledronat (M05BA08), etidronat og kalsium (M05BB01), alendronat og kolekalsiferol (M05BB03) og denosumab (M05BX04, kun Prolia®). Virkestoffet denosumab er godkjent for flere indikasjoner. Siden det kun er preparatet Prolia® som har osteoporose som godkjent indikasjon, inngår kun dette preparatet i denne rapporten.

Det er ulike vilkår som må oppfylles for å få refundert legemiddelbehandling ved osteoporose (6). Det er færrest vilkår som må oppfylles for å få refusjon for behandling med alendronat, men dersom det er bivirkninger ved alendronatbehandling eller andre hensyn som tilsier det, kan et av de andre preparatene velges.

1.4 Use of drugs for osteoporosis in the elderly

Every year, adult Norwegians suffer about 9 000 hip fractures and 15 000 forearm fractures. A large number also experience vertebral fractures (1). In the period 1999–2013, there was a decline in the rate of hip fractures, but the number is expected to rise in the coming years due to the increase in number of elderly people (2).

Hip fractures are the most serious fractures among osteoporosis patients, and approximately 250 surgical ward beds will be occupied by hip fracture patients at any time. The mortality after hip fractures is high, and one third of those 85 years or older who lived at home before the fracture, lived in a nursing home one year after the fracture (3–5). Prevention of these fractures is possible, both through lifestyle changes and drug therapy. This could potentially save unnecessary expenses for society and pain, suffering and loss of quality of life for individual patients.

Several drugs against osteoporosis have been marketed in Norway in recent decades: bisphosphonates (M05BA, M05BB), teriparatide (H05AA02), calcitonin (H05BA01), raloxifene (G03XC01) and denosumab (M05BX04, only Prolia®).

Previously, only oestrogen was available for treating osteoporosis but this is no longer recommended to be used for extended periods because of side effects. Strontium ranelate has not been marketed in Norway and is therefore not presented in the statistics. In this report the following drugs are termed “anti-osteoporosis drugs”: raloxifene (G03XC01), calcitonin (H05BA01), teriparatide (H05AA02), etidronate (M05BA01), alendronate (M05BA04), ibandronate (M05BA06), risedronate (M06BA07), zoledronate (M06BA08), etidronate and calcium (M05BB01), alendronate and cholecalciferol (M03BB03) and denosumab (M05BX04, only Prolia®). The active drug denosumab is licensed with several indications. Since only the drug Prolia® has osteoporosis as an approved indication, this drug is the only included in the statistics.

To get the drug for osteoporosis reimbursed, different criteria must be met (6). Alendronate is the drug for which fewest criteria need to be met, but if the treatment with alendronate gives side effects or other conditions require it, other drugs can be prescribed.

Table 1.4.a. Number and proportion of the population ≥ 65 years using anti-osteoporosis drugs in Norway in 2008 and 2013–2017. Adjusted population (i.e. excl. the population in nursing homes).

	2008		2013		2014		2015		2016		2017	
Women	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adjusted population (i.e. excl. the population in nursing homes)	386 701		432 480		441 729		451 629		460 230		469 646	
All anti-osteoporosis drugs ¹	41 135	10,6	42 278	9,8	42 161	9,5	42 266	9,4	42 849	9,3	43 915	9,4
Bisphosphonates ²	40 077	10,4	40 081	9,3	39 175	8,9	38 395	8,5	37 731	8,2	37 401	8
Alendronate ³	36 467	9,4	37 219	8,6	36 279	8,2	35 424	7,8	34 477	7,5	33 811	7,2
Zoledronate ⁴	100	0	2 004	0,5	2 350	0,5	2 480	0,5	2 901	0,6	3 325	0,7
Other bisphosphonates ⁵	3 921	1	1 531	0,4	832	0,2	767	0,2	664	0,1	652	0,1
Raloxifene ⁶	1 084	0,3	599	0,1	452	0,1	298	0,1	264	0,1	226	0
Teriparatide ⁷	123	0	202	0	270	0,1	338	0,1	461	0,1	595	0,1
Denosumab ⁸	0	0	1 919	0,4	2 879	0,7	3 804	0,8	5 067	1,1	6 560	1,4
Men	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adjusted population (i.e. excl. the population in nursing homes)	303 366		364 566		376 821		388 525		399 980		412 082	
All anti-osteoporosis drugs ¹	4 017	1,3	4 780	1,3	4 994	1,3	5 367	1,4	5 762	1,4	6 122	1,5
Bisphosphonates ²	4 005	1,3	4 694	1,3	4 879	1,3	5 187	1,3	5 509	1,4	5 825	1,4
Alendronate ³	3 772	1,2	4 445	1,2	4 629	1,2	4 869	1,3	5 143	1,3	5 396	1,3
Zoledronate ⁴	23	0	202	0,1	220	0,1	290	0,1	344	0,1	424	0,1
Other bisphosphonates ⁵	227	0,1	97	0	52	0	56	0	47	0	44	0
Teriparatide ⁷	15	0	19	0	27	0	32	0	38	0	48	0
Denosumab ⁸	0	0	83	0	115	0	173	0	247	0,1	299	0,1

¹) All anti-osteoporosis drugs: G03XC01+H05BA01*+H05AA02+M05BA01+M05BA04+M05BA06+M05BA07+M05BA08+M05BB01+M05BB03+M05BX04 (only Prolia®)

²) Bisphosphonates: M05BA01+M05BA04+M05BA06+M05BA07+M05BA08+M05BB01+M05BB03

³) Alendronate: M05BA04+M05BB03

⁴) Zoledronate: M05BA08

⁵) Other bisphosphonates: M05BA01+M05BA06+M05BA07+M05BB01

⁶) Raloxifene: G03XC01

⁷) Teriparatide: H05AA02

⁸) Denosumab : M05BX04 (only Prolia®)

*Separate data for calcitonin (ATC code H05BA01) are not shown because of very few users, but are included in the figures for "All anti-osteoporosis drugs".

Tabell 1.4.a viser andel av hjemmeboende eldre over 65 år, som fikk utlevert legemidler mot osteoporose i 2008 og 2013–2017. Totalt sett har bruken av disse legemidlene vært stabil i siste del av perioden, noe under 10 % av den kvinnelige befolkningen og vel 1 % av mennene har fått utlevert antiosteoporoslegemidler. Det er imidlertid en nedgang i forhold til bruken i 2008 for kvinner (figur 1.4.a) og en svak økning for menn. De aller fleste kvinner og menn bruker bisfosfonater, og alendronat er dominerende. Bruken av bisfosfonatet zoledronat og preparatet denosumab (Prolia®) har vært økende i løpet av perioden 2008–2017. Bruken av teriparatid, raloxifen og kalsitonin er svært lav.

Table 1.4.a shows the proportion of the elderly (≥ 65) not living in nursing homes that had prescriptions dispensed for anti-osteoporosis drugs in 2008 and 2013–2017. Overall, the use of these drugs has been stable in the last part of the period, slightly below 10% of the female population and 1% of the male population each year. However, among women there is a decline compared to the use in 2008 (figure 1.4.a) and a small increase among men. Most of both women and men use bisphosphonates, and alendronate dominates. Use of the bisphosphonate zoledronate and the drug denosumab (Prolia®) has increased in the period 2008–2017. Use of teriparatide, raloxifene and calcitonin is negligible.

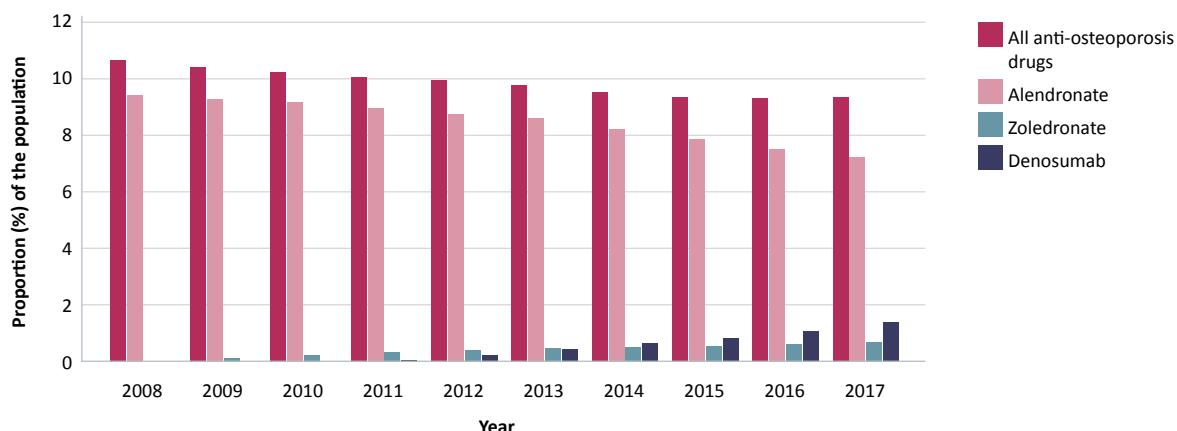


Figure 1.4.a. Proportion of the female population ≥ 65 years in Norway using anti-osteoporosis drugs in 2008–2017. Adjusted population (i.e. excl. the population in nursing homes).

All anti-osteoporosis drugs: ATC-codes: G03XC01, H05BA01, H05AA02, M05BA01, M05BA04, M05BA06, M06BA07, M05BA08, M05BB01, M05BB03 and M05BX04 (only Prolia®), Alendronate: ATC-codes: M05BA04 and M05BB03, Zoledronate: ATC-code: M05BA08 and Denosumab: M05BX04, only Prolia®.

Generelt anbefales inntak av kalsium og vitamin D som forebyggende behandling mot osteoporose, men siden disse legemidlene i stor grad selges uten resept og via andre salgskanaler enn apotek inngår de ikke i tabellen. I 2017 var det ca 95 000 individer over ≥ 65 år som var registrert i Rezeptregisteret med minst én utlevering av ATC-kode A12AX (Kalsium i kombinasjon med vitamin D eller andre substanser), men bruk av disse legemidlene etter resept sier ikke nødvendigvis noe om individet har osteoporose.

Det er ulike doseringsregimer for legemidler mot osteoporose. Bisfosfonatet Aclasta® (zoledronat) gis som en infusjon én gang i året og kom på det norske markedet i 2005. Prolia® med virkestoffet denosumab har indikasjon mot osteoporose og gis subkutan 2 ganger årlig. Teriparatid gis som en daglig subkutan injeksjon og behandlingstiden er maks 24 måneder (kun én gang i livet). Deretter må det vurderes om annen behandling mot osteoporose skal igangsettes.

Oral bisfosfonatbehandling har vært assosiert med etseskader i spiserør og svelg og etterlevelsen av den orale behandlingen er dårlig, mye på grunn av et komplisert doseringsregime. Bivirkningene er færre og etterlevelse av behandlingen forventes å være bedre med zoledronat og denosumab.

Av figurene 1.4.a og 1.4.b ser det ut som andel brukere blant hjemmeboende eldre totalt går ned mens andel nye brukere i befolkningen øker i samme periode. Dette kan tyde på at det er flere som slutter enn som starter med behandling. Det er imidlertid noen forbehold med hensyn til dette. I tabellen

In general, it is recommended to use calcium and vitamin D-supplements to prevent osteoporosis, but since these drugs often are sold over the counter (OTC) in pharmacies and through other sales channels than pharmacies, they are not included in the table. In 2017, approximately 95 000 individuals 65 years or older were registered in the NorPD with at least one dispensed drug with the ATC-code A12AX (calcium, combinations with vitamin D and/or other drugs). However, the use of these drugs does not necessarily mean that the individual has osteoporosis.

The different anti-osteoporosis drugs have different dosing regimens. The bisphosphonate Aclasta® (zoledronate) is an infusion administered once a year and has been on the Norwegian market since 2005. Prolia® (denosumab) has the indication osteoporosis and is administered subcutaneously twice a year. Teriparatide is given as a daily subcutaneous injection during a treatment period of maximum 24 months (only once in life). Thereafter, another treatment for osteoporosis should be considered.

Oral bisphosphonate therapy has been associated with caustic injury in the oesophagus and poor compliance because of a complex dosing regimen. There are fewer side effects and compliance is expected to be better with zoledronate and denosumab.

From the figures 1.4.a and 1.4.b it appears that the overall proportion of users among elderly not living in nursing homes is declining, while the proportion of new users is increasing. This may indicate that more people discontinue than start treatment. However,

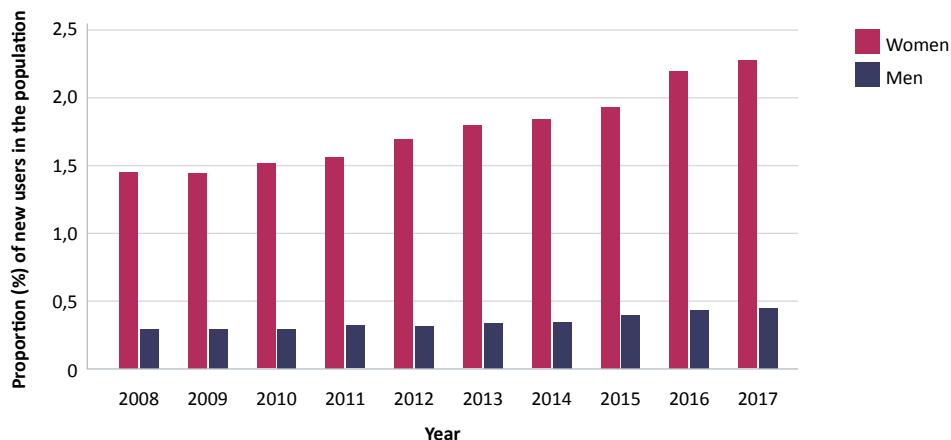


Figure 1.4.b. Proportion of new users of anti-osteoporosis drugs in the Norwegian population ≥ 65 years in the period 2008–2017. The individual is defined as a new user if she/he has not been dispensed prescriptions for any of the anti-osteoporosis drugs the last 365 days. Adjusted population (i.e. excl. the population in nursing homes).

Anti-osteoporosis drugs: ATC-codes: G03XC01, H05BA01, H05AA02, M05BA01, M05BA04, M05BA06, M06BA07, M05BA08, M05BB01, M05BB03 and M05BX04 (only Prolia®).

og figurene om antiosteoporosemedisin i denne rapporten er det kun med data for legemidler utlevert etter resept fra apotek. Det er ikke med data for legemidler utlevert direkte fra institusjon til pasient eller legemidler som benyttes i kliniske utprøvinger. Pasienter på sykehjem er dermed ikke med i oversiktene. Sammenligning av data fra Reseptregisteret med data fra Grossistbasert legemiddelstatistikk viser at nesten alle legemidler mot osteoporose selges per resept (målt i DDD) i 2017. Men avviket er større for legemidler med virkestoffet zoledronat. For alle legemidler mot osteoporose var det i 2017 ca 4 % som ikke var registrert i Reseptregisteret, men det varierer og for zoledronat var denne andelen hele 79 %. Et estimat for antall individer som ikke er registrert i Reseptregisteret som er brukere av zoledronat er 21 000 i 2017. Et forbehold ved dette tallet er at virkestoffet zoledronat også benyttes ved andre indikasjoner enn ved osteoporose. Prosjektet NoFRACT (7), som gjennomføres overfor bruddpasienter ved 7 norske sykehus for å forebygge et nytt brudd, kan ha bidratt til noe av økningen i bruk av zoledronat (Aclasta), både via Reseptregisteret og som legemiddel brukt og administrert på de aktuelle sykehusene.

Figur 1.4.b illustrerer andel nye brukere i befolkningen (%) når det gjelder bruk av legemidler mot osteoporose hos kvinner og menn, over 65 år, for perioden 2008–2017. Her er en ny bruker definert som en som ikke har fått utlevert noe legemiddel mot osteoporose de siste 365 dagene. Med unntak av de første årene, er det en svak økning i andel nye brukere i hele perioden, hos begge kjønn.

some considerations need to be taken. In the table and figures showing use of anti-osteoporosis drugs in this report, only drugs dispensed by prescription in the pharmacies are included. Drugs given directly to the patient in an institution or drugs used in clinical trials are not included. This means that drugs given to the elderly living in nursing homes are not included. Comparison of data from the NorPD and the Norwegian Drug Wholesale Statistics shows that almost all the anti-osteoporosis drugs were dispensed by prescription (measured in DDD) in 2017. The difference was larger for drugs with the active ingredient zoledronate. For all the anti-osteoporosis drugs in 2017, approximately 4% were not registered in the NorPD, but for the active ingredient zoledronate this was as much as 79%. The estimate for the number of users of zoledronate not registered in the NorPD is 21 000 in 2017. It has to be taken into account that the active drug zoledronate is also used for indications other than osteoporosis. The NoFRACT project (7), conducted among fracture patients at 7 Norwegian hospitals to prevent new fractures, may have contributed to increased use of zoledronate (Aclasta®), both through prescription and as a drug used in the relevant hospitals.

Figure 1.4.b illustrates the proportion (%) of new male and female users of anti-osteoporosis drugs in the population over 65 years, each year in the period 2008–2017. A new user is defined as someone who has not been dispensed prescriptions for any of the anti-osteoporosis drugs in the last 365 days. Except for the first few years, the proportion of new users is increasing slightly throughout the period, for both genders.

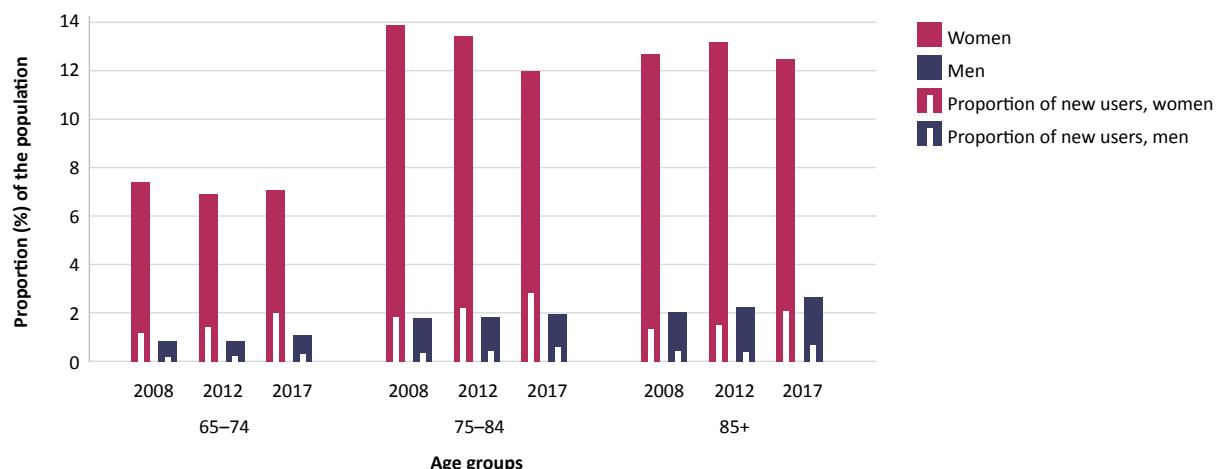


Figure 1.4.c. Proportion of users (red and blue bars) and proportion of new users (white bars) of anti-osteoporosis drugs in the Norwegian population aged ≥ 65 years in 2008, 2012 and 2017 in three age groups. The individual is defined as a new user if she/he has not had filled prescriptions for any of the anti-osteoporosis drugs the last 365 days. Adjusted population (i.e. excl. the population in nursing homes).

ATC-codes: G03XC01, H05BA01, H05AA02, M05BA01, M05BA04, M05BA06, M06BA07, M05BA08, M05BB01, M05BB03 and M05BX04 (only Prolia®).

Det er ulikt doseringsregime for legemidler mot osteoporose, dette kan bidra til at noen individ blir registrert som nye brukere flere ganger. Zoledronat ges for eksempel én gang årlig og etter vurdering av legen kan det gå flere år mellom hver injeksjon. Fordi det da går mer enn 365 dager mellom utleveringene av preparatet, vil de telles som nye brukere flere ganger.

Andel brukere i befolkningen av legemidler mot osteoporose er høyest blant hjemmeboende i aldersgruppen 75–84 år hos kvinner, men i 2017 ligger de to øverste aldersgruppene (75–84 og 85+) på samme nivå som vist i figur 1.4.c. Blant menn øker bruken med økende alder. Dette er et forventet mønster siden alder er en viktig risikofaktor for osteoporose og følgelig observeres en økende forekomst av osteoporose med økende alder. I de tre aldersgruppene er andel nye brukere økende med tiden for både menn og kvinner som vist i figur 1.4.c (hvite strek-søyler).

The different anti-osteoporosis drugs have different dosing regimens. This may mean that some individuals are defined as new users more than once. Even though the dosing regimen for zoledronate is once a year, the doctor can consider it sufficient for some individuals to administer it for several years between each injection. Therefore, if it is more than 365 days between the dispensings of zoledronate, they will count as a new user more than once.

The proportion of users of anti-osteoporosis drugs among elderly people not living in nursing homes is highest in the age group 75–84 years among women, but in 2017 the two oldest age groups (75–84 and 85+) are at the same level, see figure 1.4.c. Among men use increases with age. This is expected, since age is an important risk factor for osteoporosis and the proportion of individuals with osteoporosis increases with age. In all of the three age groups the proportion of new users is increasing over time for both men and women as shown in figure 1.4.c (white bars).

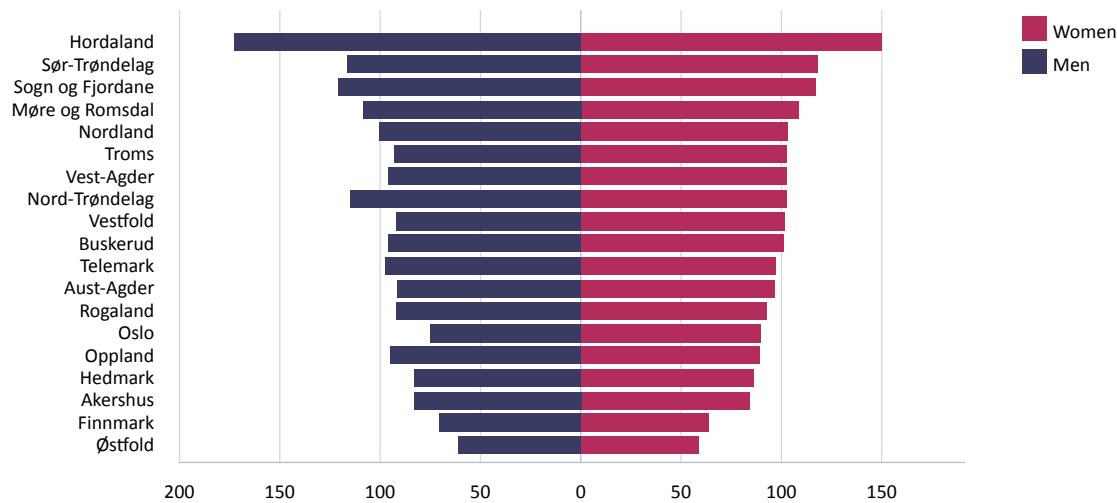


Figure 1.4.d. The ratio between age standardised proportion of users in each county and the proportion of users in Norway (%) (women and men aged ≥ 65 years, unadjusted population) by county in 2017. The national average is 100.

ATC codes: G03XC01, H05BA01, H05AA02, M05BA01, M05BA04, M05BA06, M06BA07, M05BA08, M05BB01, M05BB03 and M05BX04 (only Prolia®).

Figur 1.4.d viser forholdet mellom aldersjustert andel brukere i fylkene og andel brukere i Norge i prosent for individer som er 65 år eller eldre (data er aldersjustert, men ikke korrigert for andel individer med langtidsplass i sykehjem). Det er store forskjeller i bruk av legemidler mot osteoporose mellom fylkene og det er hovedsakelig samvariasjon mellom bruk av legemidler blant kvinner og menn innen samme fylke sammenlignet med landet som helhet. De store fylkesforskjellene kan ikke forklares med forskjeller i forekomsten av hoftebrudd.

En studie basert på data fra Helseundersøkelsen i Nord-Trøndelag (HUNT) og Rezeptregisteret konkluderer med at individer som har høy risiko for brudd i liten grad mottar legemiddelbehandling mot osteoporose (8).

Figure 1.4.d shows the relationship between the age standardised proportion of users in each county and the proportion of users in Norway for individuals over 65 years (the numbers are age standardised, but not adjusted for individuals living in nursing homes). There are large differences in the use of anti-osteoporosis drugs between the counties, and the county differences follow roughly the same pattern in men and women. The large differences in use cannot be explained by differences in the occurrence of hip fractures.

A study with data from the HUNT Study – a longitudinal population health study in Norway and the Norwegian Prescription Database concludes that individuals with high risk for fracture are undertreated with anti-osteoporosis drugs (8).

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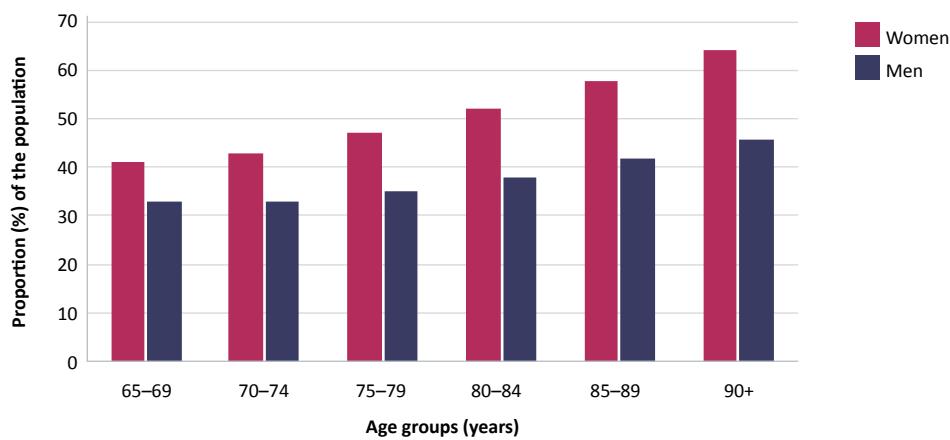


Figure 1.5.a. Proportion (%) of the population by age groups ≥ 65 years and gender who had at least one prescription of analgesics dispensed in 2017. Adjusted population (i.e excl. the population in nursing homes).

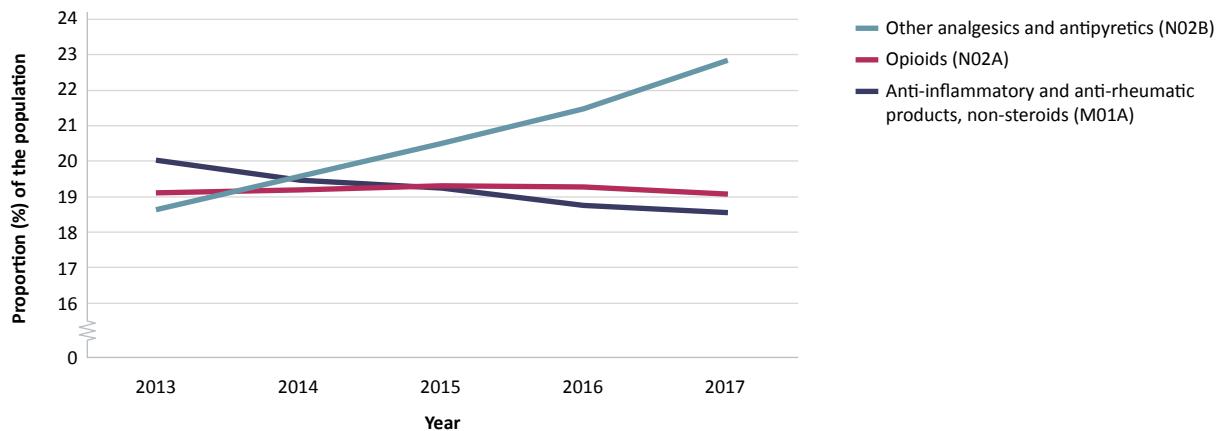


Figure 1.5.b. Proportion (%) of the population ≥ 65 years who had at least one prescription of different analgesics (ATC groups M01A, N02A and N02B) dispensed in 2013–2017. Unadjusted population.

1.5 Bruk av smertestillende legemidler hos eldre

Smertestillende legemidler (analgetika) omfatter i denne sammenheng ikke-steroide antiinflammatoriske og antirevmatiske legemidler (NSAIDs, ATC-gruppe M01A), opioider (ATC-gruppe N02A) og andre, ikke-opioide analgetika (i hovedsak paracetamol, ATC-gruppe N02B).

Totalforbruket av smertestillende legemidler

Andelen eldre som får utlevert smertestillende lege midler øker med alder. Blant hjemmeboende eldre i aldersgruppen 65–69 år fikk 41 % av kvinner og 33 % av menn utlevert smertestillende minst én gang i 2017, mens tilsvarende tall for aldersgruppen ≥ 90 år var 64 % av kvinnene og 46 % av menn (figur 1.5a).

1.5 Use of analgesics in the elderly

Analgesics include non-steroid anti-inflammatory drugs (NSAIDs, ATC group M01A), opioids (ATC group N02A) and non-opioid analgesics (mainly paracetamol, ATC group N02B).

Total consumption of analgesics

The proportion of elderly who receive analgesics increases with age. In the age group 65–69 years, 41% of women and 33% of men living at home were dispensed an analgesic drug at least once in 2017, while the corresponding figures for the age group ≥ 90 years were 64% of women and 46% of men (figure 1.5a).

The use of the various analgesics has changed somewhat in the last 5-year period (figure 1.5.b). The proportion of users of NSAIDs has decreased slightly, while the

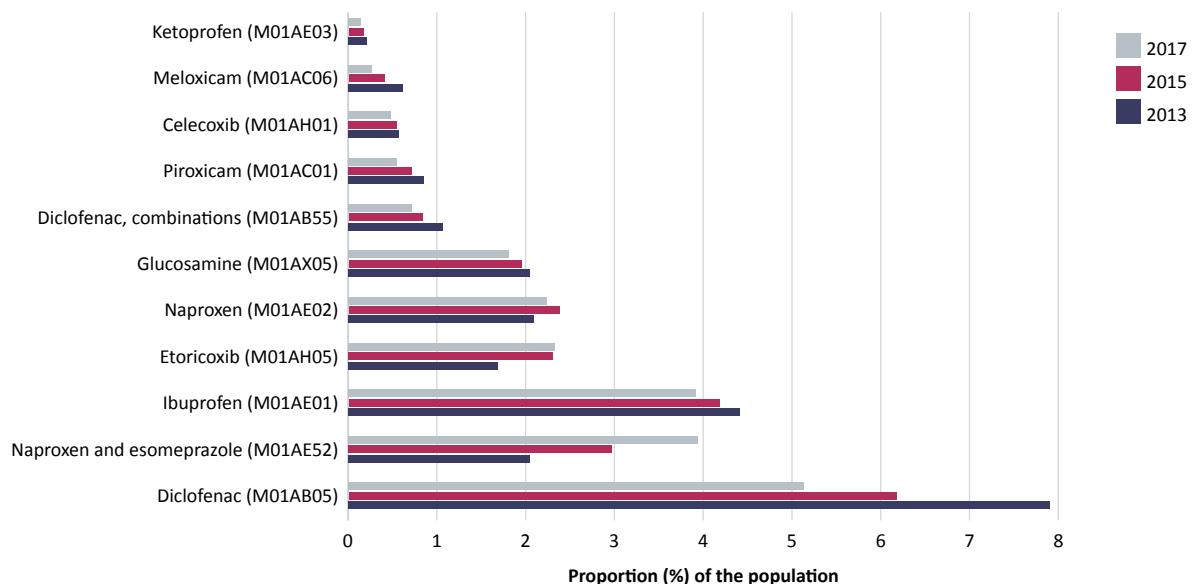


Figure 1.5.c. Proportion (%) of the population ≥ 65 years who had at least one prescription of different NSAIDs (M01A) dispensed in 2013, 2015 and 2017 (only NSAIDs with more than 1000 users are included). Unadjusted population.

Bruken av de ulike smertestillende legemidlene har endret seg noe i siste 5-årsperiode (figur 1.5.b.). Andel som har fått utlevert NSAIDs går noe ned, mens andelen som får andre (ikke-opioide) analgetika øker. Dette er i tråd med anbefaling om forsiktighet ved bruk av NSAIDS hos eldre på grunn av risiko for bl.a. økt blødningsrisiko og gastrointestinale bivirkninger (1). Andel som får opioider har vært relativt stabil.

NSAIDs (ATC-gruppe M01A)

NSAIDs har både betennelsesdempende og smertestillende effekt. Mange eldre får forskrevet NSAIDs for korttidsbruk, mens andre bruker disse over lang tid. I 2017 fikk omrent 19 % av alle individer ≥ 65 år utlevert minst ett NSAID. Av alle utleveringer av NSAIDs til individer ≥ 65 år var 63 % på hvit resept mens 36 % var på refusjonsresept («blå resept»). De vanligste refusjonskodene var revmatiske lidelser som leddgikt, og forskjellige typer betennelsestilstander (artroser).

I perioden 2013–2017 gikk bruken av diklofenak (M01AB05) ned. Dette er i tråd med anbefalinger fra Legemiddelverket (2). Data viser at diklofenak øker risikoen for hjerte- og karsykdom, og Legemiddelverket advarer mot bruk av diklofenak hos pasienter med høy risiko for hjerte- og karsykdom. Kombinasjonen av naproxen og esomeprazol (som reduserer risiko for mage-tarm bivirkninger) har økt kraftig (figur 1.5.c.).

proportion of non-opioid analgesic users increases. This is in line with the recommendation for caution when using NSAIDS in the elderly due to the increased bleeding risk and gastrointestinal side effects. (1). The proportion of opioid users has been relatively stable.

NSAIDs (ATC group M01A)

NSAIDs have both anti-inflammatory and analgesic effects. Many elderly people are prescribed NSAIDs for short-term use, while others use them over a long time. In 2017, approximately 19 % of all subjects ≥ 65 years received at least one NSAID. Of all the NSAIDs dispensed to individuals ≥ 65 years, 63 % were on non-reimbursed prescriptions whereas 36 % were reimbursed. The most common reimbursement codes were rheumatic disorders such as arthritis and various types of inflammatory conditions (arthrosis).

In the period 2013–2017 the use of diclofenac (ATC-code M01AB05) has been reduced in line with recommendations from the Norwegian Medicines Agency (2). Data show that diclofenac increases the risk of cardiovascular disease, and the Norwegian Medicines Agency warns against the use of diclofenac in patients at high risk of cardiovascular diseases. The combination of naproxen and esomeprazole (which reduces the risk of gastrointestinal side effects) has had a strong increase (figure 1.5.c.).

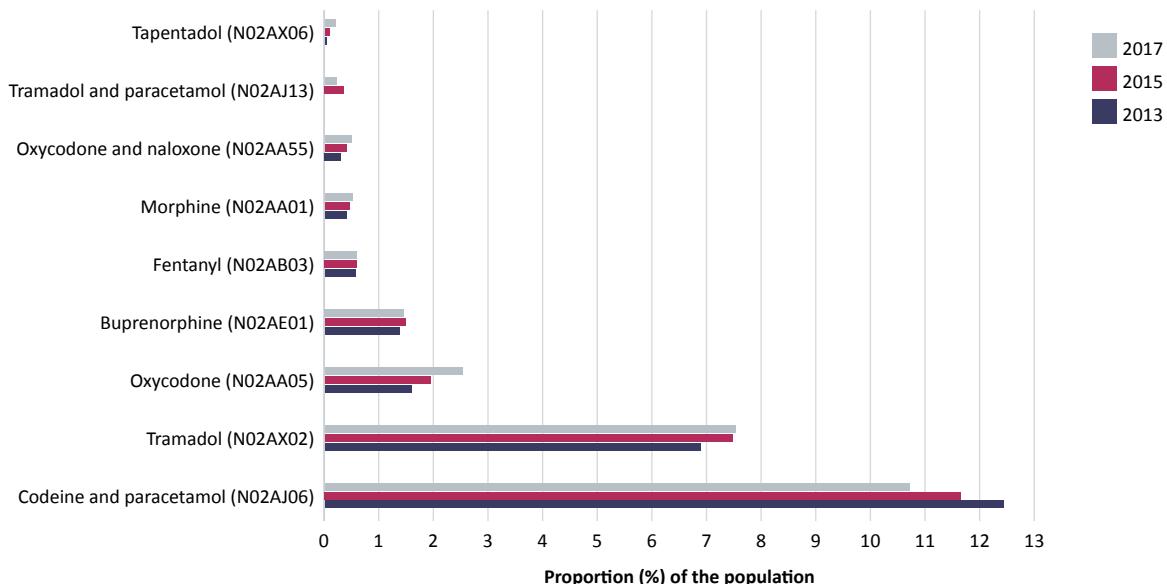


Figure 1.5.d. Proportion (%) of the population ≥ 65 years who had at least one prescription of different opioids (N02A) dispensed in 2013, 2015 and 2017 (only opioids with more than 1000 users are included). Unadjusted population.

Opioider (ATC-gruppe N02A)

Opioider kan deles inn i svake opioider (kodein, tramadol og kombinasjoner med ikke-opioide analgetika) og sterke opioider (oksykodon, buprenorfin, fentanyl, morfin m.fl.).

Målt i DDD utgjorde svake opioider 67 % av all opioidbruk i 2017. I perioden 2013 til 2017 har andel brukere av tramadol ≥ 65 år økt noe, mens kombinasjoner av kodein og paracetamol har gått ned. Av de sterke opioidene er det spesielt oxycodon som har hatt en økende andel brukere (figur 1.5.d).

Opioids (ATC group N02A)

Opioids can be divided into weaker opioids (codeine, tramadol and light analgesic combinations) and stronger opioids (oxycodone, buprenorphine, phenacetin, morphine, etc.).

Measured in DDD, weaker opioids accounted for 67% of all opioid use in 2017. Between 2013 and 2017, the use of tramadol among individuals ≥ 65 years of age has increased slightly, while combinations of codeine and paracetamol has decreased. Among the stronger opioids, oxycodone in particular showed an increased proportion of users in this period (figure 1.5.d).

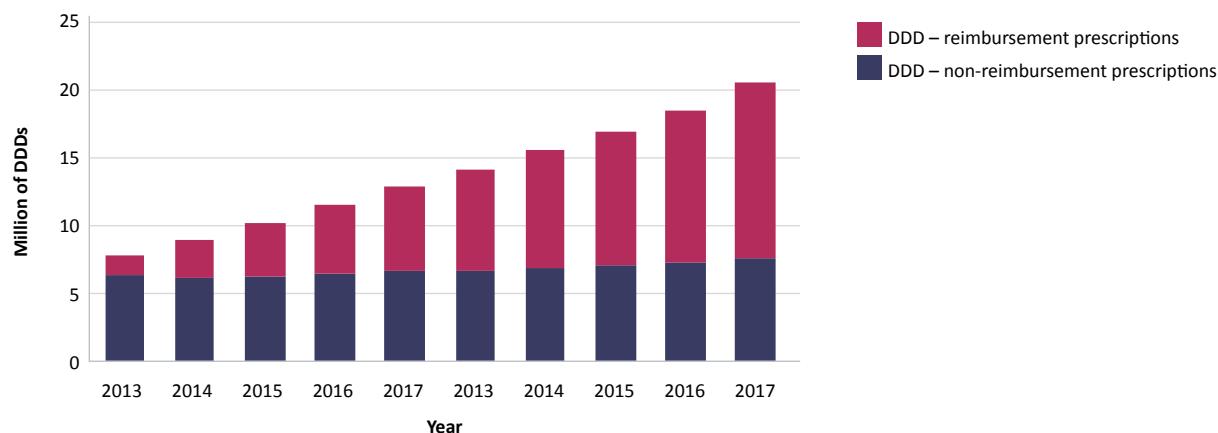


Figure 1.5.e. Number of defined daily doses (DDD) dispensed for paracetamol (ATC code N02BE01) in the population ≥ 65 years in 2008–2017, according to non-reimbursement and reimbursement prescriptions.

Andre (ikke opioide) analgetika (ATC-gruppe N02B)
 Paracetamol utgjør nærmest all forskrivning av denne typen analgetika til eldre ≥ 65 år og står for økningen i totalforbruket den siste 10-årsperioden. Figur 1.5.e viser utviklingen i bruken av paracetamol i perioden 2008 til 2017, målt i antall DDD på hvit resept og refusjonsresept («blå resept»). Bruk av paracetamol på resept til aldersgruppen ≥ 65 år har nesten tredoblet seg. Mens forskrivning målt i DDD på hvit resept har vært tilnærmet uforandret, har forskrivning på refusjonsresept økt kraftig. Andelen personer som fikk paracetamol på blå resept har femdoblet seg i perioden. Dette har sammenheng med at analgetika siden 2008 har kunnet refunderes ved kroniske smerte og paracetamol er førstehåndsvært ved denne tilstanden.

Other (non-opioid) analgesics (ATC group N02B)
 Paracetamol bidrar til nærmest all bruk av svake analgetiker i eldre ≥ 65 år, og også til økningen i total bruk over de siste 10 årene. Figur 1.5.e viser trenden i bruk av paracetamol i perioden 2008 til 2017, målt i antall DDDs etter ikke-reimburserede reseptene og reimburserede reseptene. Bruket av paracetamol i aldersgruppen ≥ 65 år har nærmest tredoblet seg. mens bruket målt i DDD på hvit resept har vært nærmest uforandret, har bruket på blå resept økt kraftig. Prosenten av individene som fikk reimburseret paracetamol har økt femfolds over perioden, hovedsakelig på grunn av at paracetamol kan reimburseres for kronisk smerte og er førstehåndsvært for denne tilstanden.

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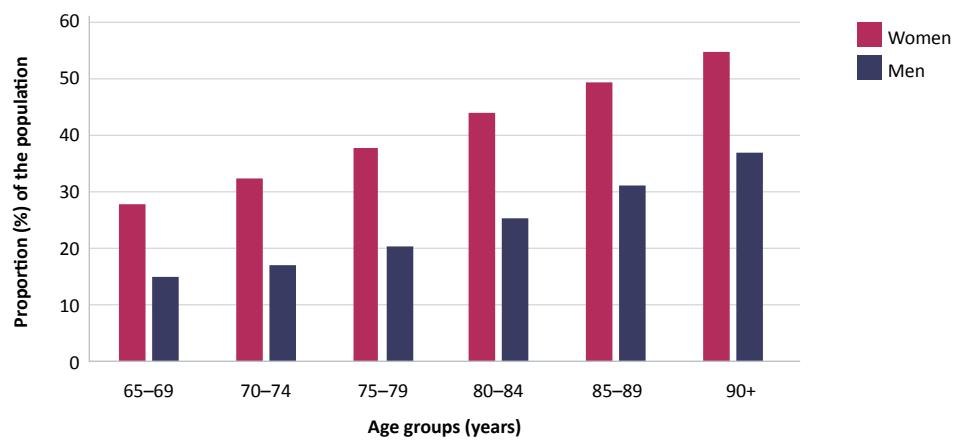


Figure 1.6.a. Proportion (%) of the population ≥ 65 years in Norway who had at least one prescription of hypnotics and/or anxiolytics* dispensed in 2017, according to age groups and gender. Adjusted population (i.e. excl. the population in nursing homes).

*diazepam, oxazepam, nitrazepam, zopiclone, zolpidem, melatonin, chlomethiazole, alimemazine, prometazine, doxylamine

1.6 Bruk av sovemedidler og beroligende midler hos eldre

Søvnproblemer øker med økende alder. Ikke-medikamentell behandling som gode råd om søvnhygiene fører ikke alltid til målet, derfor behandles søvnvansker hos eldre ofte med legemidler. Det er anbefalt at sovemedisiner bare bør brukes over korte perioder. Dette er særlig viktig i eldre aldersgrupper fordi eldre både kan ha endret legemiddelomsetning og økt følsomhet for legemidler. Derfor anbefales lavere doser og sovemedidler med kortere halveringstid til eldre.

Z-hypnotika og benzodiazepiner er de legemidler som oftest brukes som sovemedidler. Z-hypnotika, som dominerer markedet generelt, anbefales som førstevalg (1). Figur 1.6.a viser andelen av befolkningen i aldersgruppen ≥ 65 år som fikk sovemedidler og/eller beroligende midler i 2017. I figuren er det valgt å inkludere angstdempende benzodiazepiner (diazepam og oksazepam), selv om disse ikke først og fremst benyttes ved søvnvansker. Også enkelte antihistaminer med sederende effekt som brukes som sovemedidler er inkludert.

Følgende legemidler er inkludert i figuren: angstdempende benzodiazepiner (diazepam og oxazepam), benzodiazepin-hypnotika (nitrazepam), z-hypnotika (zopiklon, zolpidem), andre hypnotika (melatonin og klometiazol) og enkelte antihistaminer med sederende effekt (alimemazin, prometazin og doksyldamin). Antidepressiva og antipsykotika er ikke inkludert.

1.6 Use of hypnotics and anxiolytics in the elderly

Sleep problems increase with age. Insomnia among the elderly is not always resolved with non-medical treatments such as good sleep hygiene advice, so it is often treated with medicines. Hypnotics should only be used for short periods. This is particularly important in older age groups because the elderly may have both an altered drug metabolism and increased sensitivity to drugs. Therefore, lower doses and hypnotics with a shorter half-life are recommended for the elderly.

Z-hypnotics and certain benzodiazepines are the drugs most commonly used as hypnotics. Z-hypnotics, which dominate the market, are recommended as the first choice (1), Figure 1.6.a shows the proportion of the population aged ≥ 65 years who used hypnotics in 2017. In this overall figure, we have chosen to also include anxiolytic benzodiazepines (diazepam and oxazepam), even though these are not used as hypnotics. Certain antihistamines with sedative effects that are being used as hypnotics are also included.

The following drugs are included: anxiolytic benzodiazepines (diazepam and oxazepam), benzodiazepine hypnotics (nitrazepam), z-hypnotics (zopiclone, zolpidem), other hypnotics (melatonin and clomethiazole) and some antihistamines (alimemazine, promethazine and doxylamine). Antidepressants and antipsychotics are not included.

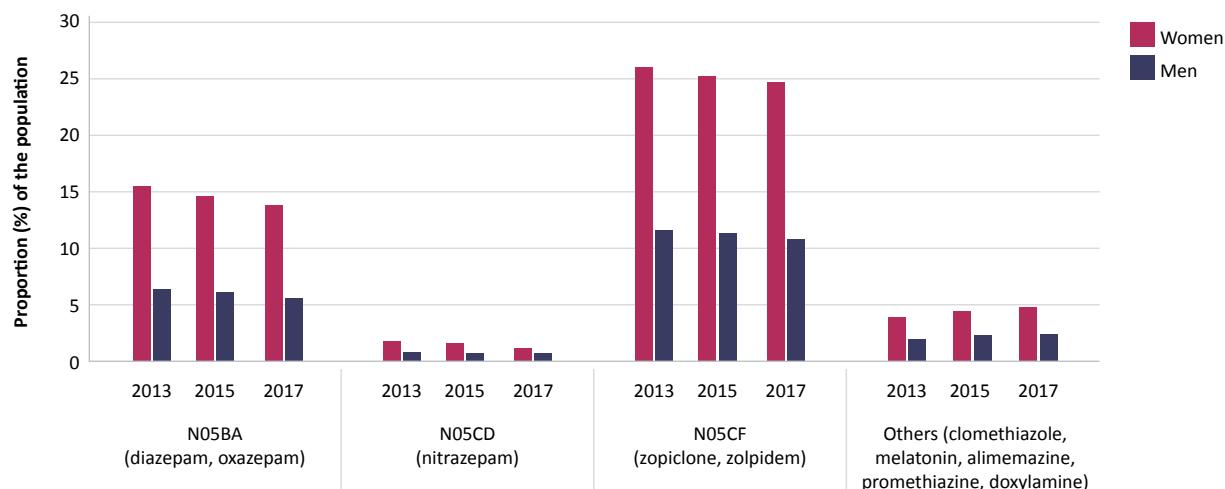


Figure 1.6.b. Proportion (%) of the population ≥ 65 years in Norway who had at least one prescription of hypnotics and/or anxiolytics dispensed in 2013, 2015 and 2017, by gender. Unadjusted population.

Hjemmeboende eldre ≥ 65 år bruker 46 % av alle sovemedler og beroligende midler målt i DDD mens de utgjør en andel på 17 % av befolkningen. Totalt fikk 28 % av eldre ≥ 65 år utlevert disse legemidlene fra apotek i 2017. Dette er en nedgang fra 2011, hvor andelen var på 32 %. Andelen øker fra 22 % hos 65–69-åringene til 49 % hos de som er 90 år og eldre og bor hjemme. For alle inkluderte aldersgrupper er andelen som bruker sovemedler og beroligende midler større hos kvinner enn hos menn (figur 1.6.a). Andelen øker fra 28 % hos 65–69 årige kvinner til 55 % hos kvinner i aldersgruppen over 90 år. For menn er andelene henholdsvis 15 % og 37 %.

Z-hypnotika er mest brukt (figur 1.6.b). I aldersgruppen ≥ 65 år fikk 25 % av alle kvinner utlevert et z-hypnotikum i 2017, mot 13 % blant menn. Totalt sett har andelen brukere av z-hypnotika gått svakt ned siden 2013. Bruken av angstdempende benzodiazepiner (N05BA) og benzodiazepin-hypnotika (N05CF) har også vist en svak nedgang i samme periode. For andre midler enn benzodiazepiner og z-hypnotika er det derimot en svak økning, hovedsakelig grunnet økende bruk av melatonin (N05CH01) blant eldre.

I følge preparatomtalen for z-hypnotika bør varigheten av behandlingen være så kort som mulig og ikke mer enn 2–4 uker. Vi har analysert hvordan nye brukere av z-hypnotika i 2013 blant befolkningen ≥ 65 år (i underkant av 28 000 individer) brukte disse legemidlene i de fire påfølgende årene (365 dagers perioder) etter første utlevering. Over halvparten av disse (52 %) fikk en eller flere utleveringer av z-hypnotika i løpet av det første året etter første utlevering (figur 1.6.c). En fjerdedel av de nye brukerne

The group of elderly (≥ 65 years) outside institutions uses 46% of all hypnotics and/or anxiolytics measured in DDD, while they constitute 17% of the population. Overall, 28% of the population aged ≥ 65 years were dispensed these drugs from pharmacies in 2017. This is a decline from 2011, where the proportion was 32%. The proportion is increasing from 22% in 65–69 year olds to 49% in those over 90 years. For all age groups included, more women than men used hypnotics (figure 1.6.a). The proportion is increasing from 28% in 65–69 year old women to 55% in women aged over 90 years. For men, the corresponding numbers were 15% and 37%.

Z-hypnotics are the most used hypnotic (figure 1.6.b). In the age group ≥ 65 years, 25% of women received z-hypnotics in 2017, compared with 13% among men. Overall, the proportion of users of z-hypnotics has fallen slightly since 2013. The use of anxiolytic benzodiazepines (N05BA) and benzodiazepine hypnotics (N05CF) has also shown a slight decrease over the same period. However, for other agents than benzodiazepines and z-hypnotics there is a slight increase, mainly due to increasing use of melatonin (N05CH01) among the elderly.

According to the product information for z-hypnotics, the duration of treatment with z-hypnotics should be as short as possible and not more than 2–4 weeks. A cohort of approximately 28 000 new users of z-hypnotics in 2013 in the age group ≥ 65 years was followed for four consecutive years (365 day periods). More than half (52%) of these received one or more z-hypnotics during the first 365 day period after their first dispensation (figure 1.6.c). About 25% continued

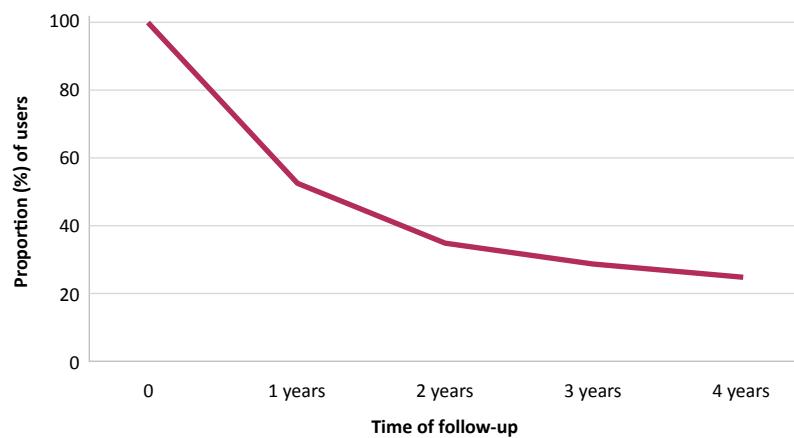


Figure 1.6.c. Proportion (%) of new users ≥ 65 years of z-hypnotics (ATC group N05CF) in 2013 who also were dispensed z-hypnotics in the following four years of follow-up. The individual was defined a new user if he/she had not filled any prescriptions for z-hypnotics the last 730 days. Unadjusted population.

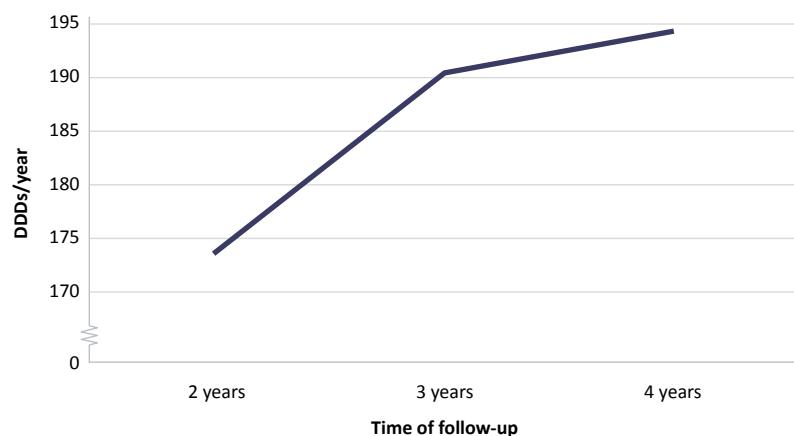


Figure 1.6.d. Average annual amount dispensed in defined daily doses (DDDs) of z-hypnotics (ATC group N05CF), in new users (≥ 65 years) in 2013, in the four years of follow-up. Unadjusted population.

i 2013 fortsetter å bruke z-hypnotika over en fire års periode. Andelen langtidsbrukere ligger på samme nivå som resultatet fra en tilsvarende analyse av nye brukere i 2009 (2).

Gjennomsnittlig mengde utlevert, målt i DDD, tilsier at mange fikk utlevert et volum som tyder på langtidsbruk av z-hypnotika. Mengden utlevert øker noe over tid, til rett i underkant av 200 DDD fire år etter første utlevering (figur 1.6.d).

to use z-hypnotics throughout the study period of 4 years. The proportion of recurrent users are at the same level as seen in a comparable study of new users in 2009 (2).

The average amount dispensed measured in DDDs indicates long-term use of z-hypnotics. The number of DDDs is increasing over time to an average amount of just under 200 DDDs in the fourth year of follow-up (figure 1.6.d).

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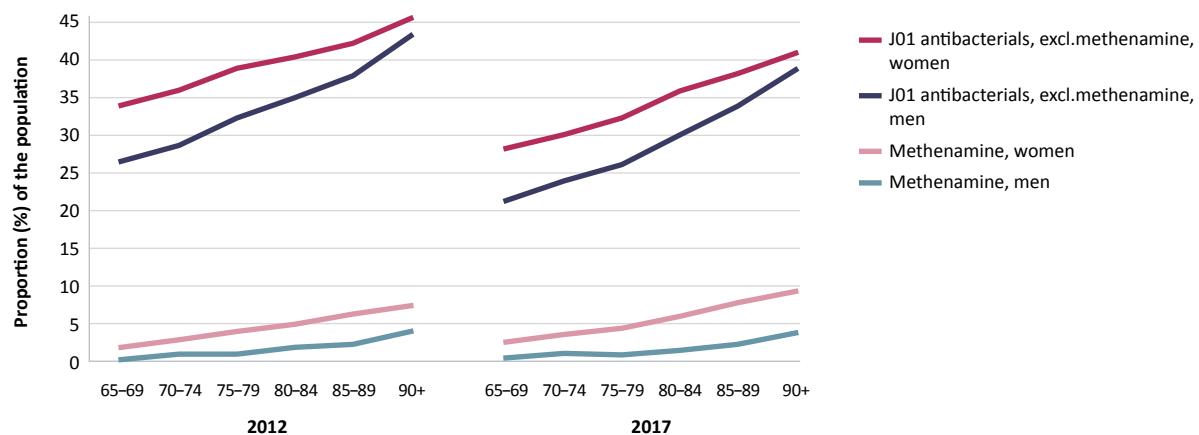


Figure 1.7.a. Proportion (%) of the population ≥ 65 years in Norway who had at least one prescription of antibiotics for systemic use (J01 excl. methenamine) and methenamine (J01XX05) dispensed in 2012 and 2017, according to age groups and gender. Adjusted population (i.e. excl. the population in nursing homes).

1.7 Bruk av antibiotika hos eldre

Bruk av antibiotika øker med økende alder (1). Eldre med nedsatt immunforsvar og komorbiditet har oftere behov for antibiotika og behandlingen vil da foregå i sykehus/KAD (Kommunal akutt døgnhet). Reseptregisteret gir bare informasjon om forskrivning utenfor helseinstitusjoner som sykehus og sykehjem. I dette avsnittet har vi forsøkt å ta høyde for det ved å estimere andelen av befolkningen som bor utenfor institusjon. Dette estimatet er dermed grunnlaget for beregning av årsprevalens for antibiotikabruk i den eldre befolkningen.

I 2017 fikk 30 % av befolkningen ≥ 65 år forskrevet og utlevert antibiotika (ATC J01) minst én gang i løpet av året, 33 % kvinner og 26 % menn. Figur 1.7.a viser at andelen som får utlevert antibiotika øker med økende alder; fra 25 % (28 % av kvinnene og 21 % av mennene) hos aldersgruppen 65–69 år, til 40 % (41 % av kvinnene og 39 % av mennene) hos de over 90 år. Flere kvinner enn menn får antibiotika i alle de inkluderte aldersgruppene, men kjønnsskjellen blir mindre med økende alder.

I figur 1.7.a vises også bruken av det urinveisantiseptiske middelet metenamin. I motsetning til andre antibakterielle midler, har bruken av metenamin gått opp siden 2012. Bruken øker med alder både hos kvinner og menn, men økningen er størst hos kvinner.

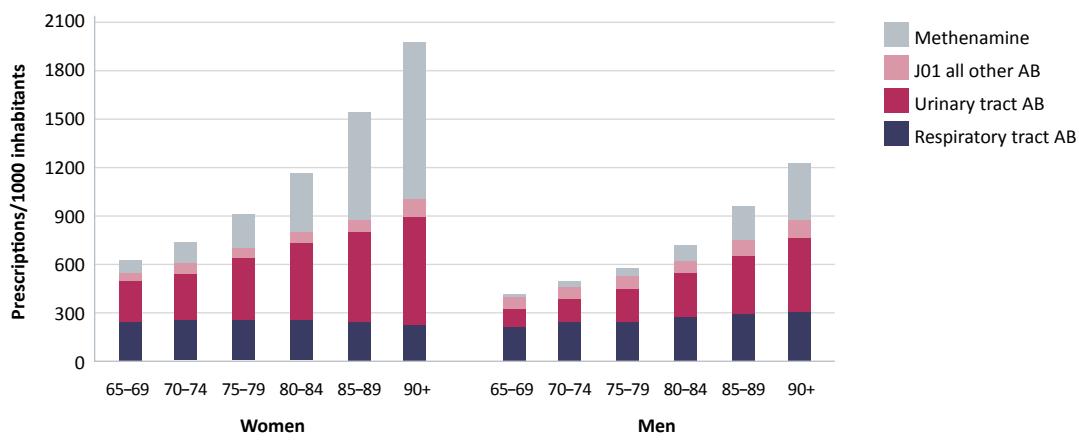
Nasjonal strategi mot antibiotikaresistens 2015–2020 benytter antibiotikaforbrukstatistikk for å måle effekt

1.7 Use of antibiotics in the elderly

Use of antibiotics increases with increasing age (1). Elderly people with impaired immune system and severe comorbidity are more likely to need antibiotics and treatment will then take place in hospital/municipal emergency care beds. The NorPD only provides information on prescribing outside health institutions such as hospitals and nursing homes. In this section, we have tried to account for this by estimating the proportion of the population living outside institutions. This estimate forms the basis for calculating the annual prevalence of antibiotic use in the elderly population.

In 2017, 30% of the population ≥ 65 years received prescribed antibiotics (ATC group J01) at least once during the year, 33% women and 26% men. Figure 1.7.a shows that the proportion of antibiotics dispensed increases with increasing age; from 25% (28% of women and 21% of men) in people aged 65–69 years, to 40% (41% of women and 39% of men) in those over 90-years-old. More women than men receive antibiotics in all the included age groups but the gender difference is getting smaller with increasing age.

Figure 1.7.a also shows the use of the urinary tract antiseptic drug methenamine. Unlike other antibacterial agents, the use of methenamine has increased since 2012. The use increases with age in both women and men but the increase is more pronounced in women.



Figur 1.7.b. Dispensed antibiotic prescriptions according to indication groups in the elderly population ≥ 65 years in Norway in 2017. Adjusted population (i.e. excl. the population in nursing homes).

RTI-AB: amoxicillin, phenoxymethylpenicillin, erythromycin, clarithromycin, azithromycin and doxycycline. UTI-AB: pivmecillinam, trimethoprim, sulfamethoxazole and trimethoprim, ciprofloxacin and nitrofurantoin. J01 all other AB: J01, excl. RTI-AB, UTI-AB and methenamine.

av tiltak (2). Det var et topp-år for antibiotikabruk i 2012, dette året benyttes derfor som et referanseår for de intervenerjoner som er igangsatt. I 2012 fikk 35 % av befolkningen ≥ 65 år forskrevet og utlevert antibiotika (ATC J01) en eller flere ganger. Siden 2012, har det vært en nedgang i bruken av antibakterielle midler (J01, ekskl. metenamin) i hele befolkningen, også blant de eldre, men nedgangen hos eldre ≥ 65 år, målt i resepter/1000 innbyggere, var lavere (-19%) enn hos aldersgruppen < 65 år (-26%).

Det er i hovedsak luftveisinfeksjoner (LVI) og urinveisinfeksjoner (UVI) som er årsak til at det forskrives antibakterielle midler (3). I dag er det ikke et krav om at antibiotikaresepter skal påføres indikasjon, men fordi de fleste antibiotika kan tilskrives en hovedindikasjon (som LVI eller UVI) er det mulig å gruppere ulike antibiotika etter sannsynlig hovedindikasjon. Vi har gruppert antibiotika i fire hovedgrupper ut fra opplysninger i legemiddelets preparatomtale og informasjon fra Norske Retningslinjer for antibiotikaforskrivning i primærhelsetjenesten (4). Luftveisantibiotika (LVI-AB) er definert som doksyklin, amoksicillin, fenoxymetylpenicillin, erythromycin, klaritromycin og azitromycin; Urinveisantibiotika (UVI-AB) som pivmecillinam, trimetoprim, trimetoprim/sulfametokszol, ciprofloksacin og nitrofurantoin. Metenamin er satt i en egen gruppe, mens alle andre antibiotika er gruppert sammen. Figur 1.7.b viser at midler brukt til infeksjoner i urinveiene dominerer hos de eldste aldersgruppene og at dette øker med økende alder både hos kvinner og hos menn. Metenamin brukes til å forebygge urinveisinfeksjoner. Bruken har økt kraftig de senere årene (5) og figur

The national strategy against antibiotic resistance 2015–2020 uses antibiotic consumption statistics to measure the impact of interventions (2). 2012 was a peak year for antibiotic use, so it is used as a reference year for the interventions that have been introduced. In 2012, 35% of the population ≥ 65 years received prescribed antibiotics (ATC group J01) at least once. Since 2012, there has been a decrease in the use of antibacterial agents (J01, excluding methenamine) throughout the population, also among the elderly, but the decrease in the elderly ≥ 65 years, measured in prescriptions / 1000 inhabitants, was lower (-19%) than in the age group < 65 years (-26%).

Respiratory tract infections (RTI) and urinary tract infections (UTI) are the main reason for the prescribing of antibacterial agents (3). Today it is not required for antibiotic prescriptions to include the indication for use, but because most antibiotics are attributable to one major indication (like RTI or UTI), it is possible to group different antibiotics by the likely main indication. We have grouped antibiotics into four main groups based on information in the summary of product characteristics (SPC) for the different substances and information from the National Guidelines on Antibiotic Use for the Primary Health Care Service (4). Respiratory tract antibiotics (RTI-AB) are defined as doxycycline, amoxicillin, phenoxymethylpenicillin, erythromycin, clarithromycin and azithromycin; Urinary tract antibiotics (UTI-AB) are defined as pivmecillinam, trimethoprim, trimethoprim / sulfamethoxazole, ciprofloxacin and nitrofurantoin. Methenamine

1.7.b viser at især kvinner i høy alder får forskrevet metenamin. Det er behov for kost/nytte-studier for å evaluere bruken, da metenamin ikke er godt dokumentert for langvarig profylakse og det er heller ikke brukt mye utenfor Norden.

constitutes a separate group, while all other antibiotics are grouped together. Figure 1.7.b shows that agents used for urinary tract infections predominate among the oldest age groups and that this increases with increasing age in both women and men. Methenamine is used to prevent urinary tract infections. The use has increased dramatically in recent years (5) and Figure 1.7.b shows that especially elderly women are prescribed methenamine. There is a need for cost-benefit analysis to evaluate the use, as methenamine is not well documented for prolonged prophylaxis, nor is it used much outside the Nordic countries.

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Del 2

Part 2

2. Generelt om Reseptregisteret (NorPD) og legemiddelstatistikk

2.1 Reseptregisteret

Ny apoteklov som trådte i kraft 1. mars 2001 forpliktet alle apotek i Norge til å videresende reseptdata til en ny nasjonal legemiddeldatabase. Forskrift om innsamling og behandling av helseopplysninger i Reseptbasert legemiddelregister (Reseptregisteret), hjemlet i Helseregisterloven, ble vedtatt av kongen i Statsråd i oktober 2003 (1). Forskriften angir hvilke opplysninger som kan samles inn fra apotek og administrative registre. Opplysningsene i Reseptregisteret kan bare anvendes til formål som er nevnt i § 1-3. Formålet med Reseptregisteret (jf. forskriftens § 1-3) er å samle inn og behandle data om legemiddelbruk hos mennesker og dyr for å:

1. kartlegge forbruket i landet og belyse endringer over tid
2. fremme og gi grunnlag for forskning og utredning for å kunne belyse positive og negative effekter av legemiddelbruk
3. gi myndighetene et statistisk grunnlag for kvalitetssikring av legemiddelbruk og overordnet tilsyn, styring og planlegging
4. gi legemiddelrekvirenter et grunnlag for internkontroll og kvalitetsforbedring

2. General information about the Norwegian Prescription Database (NorPD) and drug statistics

2.1 About the NorPD

From March 1st 2001 the new legislation in the Norwegian pharmacy sector came into force. This legislation obliged all pharmacies in Norway to forward prescription data to a new national drug database. The regulation covering the «collection and handling of health information in the Norwegian Prescription Database (Reseptregisteret)», under the provision of the Personal Health Data Filing System Act, was approved in October 2003 (1). The regulation states which information the register can collect from the pharmacies and administrative registers. The objectives of the NorPD, as defined in authoritative regulations, are to collect and process data on drug use in individuals and animals in Norway to:

1. map usage trends and monitor trends over time
2. be a resource for research in order to see positive and negative effects of drug consumption
3. give health authorities a statistical management tool for quality control of drug use and for steering and planning
4. give prescribers a basis for internal control and quality improvement of their prescribing practices

Datainnsamling og variabler i Reseptregisteret
Folkehelseinstituttet har siden 1. januar 2004 mottatt opplysninger om hver enkelt ekspederte resept og rekvisisjon fra alle apotek i Norge (2). I apotekene er det tilrettelagt for automatisk innsending av rapport til Reseptregisteret til fast tidspunkt hver måned, slik at apotekene kan oppfylle sin rapporteringsplikt uten vesentlig ekstra arbeid.

Reseptregisteret inneholder informasjon om alle legemidler som er forskrevet og utlevert til enkelt-pasienter utenom sykehus og institusjoner. Legemidler forskrevet på godkjenningsfritak (legemidler uten markedsføringstillatelse) er også inkludert i registeret dersom varen er registrert i Vareregisteret (www.farmalog.no/no/Om-Vareregisteret/). Legemidler som selges reseptfritt er ikke registrert i Reseptregisteret. Hvis reseptfrie legemidler er forskrevet på resept vil de imidlertid bli registrert i databasen.

De viktigste dataene i Reseptregisteret er basert på resepter forskrevet til enkeltpersoner, men også reseptekspederinger av legemidler fra veterinærer til dyr og legemidler utlevert til forskrivens egen praksis registreres i Reseptregisteret. Når det gjelder pasienter som er innlagt på sykehus eller sykehjem, samler registeret kun inn aggregerte data på institusjons- eller avdelingsnivå, basert på informasjon som apotekene registrerer når de leverer legemidler til institusjoner.

Reseptregisteret inneholder følgende variabler:

Pasient

Personidentifikasjon (kryptert), fødselsmåned/-år, dødsår/-år, kjønn og bosted (kommune og fylke)

Forskriver

Personidentifikasjon (kryptert), fødselsår, kjønn, profesjon og spesialitet

Legemiddel

Nordisk varenummer, handelsnavn, styrke, lege-middelform, pakningsstørrelse, ATC-kode, verdi og enhet for DDD, utleveringsgruppe og apotekets utsalgspolis

Informasjon om den enkelte utlevering

Antall pakninger utlevert, antall definerte døgn-doser (DDD), reseptkategori (se kap. 3.2), hjemmel, kode for refusjon (se under), utleveringsdato, pris for resepten og dyreart ved resept til dyr

Apotek

Apoteknavn, konsesjonsnummer, kommune og fylke

Data collection and variables in the NorPD
Since January 1st 2004, the Norwegian Institute of Public Health (NIPH) has received data on prescriptions and requisition from all Norwegian pharmacies (2). Monthly electronically reports are automatically generated in all pharmacies, thus avoiding extra work for the pharmacy.

The NorPD contains information about all drugs prescribed and dispensed to individual patients living outside institutions, i.e. ambulant care. Unlicensed drugs are also included if they are registered in «Vareregisteret» (the Norwegian Article Number Registry) (<https://www.farmalog.no/en/The-Article-Number-Register/>). Drugs sold over-the-counter (OTC) are not recorded in the NorPD. However if the OTC drugs are prescribed by a physician and dispensed, then they will be recorded in the database.

The key data in the NorPD are based on prescriptions to individual humans, but dispensed prescriptions to animals from veterinarians and drugs delivered to a prescriber's own practice are also collected in the registry. For patients in nursing homes and hospitals, the register collects data on drug use at the level of the institution or the department, i.e. on an aggregate level.

The NorPD contains the following variables:

Patient

Person-identifier (encrypted), month/year of birth, month/year of death, gender and place of residence (municipality & county)

Prescriber

Person-identifier (encrypted), year of birth, gender, profession and speciality

Drug

Nordic article number, brand name, strength, dosage form, package size, ATC code, DDD value and DDD unit, prescription category and pharmacy retail price

Information about each dispensed drug

Number of packages dispensed, number of Defined Daily Doses (DDD), prescription category (see chap. 3.2), prescription regulation, reimbursement code (see below), dispensing date, price per filled prescription and species of animal (if prescription from a veterinary)

Pharmacy

Name, license number, municipality and county



Figure 2.1. Data flow, the Norwegian Prescription Database (NorPD).

Det nordiske varenummeret er en unik identifikasjon for hver pakning av et legemiddel og muliggjør kobling til andre registre som gir detaljert informasjon om legemidlene.

Reseptregisteret inneholder også informasjon om refusjonskoder registrert tilknyttet resepter refundert etter henholdsvis blåreseptforskriftens §§ 2 og 3a og forskrift om helseforetaksfinansierte reseptlegemidler, også kalt blåresepter og H-resepter. For blåresepter ble det tidligere registrert overordnede refusjonskoder etter egen liste definert i blåreseptforskriften, og refusjonskodene kunne da fungere som en grov diagnosekode for enkelte legemidler. Ny blåreseptforskrift trådte i kraft mars 2008, og ble fullstendig implementert fra mars 2009. I ny blåreseptforskrift er gyldige refusjonskoder angitt på en egen refusjonsliste. Refusjonskodene tar utgangspunkt i enten International Classification of Diseases versjon 10 (ICD-10) eller International Classification of Primary Care versjon 2 (ICPC-2). I tillegg har Legemiddelverket definert enkelte egne koder. For H-resepter ble krav om refusjonskoder innført i forbindelse med ikrafttredelse av forskriften 1. juli 2015. Det er ikke fastsatt noen refusjonsliste for H-resepter, så i utgangspunktet kan alle koder i International Classification of Diseases versjon 10 (ICD-10) eller International Classification of Primary Care versjon 2 (ICPC-2) benyttes. De første refusjonskodene tilknyttet H-resept ble registrert i august 2016, og i 2017 er det registrert refusjonskode for omtrent 30 % av H-reseptene i Reseptregisteret.

Datasikkerhet

Som illustrert i figur 2.1 blir registreringer av utleverte legemidler fra apotek overført automatisk (elektronisk) til Statistisk Sentralbyrå (SSB) før de kommer til FHI og inkluderes i Reseptregisteret. SSB

The Nordic article number is the key link to other registries providing detailed information about the drugs.

The NorPD also contains information on reimbursement codes registered associated with general reimbursement prescriptions (according to the “Blue prescription Regulation”) and Health Trust Financed Prescriptions (according to the “Regulation for Health Trust Financed medicinal products”). General reimbursement prescriptions were previously registered with general and wide reimbursement codes, which in some cases could act as a proxy of diagnosis for certain drugs. New reimbursement regulations came into force in March 2008 and was fully implemented from March 2009. Under the new reimbursement regulation, valid reimbursement codes are available on a separate reimbursement list. Reimbursement codes are based on either the International Classification of Diseases version 10 (ICD-10) or International Classification of Primary Care Version 2 (ICPC-2). In addition, NoMA assigns special codes for general reimbursement. For Health Trust Financed Prescriptions there are no list of pre-approved reimbursement codes. This means that all codes in the International Classification of Diseases version 10 (ICD-10) or International Classification of Primary Care version 2 (ICPC-2) can be used. The first reimbursement codes for Health Trust Financed Prescriptions were registered in the NorPD in August 2016. About 30 percent of all Health Trust Financed Prescriptions in 2017 were registered with a reimbursement code in the NorPD.

Data protection

As illustrated in figure 2.1 the pharmacy's records of dispensed drugs are automatically transferred (electronically) through Statistics Norway before they arrive at NIPH and are included in the NorPD.

fungerer som en såkalt tiltrodd tredjepart og er en del av datasikkerheten for å ivareta konfidensialitet og informasjonssikkerhet for all personlig informasjon. SSB har kun tilgang til pasientens fødselstnummer og forskrivers helsepersonellnummer og erstatter begge med et pseudonym. SSB kan ikke lese noen annen informasjon fra reseptene fordi denne informasjonen er kryptert før SSB mottar dataene. Når SSB sender data videre til Folkehelseinstituttet er fødselstnummer og forskrivers helsepersonellnummer erstattet av pseudonym, og FHI kan dekryptere helseopplysningene som fremgår av resepten igjen. Prinsippet for pseudonymisering er at ingen, heller ikke den som tildeler og forvalter pseudonymet, skal kunne ha samtidig tilgang til både pseudonym, helseopplysninger og personens identitet. Pseudonyme helseopplysninger er i reseptregisterforskriften definert som: «Helseopplysninger der identitet er kryptert eller skjult på annet vis, men likevel individualisert slik at det lar seg gjøre å følge hver person uten at identiteten røpes». Dette betyr at identiteten til pasienter og forskrivere har blitt kryptert i henhold til norsk lovgivning, men likevel er individuell, slik at det er mulig å følge enkeltpersoner over tid, og gjøre registerkoblingsstudier.

Kvalitetssikring

For å identifisere mulige feil eller manglende data i Reseptregisteret blir det utført en rekke kontroller i forbindelse med hver månedlige oppdatering av databasen, i tillegg til en mer omfattende årskontroll. Hver måned kontrolleres det at alle åpne apotek har sendt inn rapport til registeret, samt at rapporten er av rimelig størrelse (kvantitetskontroll). Ved mangler i reseptrapporten (hele eller deler) setter FHI i gang tiltak for å innhente det manglende datagrunnlaget. Videre gjennomføres kvalitetskontroll av de mottatte reseptrapportene som blant annet inkluderer kontroll av kategorisering, reseptyper og omfang. Når apotekene tar i bruk en ny versjon av apotekenes programvare (FarmaPro) kontrollerer FHI at data mottas på en form som leses korrekt inn i Reseptregisteret. SSB kontrollerer fødselstnummer mot Folkeregisteret før oversending av reseptrapportene til FHI. Når fødselstnummeret er ugyldig eller mangler, lager SSB et spesielt pseudonym. Disse personene er ikke mulig å følge over tid, og heller ikke mulig å koble til andre datakilder, men det rapporterte antall ordinasjoner og DDD knyttet til disse personene kan likevel inkluderes i totalstatistikken. Hver måned kontrollerer FHI at Reseptregisteret er oppdatert med siste tilgjengelige versjon av «grunnlagsregistre», dvs. registre Reseptregisteret

Statistics Norway act as so-called “trusted third part” and is part of the data protection to ensure confidentiality of personal information. Statistics Norway only has access to the patients’s Personal Identity Number and the prescriber’s health personnel number and replaces both with a pseudonymised identifier. Statistics Norway cannot read any other prescription data because this information is encrypted before Statistics Norway receives the data. When Statistics Norway sends the data including the pseudonymised identifiers to the NIPH, the NIPH is allowed to decrypt the prescription information again. The principle of pseudonymisation is that no one, not even the trusted third part should have simultaneously access to pseudonym, health data and the person’s identity. In the regulation of the NorPD, pseudonymous health data is defined as: «Health information where the identity is encrypted or otherwise concealed, but nonetheless individualized so that it is possible to follow each person without disclosing the identity». This means that the identity of patients and prescribers has been encrypted according to Norwegian legislation, but nonetheless individualized, so that it is possible to follow individuals over time and perform record-linkage studies. Data linkage is based on the unique identification number system which is available in all the Nordic countries.

Quality assurance

To identify possible errors or missing data in the NorPD several checks are performed in connection with each monthly update of the database, in addition to a more comprehensive annual quality control. A control to verify that each open pharmacy has submitted their report, and that the report is of reasonable size, is performed every month (quantity control). NIPH initiates necessary actions to retrieve missing reports. Various quality control checks are performed, including control of categorization, prescription types etc. Each time a new version of the pharmacy software (FarmaPro) is applied the NIPH controls that the received data is correctly read into the NorPD. Statistics Norway verifies the Personal Identity Number against the Central Population Registry before the reports are transmitted to the NIPH. If Personal Identity Number is invalid or missing, Statistic Norway creates a special Pseudonym. These individuals are not possible to track over time, and it is not possible to link these to other data sources, however the reported total number of ordinations and DDDs related to these individuals can be included in the overall statistics. Each month the NIPH checks that the NorPD is updated with the latest available version of the "basis registries", i.e. registries the NorPD retrieves information from in

henter informasjon fra i tillegg til fra apotekene (f.eks. Folkeregisteret, Vareregisteret og Helsepersonellregisteret). F.eks. får Reseptregisteret kun informasjon om varenummer fra apoteket (det benyttes felles nordiske varenumre for legemidler), mens informasjon om gyldige ATC-koder og DDD-verdier hentes fra det nasjonale vareregisteret for legemidler (3).

2.2 Nordiske reseptregistre

På slutten av 1980-tallet tok apotek i de nordiske landene gradvis i bruk elektroniske systemer ved ekspedering av resepter. Dette gjorde det mulig å samle inn reseptdata fra apotek på en enklere og mer effektiv måte. Selv om helsevesenet ikke er organisert likt i de nordiske landene, har alle fem land et helsevesen med universell dekning for helseutgifter. Alle borgere, uavhengig av sosioøkonomisk status, har tilgang til helsetjenester, inkludert delvis eller fullstendig refusjon av kjøpte legemidler. Nasjonale reseptdatabaser, som er basert på data fra ekspederte og utleverte lege midler fra apotek til individer utenfor sykehus/sykehjem, har vært tilgjengelig siden 1994 i Finland og Danmark, siden 2004 i Norge, siden 2005 i Sverige og siden 2006 på Island. Databasene dekker til sammen 26 millioner innbyggere (Danmark: 5,8 millioner, Finland: 5,5 millioner; Island: 0,3 millioner; Norge: 5,2 millioner og Sverige: 10 millioner). Det er mulig å koble disse dataene til ulike helseutfall og andre data basert på det unike fødselsnummeret/-koden som alle innbyggere i disse landene har. Databasene er en viktig ressurs for å kunne gjennomføre longitudinelle og registerkoblede studier med helseundersøkelser og andre registre. Databasene representerer også et godt kunnskapsgrunnlag for nasjonale beslutninger innen legemiddelbruk. En artikkel fra 2010 gir en oversikt over datainnsamlingsprosedyrer og innhold i de nordiske landenes reseptregister (4).

2.3 Grossistbasert legemiddelstatistikk

Statistikk basert på totalt salg av legemidler fra grossist til apotek, sykehus/sykehjem har vært tilgjengelig i Norge siden 1970-tallet. Grossistbasert legemiddelstatistikk omfatter alt salg av legemidler fra grossist til apotek, sykehus/sykehjem, dagligvarebutikker og andre med tillatelse til å omsette legemidler. Legemidler til dyr og mennesker, både reseptfrie og reseptbelagte, er inkludert i statis-

addition to information from the pharmacies (e.g. the Central Population Registry, Vareregisteret (the Article Number Register) and Helsepersonellregisteret (The Register for Health Personell)). For instance, the NorPD only receives information about the national article number of the medicinal product from the pharmacy, while information on valid ATC codes and DDD values is obtained from the Article Number Register (3).

2.2 Prescription statistics in the other Nordic countries

During the late 1980s, pharmacies in the Nordic countries gradually computerized their records of dispensed prescriptions which made it possible to collect data efficiently. Although healthcare systems are not organized identically in the Nordic countries, all five countries have a tax-supported public health service with universal coverage. All citizens, independent of socioeconomic status, have access to health services, including partial or complete reimbursement of purchased medicines. National prescription databases, containing data on drugs dispensed at pharmacies (exposure data) to individuals receiving ambulatory care, have been available since 1994 in Finland and Denmark, since 2004 in Norway, since 2005 in Sweden and since 2006 in Iceland. The databases together cover 26 million inhabitants (Denmark: 5.8 million; Finland: 5.5 million; Iceland: 0.3 million; Norway: 5.2 million; and Sweden: 10 million) and have the potential to link these data to different health outcomes and other data based on the unique personal identity code which all residents in these countries have. The databases serve as a resource for conducting longitudinal and record-linkage studies with health surveys and other registries. They also offer a sound evidence base for national decision-making in the field of drug utilization. An article from 2010 provides an overview of the data collection procedures and content of the Nordic countries' prescription databases (4).

2.3 The Norwegian Drug Wholesales Statistics

Statistics based on total sales of drugs from wholesalers to pharmacies, hospitals/nursing homes has been available in Norway since the 1970s. The Norwegian Drug Wholesales Statistics database includes total sales of drugs from wholesalers to pharmacies, hospitals/nursing homes and non-pharmacy outlets and others with permission to sell medicines. Total sales of prescription and non-prescription human and veterinary medicines are included in the

tikken. Statistikken gir en oversikt over utviklingen på fylkesnivå. Statistikken inneholder imidlertid ikke opplysninger om den enkelte legemiddelbruker.

Legemiddelforbruket i Norge – årlig publikasjon
Årlig publiseres data fra den Grossistbaserte legemiddelstatistikken i publikasjonen *Legemiddelforbruket i Norge*. Hver utgave omfatter 5-årsoversikter over totalsalget av reseptfrie og reseptbelagte legemidler i Norge (5). Boken er tilgjengelig på nettsiden www.legemiddelforbruk.no. Nærmere informasjon vedrørende utlevering av data fra den grossistbaserte legemiddelstatistikken finnes på Folkehelseinstituttets nettside www.fhi.no.

2.4 Anatomisk Terapeutisk Kjemisk (ATC)-klassifikasjon

Alle legemidler som er registrert i Norge er gruppert etter ATC-systemet. I ATC-systemet inndeles legemidlene i grupper på 5 nivåer: På 1. nivå fordeles legemidlene på 14 anatomiske hovedgrupper. Det neste nivået (2. nivå) er en terapeutisk eller farmakologisk undergruppe. 3. nivå og 4. nivå er terapeutiske, farmakologiske eller kjemiske undergrupper, mens 5. nivå representerer den kjemiske substansen.

ATC-koden

En fullstendig klassifikasjon av legemiddelsubstansen spironolakton (vanndrivende middel) med ATC-koden C03DA01 kan illustrere oppbygningen av ATC-systemet:

- C Hjerte og kretsløp (1. nivå, anatomisk hovedgruppe)
- C03 Diureтика (2. nivå, terapeutisk undergruppe)
- C03D Kaliumsparende midler (3. nivå, farmakologisk undergruppe)
- C03DA Aldosteronantagonister (4. nivå, farmakologisk undergruppe)
- C03DA01 Spironolakton (5. nivå, kjemisk substans)

Alle spironolakton preparater (Aldactone® og Spirix®) gis i dette systemet koden C03DA01.

Ved hjelp av dette klassifikasjonssystemet kan man lage statistikker over legemiddelforbruk gruppert på fem ulike nivåer, fra tall som viser totalforbruket av alle preparater klassifisert f.eks. under hovedgruppe C – *Hjerte og kretsløp* (1. nivå), tall for de ulike undergruppene (2., 3. og 4. nivå) og ned til tall som viser forbruket av det enkelte virkestoff.

statistics. The statistics give an overview of developments in drug consumption over time, both at county and country level. The statistics, however, contain no information about the individual drug user.

Drug Consumption in Norway – published annually
Data from the Norwegian Drug Wholesales Statistics Database have been published annually in Drug Consumption in Norway (5) since 1977. Each issue includes total sales data for 5 year periods for both prescription and non-prescription drugs in Norway. The book is available from the website www.drugconsumption.no. Further information on the Norwegian Drug Wholesales Statistics database, including how to apply for data, can be found at the Norwegian Institute of Public Health's website www.fhi.no.

2.4 The Anatomical Therapeutic Chemical (ATC) classification system

In the ATC system the drug substances are classified into groups at 5 different levels. The drugs are divided into fourteen main groups (1st level), with pharmacological/ therapeutic sub-groups (2nd levels). The 3rd and 4th levels are chemical/pharmacological/therapeutic sub-groups and the 5th level is the chemical substance.

The ATC code

A complete classification of the drug spironolactone (diuretic) with the ATC code C03DA01 illustrates the structure of the ATC system:

- C Cardiovascular system (1st level, anatomical main group)
- C03 Diuretics (2nd level, therapeutic sub-group).
- C03D Potassium-sparing agents (3rd level, pharmacological sub-group)
- C03DA Aldosterone antagonists (4th level, pharmacological sub-group)
- C03DA01 Spironolactone (5th level, chemical substance)

All medicinal products containing plain spironolactone (Aldactone® and Spirix®) are thus assigned the code C03DA01.

The ATC classification system makes it possible to compile drug consumption statistics on 5 different levels, i.e., figures showing total consumption of all preparations classified in main group C – *Cardiovascular system* (1st level), figures for the various sub-groups (2nd, 3rd and 4th levels), and down to figures showing consumption of each active ingredient.

ATC-kode for hvert enkelt preparat er angitt i *apotekenes vareregister*, SPC på Legemiddelverkets hjemmesider og i preparatomtalene publisert i *Felleskatalogen*. Ved å bruke «Anatomisk terapeutisk kjemisk legemiddelregister» (Felleskatalogens gule del) eller Felleskatalogens nettside (<http://felleskatalogen.no/medisin/atc-register>), vil man få en oversikt over hvilke produktnavn hver enkelt ATC-kode omfatter.

2.5 Definert Døgndose (DDD)

I enkelte tabeller i del 3 i boken er volum av lege-middelbruk angitt i antall DDD. Ved å benytte definerte døgndoser (DDD) som måleenhet, får man bedre mulighet for sammenligninger mellom alternative legemidler uavhengig av prisdifferanser. Vurdering av volum av legemiddelforbruket gjennom lengre tidsperioder, nasjonalt og internasjonalt, blir enklere og bedre ved bruk av definerte døgndoser. Måleenheten DDD er definert som *den antatt gjennomsnittlige døgndose brukt ved preparatets hovedindikasjon hos voksne*.

Døgndosene fastsettes på bakgrunn av en vurdering av bruken internasjonalt, selv om de nasjonale terapitradisjonene kan variere fra et land til et annet (f.eks. bruksområde og doseringsanbefalinger). Den definerte døgndose (DDD) bør derfor betraktes som en teknisk måleverdi.

Legemidler som benyttes ved forskjellige indikasjoner kan ha på spesielle problemer som det må tas hensyn til ved vurdering av døgndosestatistikk. Dosen ved hovedindikasjonen benyttes normalt ved fastsettelse av DDD. Med unntak av for noen få spesielle barneprøver benyttes doseringer for voksne. Ofte vil DDD for ulike administrasjonsformer være like med unntak av der biotilgjengeligheten er svært forskjellig. For prøver der man benytter en støtdose og en vedlikeholdsdoze, vil døgndosene være basert på vedlikeholdsdosene. Hvis mulig er DDD angitt i mengde aktiv substans. Er det umulig, som f.eks. ved kombinasjonsprøver og enkelte flytende prøver, angis DDD som antall enkeltdoser (antall tabletter, kapsler, milliliter osv.).

DDD representer ikke nødvendigvis den mest forskrevne eller brukte dose, noe som må tas i betragtning når tallene vurderes. Det vil derfor ofte være vanskelig å beregne antall brukere ved kun å bruke DDD som måleenhet. Dette gjelder særlig der

The ATC code for all pharmaceuticals on the Norwegian market can be retrieved from *the pharmacy medicinal product register*, SPC at the Norwegian Medicines Agency's website and in the monographs of the national drug catalogue «*Felleskatalogen*». The yellow section of the latter, entitled *The Anatomical Therapeutic Chemical Medicines Register* or *Felleskatalogens* website (<http://felleskatalogen.no/medisin/atc-register>), lists all medicinal products belonging to each of the ATC 5th level codes.

2.5 The Defined Daily Dose (DDD)

In some tables in part 3 in this book the sales volume of drug consumption is given in number of DDDs. Using DDDs as the unit of measurement allows better comparison between alternative medications, regardless of price differences. The evaluation of drug consumption volumes over time, nationally and internationally, is simplified and improved by the use of DDDs. A DDD is defined as *the assumed average maintenance dose per day for a drug used on its main indication in adults*.

The DDDs are determined on the basis of evaluation of international use of the substance in question, bearing in mind that national therapy traditions (indications, dosages) often differ greatly. Each DDD should therefore be regarded as a technical measuring unit.

Drugs used for more than one indication may cause particular problems which are important to consider when evaluating statistics based on DDDs. With the exception of a very few specially formulated pediatric preparations, adult dosages are used. The DDD for a substance will often be one and the same, irrespective of the route of administration. However, drugs with different bioavailabilities depending on their administration route will have more than one DDD, each of them linked to a specific dosage form. For medications where a booster dose is followed by a smaller maintenance dosage, the maintenance dose will form the basis for determining the DDD. Whenever possible, the DDD is indicated as the quantity of active substance. When this is impossible, as is the case with combination preparations and some liquid preparations, the DDD is indicated as the number of single doses (number of tablets, capsules, millilitres etc.).

The DDDs are not necessarily the most frequently prescribed or used doses. This must be considered when evaluating the data. Accordingly it will often be difficult to estimate the number of users by using the

doseringsanbefalingene kan variere mye etter bruksområde. Salgstallene kan angis i DDD/1000 innbyggere/døgn og beregnes på følgende måte:

Samlet forbruk i antall DDD x 1000

365 x antall innbyggere

Dette tallet vil gi et estimat av andelen av befolkningen i promille som får en bestemt medikamentell behandling. Et estimert salg av et legemiddel på 10 DDD/ 1000 innbyggere /døgn indikerer at 10 av 1000 personer (dvs. 1 % av befolkningen) daglig kan bruke dette legemidlet. Dette estimatet blir imidlertid kun riktig dersom det er samsvar mellom DDD og dosen som faktisk brukes.

2.6 WHO Collaborating Centre for Drug Statistics Methodology

ATC-/DDD-systemet administreres og videreutvikles av WHO Collaborating Centre for Drug Statistics Methodology. Dette senteret er en del av Avdeling for legemiddelstatistikk ved Folkehelseinstituttet. Nærmere beskrivelse av systemet finnes i publikasjonen Guidelines for ATC classification and DDD assignment (6). ATC Index with DDDs, som inneholder en liste over alle fastsatte DDD, kan bestilles fra WHO senteret (7). Begge publikasjonene finnes i engelsk og spansk versjon. Senterets website har følgende adresse: www.whocc.no. Publikasjonene kan bestilles fra WHO Collaborating Centre for Drug Statistics Methodology. ATC- og DDD-endringer som er vedtatt blir publisert årlig og gjort gjeldende ved årsskiftet. ATC-/DDD-versjon gjeldende fra januar 2018 er benyttet i rapporten.

DDD as the measuring unit. The sales can be given as the number of DDDs/1000 inhabitants/day, calculated as follows:

Total consumption measured in number of DDDs x 1000

365 x number of inhabitants

This figure offers an estimation of what proportion of the population that may receive a certain drug treatment. An estimated drug consumption of 10 DDDs/1000 inhabitants/day corresponds to a daily use of this drug by 1% of the population. This estimate is, however, only valid if there is good correlation between the DDD and the actual consumed dose.

2.6 WHO Collaborating Centre for Drug Statistics Methodology

The WHO Collaborating Centre for Drug Statistics Methodology is responsible for the administration and development of the ATC/DDD system. The Centre is located at the Department of Drug Statistics at the NIPH. Further information about the ATC/DDD system is given in the publication Guidelines for ATC classification and DDD assignment (6). The ATC Index with DDDs which includes a list of all assigned DDDs can be ordered from the Centre (7). Both publications are available in English and Spanish. The website for the Centre is www.whocc.no. The ATC/DDD publications can be ordered from the WHO Collaborating Centre for Drug Statistics Methodology. ATC and DDD changes are published annually and are made official by the end of the year. ATC/DDD version from January 2018 has been used in this book.

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Del 3

Part 3

3. Reseptregisteret (NorPD) 2013–2017

3.1 Utvalgte nøkkeltall fra Reseptregisteret

Reseptregisteret inneholder opplysninger fra alle landets apotek om utlevering av legemidler på resept, til forskriveres egen praksis og til institusjoner. I 2017 ble rundt 96 % av legemidlene i Reseptregisteret (målt i DDD) utlevert til enkeltpersoner. Leveransene til institusjoner (sykehus og sykehjem) utgjorde 3 % av det totale antall DDD og ca. 0,4 % av totalt antall DDD ble utlevert til bruk i forskriveres egen praksis. Salg av reseptfrie legemidler er ikke inkludert i Reseptregisteret. Reseptfritt salg utgjorde i 2017 13 % av totalt salg av legemidler i Norge målt i DDD (Kilde: Grossistbasert legemiddelstatistikk, Folkehelseinstituttet).

3. The Norwegian Prescription Database (NorPD) 2013–2017

3.1 Selected key figures from the NorPD

The NorPD contains information from all Norwegian pharmacies of drugs dispensed to individuals, to a prescriber's own practice and to institutions. In 2017, about 96% of DDDs in the NorPD were dispensed to individuals in ambulatory care. Deliveries to institutions (hospitals and nursing homes) amounted to 3% of the DDDs and about 0.4% of the DDDs were dispensed for use in the physician's practice. Sales of OTC medicines are not included in the NorPD. OTC sales constitute 13% of total sales of pharmaceuticals in Norway in 2017, measured in DDDs (source: Norwegian Drug Wholesale Statistics, Norwegian Institute of Public Health).

Table 3.1.a. Number of individuals and one-year prevalence (%) of the population who had at least one drug dispensed in Norway 2013–2017.

	Women n (%)	Men n (%)	Both genders n (%)
2013	1 910 183 (75.5)	1 574 382 (61.7)	3 484 565 (68.6)
2014	1 939 431 (75.9)	1 605 342 (62.1)	3 544 773 (69.0)
2015	1 956 001 (75.9)	1 622 534 (62.1)	3 578 535 (69.0)
2016	1 981 012 (76.2)	1 649 902 (62.6)	3 630 914 (69.3)
2017	2 007 231 (76.7)	1 680 866 (63.2)	3 688 097 (69.9)

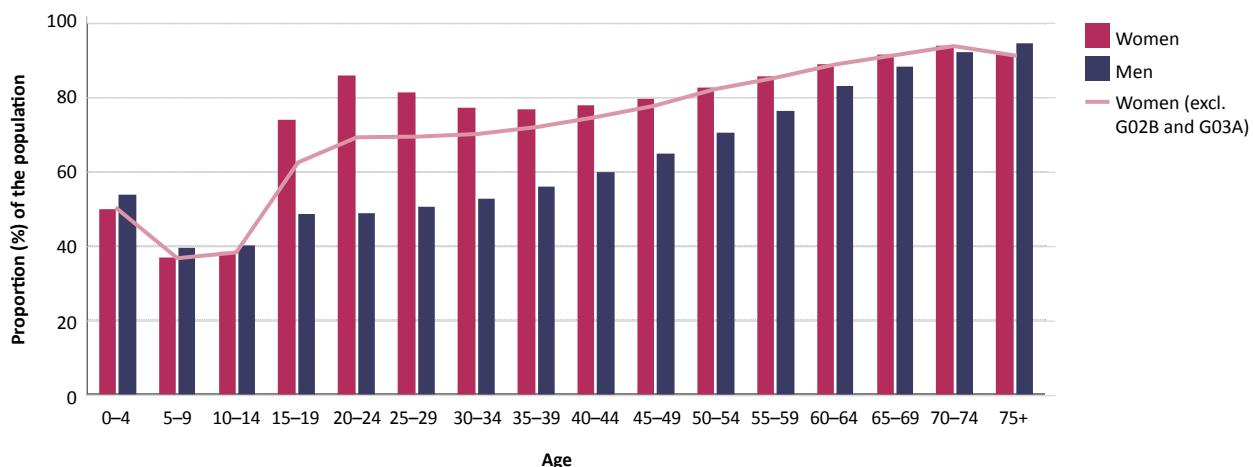


Figure 3.1. One-year prevalence (%) of the population who had at least one drug dispensed in 2017 in Norway according to age and gender. The pink line shows the one-year prevalence (%) for women excluding contraceptives for topical use (ATC code G02B) and hormonal contraceptives for systemic use (ATC code G03A).

Reseptregisteret ble opprettet 1. januar 2004 og i perioden 2004–2017 har i underkant av 5,7 millioner individer blitt inkludert i NorPD med minst ett legemiddel utlevert på resept fra apotek. Antall legemiddelleveringer etter resept til pasienter i samme periode er i underkant av 573 millioner.

I 2017 fikk 69,9 % av den norske befolkningen utlevert minst ett legemiddel på resept, 76,7 % av kvinnene og 63,2 % av mennene (tabell 3.1.a). Krav om at pasientens fødselsnummer skal påføres resepten ble innført 1. oktober 2003. I 2004, det første driftsåret for NorPD, var andelen av resepter med ugyldig eller manglende 11-sifret fødselsnummer 3,7 %. I årene 2005–2007 lå denne andelen på rundt 2 %, og i 2008 og 2009 har den ligget på i underkant av 1,4 %. I 2010–2017 var andelen uten gyldig fødselsnummer under 1 % (0,21 % i 2017).

Ettårsprevalensen for å få utlevert legemiddel etter resept i 2017 var lavest for kvinner i aldersgruppen 5–9 år og for menn i samme aldersgruppe (figur 3.1). Rundt 93 % av individene i alderen 70 år og eldre fikk utlevert medisiner etter resept. I aldersgruppen 15–29 år fikk 81 % av kvinnene utlevert legemiddel etter resept i 2017. Dersom man ekskluderer kvinner som kun fikk utlevert hormonelle prevensjonsmidler (ATC-kode G02B og G03A) var prevalensen 68 %. Andelen kvinnelige legemiddelbrukere over 15 år er høyere enn blant menn selv om de ekskluderes.

Since January 2004, approximately 5.7 million individuals have been included in NorPD with at least one prescribed drug dispensed from a pharmacy. The number of drugs dispensed to patients in the same period (2004–2017) is near 573 millions.

In 2017, 69,9% of the Norwegian population had at least one prescription dispensed, 76,7% of women and 63,2% of men (table 3.1.a). In 2004, the first operational year of NorPD, the proportion of prescriptions having invalid or missing personal identity number was 3.7%. In the period 2005–2007, the proportion was around 2%. The proportion of prescriptions with an invalid personal identity number has declined further to just below 1.4% in 2008 and 2009. In 2010–2017 the proportion was less than 1% (0.21% in 2017).

The age-specific one year prevalence for being dispensed a drug in 2017 was lowest for women at about 5–9 years of age and for men at the same age (figure 3.1). About 93% of individuals aged 70 years and older received prescribed drugs. About 81% of women aged 15–29 years received prescribed drugs in 2017. If women who only received hormonal contraception (ATC code G02B and G03A) are excluded, the prevalence was 68%. The proportion of drug users among women over 15 years of age was still higher than in men.

Table 3.1.b. One-year prevalence (%) of the population who had at least one drug dispensed in Norway in 2017 according to the main ATC groups.

ATC	Women %	Men %	Both genders %
A Alimentary tract and metabolism	23.4	17.6	20.5
B Blood and blood forming organs	13.4	13.2	13.3
C Cardiovascular system	21.3	21.1	21.2
D Dermatologicals	15.6	12.7	14.2
G Genito urinary system and sex hormones	25.7	7.7	16.6
H Systemic hormonal preparations, excl. sex hormones and insulins	11.8	5.8	8.8
J Anti-infectives for systemic use	26.9	17.8	22.3
L Anti-neoplastic and immunomodulating agents	2.4	1.8	2.1
M Musculo-skeletal system	21.0	15.5	18.3
N Nervous system	32.7	22.4	27.5
P Anti-parasitic products, insecticides and repellents	2.2	1.4	1.8
R Respiratory system	29.5	22.7	26.1
S Sensory organs	14.6	10.8	12.7
V Various	0.7	0.7	0.7

Tabell 3.1.b viser ettårsprevalens for hele befolkningen som har fått utlevert minst ett legemiddel etter resept innen hver av de 14 ATC-hovedgruppene, totalt og fordelt på kvinner og menn. De tre legegruppene som er mest brukt blant begge kjønn er midler mot infeksjoner til systemisk bruk (ATC-gruppe J), legemidler med virkning på nervesystemet (ATC- gruppe N) og legemidler som brukes for sykdommer i luftveiene (ATC-gruppe R).

Tabell 3.1.c viser en oversikt over legemidler (definert som ATC 5.nivåer) med flest brukere i Norge i 2017. Paracetamol (smertestillende) har flest brukere, etterfulgt av fenoxymetylpenicillin (antibakterielt middel). Diklofenak ligger i år som i fjor på 5. plass. Paracetamol og diklofenak selges også i reseptfrie pakninger. Denne bruken registreres ikke i Reseptregisteret. Listen inneholder i hovedsak de samme legemidlene som tidligere år, men det er noen endringer i rekkefølgen. Ny på listen sammenlignet med i fjor er vitamin-D-preparatet kolekalsiferol på 24. plass.

Table 3.1.b shows the one-year prevalence of the entire population, and among men and women, who received at least one drug in each of the main ATC groups. The three drug groups most used in both men and women are anti-infectives (ATC group J), drugs affecting the nervous system (ATC group N) and drugs used for respiratory diseases (ATC group R).

Table 3.1.c shows an overview of medicines (defined as ATC 5th levels) with the highest number of users in Norway in 2017. Paracetamol (analgesic) is used by the highest numbers of individuals, followed by phenoxyethylpenicillin (antibacterial). Diclofenac is found in 5th place, same as last year. Paracetamol and diclofenac are also sold OTC. This use is not covered by the NorPD. The list contains essentially the same drugs as in previous years, but there are some changes in order. New on the list compared with last year is the Vitamin D supplement cholecalciferol in 24th place.

Table 3.1.c. Drugs with the highest number of users in Norway in 2017.

	ATC code	Active ingredient	Use	Number of individuals	Proportion (%) of the population
1	N02BE01	paracetamol ¹⁾	Analgesic	524 901	9.9
2	J01CE02	phenoxyxymethylpenicillin	Antibacterial	394 344	7.5
3	B01AC06	acetylsalicylic acid	Antithrombotic	364 426	6.9
4	N02AJ06	codeine and paracetamol	Opioid analgesic, combinations	351 291	6.7
5	M01AB05	diclofenac ¹⁾	NSAID/analgesic	323 120	6.1
6	C10AA05	atorvastatin	Lipid modifying	295 715	5.6
7	N05CF01	zopiclone	Hypnotic	290 210	5.5
8	R06AE07	cetirizine ¹⁾	Anti-allergic	286 302	5.4
9	C07AB02	metoprolol	Antihypertensive/cardiovascular disease	283 411	5.4
10	R03AC02	salbutamol	Asthma/COPD	270 499	5.2
11	R05DA01	ethylmorphine	Cough suppressant	265 341	5.1
12	A02BC02	pantoprazole ¹⁾	Reflux oesofagitis (protonpump inhibitor)	263 785	5.0
13	R06AX27	desloratadine	Anti-allergic	243 334	4.6
14	M01AE01	ibuprofen ¹⁾	NSAID/analgesic	230 829	4.4
15	N02AX02	tramadol	Opioid analgesic	225 070	4.3
16	C10AA01	simvastatin	Lipid modifying	212 312	4.0
17	H03AA01	levothyroxine sodium	Thyroxine supplement	209 382	4.0
18	S01AA01	chloramphenicol	Antibacterial eye drops	193 942	3.7
19	J01CA08	pivmecillinam	Antibacterial	190 781	3.6
20	H02AB06	prednisolone	Antiinflammatory/corticosteroid	187 335	3.6
21	A02BC05	esomeprazole	Reflux oesofagitis (protonpump inhibitor)	176 064	3.3
22	R01AD09	mometasone ¹⁾	Inflammatory skin disorders/eczema/psoriasis	171 090	3.2
23	G03AA07	levonorgestrel and ethynodiol dienoate	Hormonal contraception	152 705	2.9
24	A11CC05	colecalciferol	Vitamin supplement	147 685	2.8
25	M01AE52	naproxen and esomeprazole	NSAID/analgesic with protonpump inhibitor	142 741	2.7
26	C08CA01	amlodipine	Antihypertensive/cardiovascular disease	137 090	2.6
27	N05BA04	oxazepam	Anxiolytic	136 950	2.6
28	G03CA03	estradiol	Hormontherapy in women	136 672	2.6
29	J01AA02	doxycycline	Antibacterial	122 266	2.3
30	A10BA02	metformin	Diabetes	120 061	2.3

¹⁾The ATC-level comprises OTC-medicinal products. The number of individuals is registered for prescription sales only.

3.2 Reseptkategorier og refusjon av utgifter til legemidler

Reseptregisteret inneholder opplysninger om utlevering av legemidler fordelt på ulike reseptkategorier. Reseptkategoriene har følgende hovedindeling:

- Hvit resept
- Blå resept (i henhold til Forskrift om stønad til dekning av utgifter til viktige legemidler mv. (Blåreseptforskriften) FOR-2007-06-28-814)
- Helseforetaksfinansiert resept (i henhold til Forskrift om helseforetaksfinansierte reseptlegemidler til bruk utenfor sykehus, FOR-2015-06-12-646)

Informasjon om følgende reseptkategorier er ikke inkludert i tabellene:

- Bidragsordningen (hjemlet i Lov om folketrygd (folketrygdlagen) § 5-22)
- Støtte til legemidler for vernepliktige og ved yrkesskade (hjemlet i Lov om folketrygd § 5-25)
- Spesielle refusjonsordninger som f.eks. medlemskap i Jernbanepersonalets Helsefond

Hvit resept

Resept hvor pasienten betaler hele beløpet selv.

Blå resept

I tabellene er refusjon i henhold til de ulike paragrafene i blåreseptforskriften slått sammen (§§ 2, 3a, 3b, 4, 5).

Refusjon etter blåreseptforskriftens § 2

Legemidler som er ført opp på refusjonslista tilknyttet § 2 refunderes pliktmessig når de brukes ved diagnoser (angitt med ICPC eller ICD koder) spesifisert i refusjonslista. Statens legemiddelverk avgjør hvilke legemidler som skal føres opp i refusjonslista, og hvilke diagnosekoder/vilkår legemidlet skal underlegges ved rekvirering på blå resept.

Refusjon etter blåreseptforskriftens §§ 3a og 3b

HELFO kan fatte vedtak om individuell refusjon av utgifter til legemidler som ikke har forhåndsgodkjent refusjon etter § 2. Individuell refusjon forutsetter enten at indikasjonen for bruken av legemidlet er dekket av en diagnosekode i refusjonslista (§3a) eller at legemidlet skal benyttes til behandling av en sjeldent eller alvorlig kronisk sykdom som ikke er nevnt i refusjonslista (§ 3b). Vedtak fattes

3.2 Prescription categories and reimbursement of medicinal expenses

NorPD contains information about dispensed prescriptions based on the following prescription categories:

- Non-reimbursed prescriptions
- General reimbursement prescriptions (according to the "Blue Prescription Regulation" (FOR-2007-06-28-814))
- Health Trust financed prescription (according to the "Regulation for Health Trust Financed medicinal products", FOR 2015-06-12-646)

The following prescription categories are not included in the tables:

- Contribution to cover the cost of healthcare when expenses are not otherwise covered by other laws (according to the National Insurance Act § 5-22).
- Contribution to conscripted military and individuals with occupational injury (according to the National Insurance Act § 5-25)
- Special contribution, for instance membership in Jernbanepersonalets Helsefond (Railways Workers Health Fund)

Non-reimbursed prescriptions

Prescriptions paid in full by the patient.

General reimbursement prescriptions

The costs under the various reimbursement schemes (§§ 2, 3a, 3b, 4, 5) according to the "Blue Prescription Regulation" are combined in the tables.

Reimbursement according to § 2

Drugs listed on the reimbursement list § 2 will always be reimbursed when prescribed for the diagnoses (indicated by the ICPC and ICD codes) specified in the reimbursement list. The Norwegian Medicines Agency decides which medicines are included in the list and which diagnostic codes/conditions should be subject to reimbursement prescribing.

Individual reimbursement according to §§ 3a and 3b

The Health Economics Administration (HELFO) will make decisions regarding individual reimbursement for drugs not included in the reimbursement list according to § 2. Individual reimbursement requires either that the indication for use of the drug is covered by a diagnostic code in the reimbursement

for hver enkelt pasient på grunnlag av søknad fra behandelende lege. Reseptregisteret gir ikke en komplett oversikt over refusjon etter §§ 3a og 3b.

Refusjon etter blåreseptforskriftens § 4

Legemidler som benyttes ved allmennfarlige smittsomme sykdommer, refunderes etter § 4 etter en nærmere angitt sykdomsliste. Det ytes stønad til utgifter til legemidler mot infeksjoner, immunstimulerende legemidler og vaksiner. Denne støtten ytes til alle som bor i Norge, uavhengig av medlemskap i folketrygden. Legen har mulighet til å rekvirere flere av legemidlene i denne paragrafen til seg selv for å bevare pasientenes anonymitet, disse reseptene vil ikke kunne følges på individnivå i Reseptregisteret.

Helseforetaksfinansiert resept

De regionale helseforetakene er gitt et særskilt finansieringsansvar for enkelte kostbare legemidler. Dette gjelder definerte legemidler brukt i behandlingen av bl.a. revmatiske lidelser, multipel sklerose, ulike krefttilstander, hudsykdommer, hepatitis C, nyresvikt og mage- og tarmsykdommer. Kun legemidler ekspedert på resept til individer er tatt med i tabellen.

En oversikt over alle legemidler som finansieres er tilgjengelig i Forskrift om helseforetaksfinansierte reseptlegemidler til bruk utenfor sykehus.

list (§ 3a) or the drug will be used to treat a rare or serious chronic disease not listed in the reimbursement list (§ 3b). Decisions are made for each patient on the basis of application from the treating physician. NorPD does not provide a complete overview of reimbursement according to §§ 3a and 3b.

Reimbursement according to § 4

Drugs used for communicable diseases are reimbursed according to § 4 according to a specified disease list. The reimbursement is granted for anti-infectives, immunostimulants and vaccines. This support is provided to all who live in Norway, regardless of citizenship. The physician may self-prescribe these drugs in order to preserve patient anonymity; such prescriptions will not be available on an individual level in the NorPD.

Health Trust financed prescriptions

The regional health trusts provide dedicated funding for certain expensive drugs. This applies to defined drugs used in the treatment of rheumatic disorders, multiple sclerosis, various cancer types, skin diseases, hepatitis C, kidney failure and gastrointestinal diseases. Only drugs that are dispensed by prescription to individuals are included in the table.

A list of all health trust financed medicinal products is available in the "Regulation for Health Trust Financed medicinal products".

Table 3.2.a. Sales of drugs by prescription categories, overview 2017.

	Number of individuals	Proportion (%) of the population	Number of DDDs (in 1000)	Sales in 1000 NOK
Non-reimbursable prescriptions	3 144 537	59.6	660 822	3 294 125
Reimbursement prescriptions	2 477 356	46.9	1 864 628	12 056 203
Health trust financed prescriptions	46 020	0.9	11 822	4 169 008

Table 3.2.b. Sales of reimbursed drugs (§§ 2, 3a, 3b, 4, 5) by ATC main groups in 2017.

ATC main groups	Number of individuals	Proportion (%) of the population	Number of DDDs (in 1000)	Sales in 1000 NOK
A Alimentary tract and metabolism	579 492	11.0	229 819	1 916 637
B Blood and blood forming organs	358 891	6.8	114 983	1 290 979
C Cardiovascular system	1 055 918	20.0	780 402	1 657 072
D Dermatologicals	324 095	6.1	2 030	257 002
G Genito urinary system and sex hormones	157 561	3.0	48 610	382 750
H Systemic hormonal preparations, excl. sex hormones and insulins	359 501	6.8	68 768	379 043
J Antiinfectives for systemic use	127 822	2.4	12 080	745 436
L Antineoplastic and immunomodulating agents	84 378	1.6	25 945	1 004 864
M Musculo-skeletal system	308 680	5.8	59 157	312 212
N Nervous system	720 386	13.7	220 847	2 099 842
P Antiparasitic products, insecticides and repellents	7 478	0.1	843	4 534
R Respiratory system	905 340	17.2	266 383	1 520 476
S Sensory organs	322 839	6.1	34 395	300 472
V Various	20 618	0.4	367	184 882

Table 3.2.c. Reimbursed drugs (§§ 2, 3a, 3b, 4, 5) with the highest number of users in 2017.

	ATC code	Active ingredient	Use	Number of individuals	Proportion (%) of the population	Number of DDDs (in 1000)	Sales in 1000 NOK
1	C10AA05	atorvastatin	Lipid modifying	293 752	5.6	153 824	127 341
2	C07AB02	metoprolol	Antihypertensive/ cardiovascular disease	279 216	5.3	43 673	148 597
3	R06AE07	cetirizine	Anti-allergic	243 278	4.6	50 899	59 066
4	R03AC02	salbutamol	Asthma/COPD	221 347	4.2	20 877	83 473
5	R06AX27	desloratadine	Anti-allergic	216 599	4.1	36 704	61 420
6	N02BE01	paracetamol	Analgesic	216 511	4.1	24 798	65 401
7	C10AA01	simvastatin	Lipid modifying	210 605	4.0	64 492	64 506
8	H03AA01	levothyroxine sodium	Thyroxine supplement	207 938	3.9	43 939	64 413
9	A02BC02	pantoprazole	Reflux oesofagitis (protonpump inhibitor)	178 695	3.4	38 390	89 568
10	C08CA01	amlodipine	Antihypertensive/ cardiovascular disease	135 988	2.6	58 450	47 185
11	A02BC05	esomeprazole	Reflux oesofagitis (protonpump inhibitor)	133 884	2.5	40 532	108 050
12	R01AD09	mometasone	Anti-allergic, nose spray	122 846	2.3	14 972	33 074
13	A10BA02	metformin	Diabetes	116 105	2.2	27 825	58 202
14	C09CA06	candesartan	Antihypertensive/ cardiovascular disease	113 605	2.2	56 062	61 589
15	N06AB10	escitalopram	Antidepressant	108 227	2.1	36 311	53 446
16	H02AB06	prednisolone	Antiinflammatory/ corticosteroid	102 706	1.9	15 198	24 783
17	S01GX02	levocabastine	Anti-allergic, eye drops	90 277	1.7	*	23 328
18	B03BA03	hydroxocobalamin	Vitamin B-12 supplement	79 802	1.5	25 921	54 895
19	R01AD12	fluticasone furoate	Anti-allergic, nose spray	78 173	1.5	6 111	16 048
20	R03AK06	salmeterol and fluticasone	Asthma/COPD	76 860	1.5	16 492	176 932
21	R03AK07	formoterol and budesonide	Asthma/COPD	76 341	1.4	14 307	185 973
22	D07AC13	mometasone	Inflammatory skin disorders/ eczema/psoriasis	71 695	1.4	*	17 923
23	C03CA01	furosemide	Antihypertensive/cardio- vascular disease/oedema	70 274	1.3	17 974	18 300
24	C09AA05	ramipril	Antihypertensive/ cardiovascular disease	68 997	1.3	54 277	34 223
25	S01XA20	artificial tears and other indif- ferent preparations	Dry eyes	68 681	1.3	*	62 231
26	D02AE01	carbamide	Softener, atopic eczema	68 141	1.3	*	64 951
27	C09CA01	losartan	Antihypertensive/ cardiovascular disease	66 815	1.3	26 700	32 908
28	C09DA01	losartan and diuretics	Antihypertensive/ cardiovascular disease	63 049	1.2	20 730	34 751
29	D07AB02	hydrocortisone butyrate	Inflammatory skin disorders/ eczema/psoriasis	61 313	1.2	*	10 123
30	C09DA06	candesartan and diuretics	Antihypertensive/ cardiovascular disease	59 207	1.1	19 323	40 501

* No DDD assigned for this ATC 5th level

3.3 Beskrivelse av hovedtabellene

Tabellene i del 3 i denne boken gir en oversikt over antall individer som har fått utlevert legemidler etter resept fra apotekene i Norge. Alle som har hentet ut minst ett legemiddel er inkludert og opplysningene er fordelt på enkeltlegemidler og legemiddelgrupper. Selv om et individ har fått utlevert samme legemiddel flere ganger, telles vedkommende som bruker bare én gang. Det er kun utleveringer til individer med fullt fødselsnummer som er inkludert i tabellene i boken. I Reseptregisteret er 0,21 % av utleveringene til individer hvor fullstendig fødselsnummer ikke er angitt i 2017.

Tabellene inneholder tall for perioden 2013–2017. I tillegg er følgende opplysninger for 2017 inkludert:

- Prevalens per 1 000 innbyggere
 - Antall individer som har hentet ut minst ett legemiddel etter resept fordelt på følgende aldersgrupper: <15, 15–44, 45–69, ≥ 70. Dersom antall individer er lavere enn fem, angis < 5 i tabellene.
 - Salg i 1 000 NOK fra apotek for utvalget i tabellen, dvs. til individer med fullt fødselsnummer.
- Kronebeløpet tilsvarer reell utsalgspris fra apotek.

Tabellene er sortert i henhold til ATC-systemet (se nærmere beskrivelse på s. 45). De aller fleste ATC-grupper med legemidler på det norske markedet er inkludert. Legemidler til pasienter i sykehus eller sykehjem er ikke tilgjengelig på individnivå i Reseptregisteret. Det totale antall legemiddelbrukere vil derfor være høyere enn det som fremgår av tabellene for en del legemidler, og spesielt for legemidler som brukes mye i sykehus. Vi har valgt å utelate noen ATC-grupper. Dette er legemidler som hovedsaklig brukes i sykehus eller institusjoner.

Følgende ATC-grupper er utelatt:

- B05 Blodsubstitutter og infeksjonsløsninger
J06 Immunsera og immunglobuliner
J07 Vaksiner
L01 Antineoplastiske midler
M03A Perifert virkende muskelrelaxerende midler
N01 Anestetika
S01H Lokalanestetika
S01J Diagnostika
S01L Midler ved okulær vaskulær sykdom
V Varia (kun ATC-gruppe V01 Allergener og V03 Alle andre terapeutiske preparater er inkludert i tabellen)

3.3 Description of the main tables

The tables in section 3 of this book provide an overview of the number of individuals who have had drugs dispensed from pharmacies in Norway. Anyone who has had at least one drug dispensed is included and the data are given for each medicinal substance and for groups of medicines. Even if an individual has been given the same drug several times, he or she is counted as a user only once. Only dispensing data to individuals with a personal identity number are included in the tables. In NorPD the complete personal identity number is missing for 0.21% of the dispensed drugs to individuals in 2017.

The tables contain figures for the period 2013–2017. In addition, the following information for 2017 includes:

- Prevalence per 1 000 inhabitants
- The number of individuals who have had at least one drug dispensed in the following age groups: <15, 15–44, 45–69, ≥ 70. If the number of individuals is less than five, <5 is used in the tables.
- Sales in 1 000 Norwegian kroner (NOK), i.e. for prescriptions dispensed to individuals with a personal identity number. The amount in NOK corresponds to the actual retail price from the pharmacy.

The tables are arranged according to the ATC system (see further description in p. 45). The majority of ATC groups containing drugs on the Norwegian market are included. Drug use by individuals in hospitals and nursing homes is not included at the individual level in the Norwegian Prescription Database. The total number of drug users will therefore be higher than the figures in the tables for a number of drugs, particularly for drugs that are frequently used in hospitals or institutions. We have chosen to exclude some ATC groups in this book that are mainly used in hospitals or other institutions.

The following ATC groups have been omitted:

- B05 Blood substitutes and perfusion solutions
J06 Immune sera and immunoglobulins
J07 Vaccines
L01 Antineoplastic agents
M03A Muscle relaxants, peripherally acting agents
N01 Anesthetics
S01H Local anesthetics
S01J Diagnostic agents
S01L Ocular vascular disorder agents
V Various (ATC group V01 Allergens and V03 All other therapeutic products are included in the table)

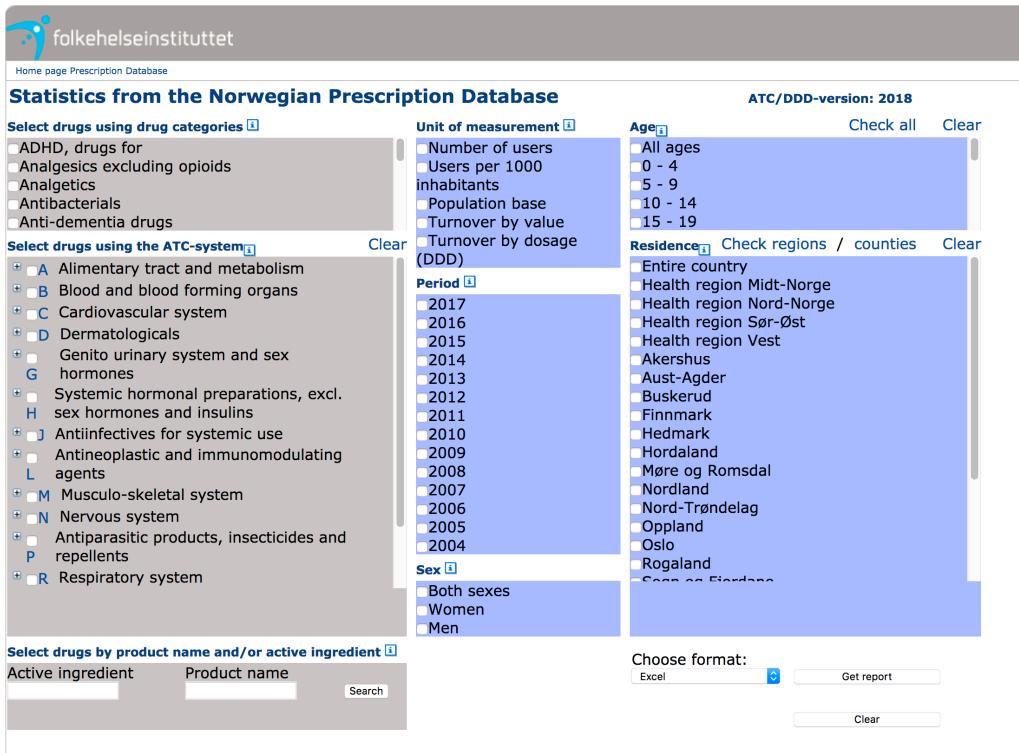


Figure 3.3. The report generator at www.norpd.no (Norwegian version at www.reseptregisteret.no)

Reseptfrie legemidler skrives i noen tilfeller også ut på resept, men i hovedsak vil salg av reseptfrie legemidler ikke være inkludert i denne boken. Salg av reseptfrie legemidler, både i og utenom apotek, er med i den grossistbaserte legemiddelstatistikken, hvor tallmaterialet blir publisert i publikasjonen Legemiddelforbruket i Norge (se også s. 45). I tabellene i del 3 i denne boken er det tatt med en fotnote tilknyttet de ulike ATC-kodene hvor det i tillegg også selges reseptfrie pakninger. I 2017 utgjorde reseptfrie legemidler en andel på 13 % av totalt antall solgte doser (DDD). Denne andelen har holdt seg relativt konstant over tid.

De fleste legemidler som forskrives på resept, har godkjent markedsføringstillatelse i Norge. Leger har imidlertid anledning til å forskrive legemidler uten markedsføringstillatelse. Det må da søkes om spesielt godkjenningsfritak fra Statens legemiddelverk. Det finnes også enkelte legemidler som inngår i en såkalt negativliste, og som bare kan utlevers etter spesiell tillatelse fra Legemiddelverket. Legemidler som er forskrevet på resept etter søknad om godkjenningsfritak eller etter spesiell tillatelse fra Legemiddelverket, er inkludert i tabellene i boken. Antall individer som behandles med disse legemidlene vil ofte være lavt.

Mange individer bruker flere legemidler. Vær derfor oppmerksom på at man ikke kan summere antall

Non-prescription drugs are sometimes prescribed, but the majority of the OTC drug sales will not be included in the tables in this book. Sales of OTC drugs are, however, included in the Norwegian Drug Wholesales Statistics database and the figures are published in «Drug Consumption in Norway» (see also p. 45). A footnote is used in the tables in part 3 of this book in the various ATC codes where OTC medicines are available in Norway. In 2017, OTC medicines had a share of 13% of total sales measured in DDDs. This share has remained almost unchanged over time.

Most prescribed drugs have an approved marketing authorisation in Norway. However, physicians can prescribe drugs without approved marketing authorisation. They must then apply for a licence from the Norwegian Medicines Agency. There are also some drugs that are part of a so-called «negative list» which can only be prescribed by special permission from the Medicines Agency. Drugs that are prescribed on licence or by special permission are included in the tables in the book. The number of individuals who are prescribed these drugs is often low.

Many individuals use more than one drug. Please be aware that it is not possible to add together the number of users of various drugs or drug groups in the tables to find the total number of users of

brukere av ulike legemidler, eller legemiddelgrupper i tabellene, for å finne totalt antall brukere av to eller flere legemidler. Statistikk på aggregert nivå i tabellene vil imidlertid inneholde brukere av minst ett av legemidlene i undernivåene. For eksempel viser tallene at totalt antall brukere av sovemedler (ATC-gruppe N05C) er lavere enn summen av antall brukere av de enkelte legemidlene som er klassifisert i N05C. Det betyr at noen individer har fått utelevert mer enn en type sovemeddel i løpet av et år, enten ved bruk av flere sovemedler samtidig eller ved bytte fra ett middel til et annet.

Endringer i ATC-klassifisering

I ATC Index 2018 (gjeldende versjon i denne rapporten) er det gjort ATC-endringer av betydning for statistikken:

I ATC 3. nivå J05A er det opprettet et nytt ATC 4. nivå: *J05AP Antivirale midler til behandling av HCV-infeksjoner*. Her finnes nå både enkeltvirkestoffer og kombinasjoner som brukes i behandlingen av hepatitt C. Noen enkeltvirkestoffer/kombinasjoner er flyttet fra andre ATC 4. nivåer (endring av kode), og nye legemidler inkluderes i denne gruppen. En tilleggskode for benzylamine *sugetabletter* er opprettet i R02AX03.

ATC kode R03AL har skiftet navn for å inkludere nye trippelkombinasjoner med kortikosteroider til behandling av KOLS. Nytt navn: *R03AL Adrenergika i kombinasjon med antikolinergika, inkl. trippelkombinasjoner med kortikosteroider*.

For mer informasjon om endringer i ATC systemet og nye ATC-koder/DDD inkludert i 2018 Index, se oppdateringer på WHO senterets nettsider, www.whocc.no.

Historiske data er oppdatert i denne rapporten og i Reseptregisterets statistikkbank (reseptregisteret.no).

Reseptregisterets nettsider: www.reseptregisteret.no
Reseptregisteret har eget nettsted som kan brukes sammen med tabellene i denne rapporten for å få kompletterende informasjon. På søkesidene (figur 3.3) kan man selv lage rapporter over antall brukere av et bestemt legemiddel eller en legemiddelgruppe. Dette kan gjøres ved søker på forhåndsdefinerte legemiddelgrupper, via ATC-systemet eller ved søker på virkestoff eller produktnavn.

two or more drugs. Statistics on the aggregate level in the tables will, however, include the use of at least one of the drugs in the included drug groups. For example, the figures in the tables show that the total number of users of hypnotics (ATC group N05C) is lower than the sum of the number of users of the individual drugs that are classified in N05C. This means that some individuals have been given more than one type of hypnotic during a year, either through the use of more than one simultaneously or by switching from one agent to another.

Changes in ATC classification

In ATC Index 2018 (current version of this report), ATC changes have been made of significance for statistics:

In the ATC 3rd level J05A, a new ATC 4th level has been created: *J05AP Antivirals for treatment of HCV infections*. Here, both single-agent and combinations available for the treatment of hepatitis C are gathered. Some single-agent/combinations have been moved from other ATC 4th levels (change of codes), and new drugs are included in this group. An additional code for benzylamine *lozenges* has been created in R02AX03.

ATC code R03AL has altered name to include new triple combinations with corticosteroids for the treatment of COPD. New name: *R03AL Adrenergics in combinations with anticholinergics Adrenergics in combinations with anticholinergics incl. triple combinations with corticosteroids*.

For more information regarding alterations in the ATC system and new ATC codes / DDD included in the 2018 Index, see updates on the WHO Centre's website www.whocc.no .

Historical data has been updated in this report and the statistics bank (www.norpdpd.no).

The NorPD website: www.norpdpd.no

The Norwegian Prescription Database has its own website which can be used together with the tables in this report for complementary information. On the website (figure 3.3), one can create reports on the number of users of a particular drug or drug group. This can be done by searching for pre-defined drug groups, through the ATC system or by searching the active substance or product name.

Følgende data om legemiddelbruk kan hentes ut fra nettstedet:

- Antall brukere, eventuelt fordelt på kjønn, 5 års aldersgrupper, fylke eller helseregion
- Antall brukere per 1 000 innbyggere (prevalens per 1 000)
- Omsetning i kroner
- Omsetning i doser (DDD – definerte døgndoser)
- Befolkningsgrunnlag i statistikken, eventuelt fordelt på kjønn, alder, fylke eller helseregion

Data er tilgjengelige fra 2004, og nettstedet oppdateres årlig med foregående års tall.

Tallene i denne rapporten kan avvike noe fra tallene som finnes på nettstedet. Årsaken er at individer uten kjent bostedsadresse er utelatt fra nettsiden, men inkludert i tabellene i denne rapporten. Rapporteringen av data fra apotek til Reseptregisteret er for en liten andel av reseptutleveringene forsinket. Forsinkelsen kan være på noen måneder, og dette innebærer at noen data fra foregående år blir rapportert på etterskudd. Nettstedet finnes også i engelsk versjon (www.norpd.no).

Utlevering av data fra Reseptregisteret

Det er mulig å søke om data fra Reseptregisteret til forskning eller til andre formål som er i henhold til formålet for Reseptregisteret. Søknadsskjema er tilgjengelig på nettstedet til FHI (www.fhi.no), og alle søknader om tilgang til data fra FHI skal sendes til datatilgang@fhi.no. Dataene er gratis, men kostnader i forbindelse med administrativ håndtering og filbehandling må påregnes.

Beregning av prevalens per 1000 innbyggere

Prevalens er ofte definert som antall individer som har fått utlevert ett legemiddel per 1000 innbyggere. Hvordan dette beregnes er vist i eksemplet nedenfor.

Antall individer som fikk minst ett hjerte-/karmiddel (ATC-gruppe C) i Norge i 2017: 1 117 743

Antall innbyggere i Norge per 1. juli 2017: 5 276 847

Beregning av prevalens (per 1000) for brukere av hjerte-/karmidler i Norge i 2017:

$$\frac{\text{Antall individer}}{\text{Antall innbyggere}} \times 1000 = \frac{1\,117\,743 \times 1000}{5\,276\,847} = 211,8 \text{ individer per 1000 innbyggere}$$

På s. 134 finnes tabeller over befolkningstallet i Norge for årene 2013–2017. Befolkingstallet for de fire aldersgruppene i tabellene er også angitt. Det brukes middelfolkemengden for hvert år, dvs folketallet per 1. juli, beregnet ut fra Statistisk Sentralbyrås folketall 1.1 og 31.12. Alder er definert som den alder individet har ved slutten av året (utleveringsår minus fødselsår).

The following data on drug use can be extracted from the website:

- Number of users, split by gender, 5-year age groups, county or health region
- Number of users per 1 000 population (prevalence per 1 000)
- Turnover in NOK (pharmacy retail price)
- Turnover in doses (DDD – defined daily doses)
- Population base for the statistics, split by gender, age, county or health region

Data are available from 2004 with an annual update for the preceding year.

The figures in this book may differ slightly from the numbers found on the website. This is because individuals without known address are included in the tables in this book but not on the website. Reporting of data from the pharmacy to NorPD is delayed for a minor number of prescriptions. The delay may be a few months, meaning that reports of data from a year can arrive the following year.

Access to data from NorPD

It is possible to apply for data from the Norwegian Prescription Database for research or for other purposes which are according to the objectives of NorPD. Application forms are available on the website of NIPH (www.fhi.no) and all applications for access to data from NIPH should be sent to datatilgang@fhi.no. The data is free of charge, but fees for administration and file processing will be required.

Calculation of prevalence per 1000 inhabitants

Prevalence is often defined as the number of individuals per 1000 inhabitants who have had at least one drug dispensed in a pharmacy during a specific time period. Please read the following example for the calculation:

The number of individuals who had at least one cardiovascular drug dispensed (ATC group C) in Norway in 2017: 1 117 743

The number of inhabitants in Norway as of 1st July 2017: 5 276 847

Calculation of the prevalence (per 1000) of users of cardiovascular drugs in Norway in 2017:

$$\frac{\text{The number of individuals}}{\text{The number of inhabitants}} \times 1000 = \frac{1\,117\,743 \times 1000}{5\,276\,847} = 211,8 \text{ individuals per 1000 inhabitants}$$

The population in Norway for the years 2013–2017 is shown on p. 134. The population of the four age groups in the tables is also provided. The population as of 1st July each year is used, calculated from the population figures by Statistics Norway from 1st January and 31st December. Age is defined as the age of the individual at the end of the year (year of dispensing minus birth year).

3.4 ATC main groups

ATC level	2013	2014	2015	2016	2017	2017	2017				2017
	Number of individuals						Prevalence per 1 000	Number of individuals per age group			
	<15	15–44	45–69	≥70							Sales in 1000 NOK
A ALIMENTARY TRACT AND METABOLISM	832 937	884 462	942 934	1 010 906	1 081 420	204.9	44 155	265 731	457 365	314 169	2 322 730
B BLOOD AND BLOOD FORMING ORGANS	629 097	640 857	658 262	678 638	699 782	132.6	4 920	79 288	280 250	335 324	1 831 416
C CARDIOVASCULAR SYSTEM	1 040 279	1 060 407	1 076 271	1 100 521	1 117 743	211.8	9 702	100 154	553 183	454 704	1 794 102
D DERMATOLOGICALS	645 692	674 324	686 915	713 156	747 278	141.6	102 824	277 104	241 159	126 191	405 264
G GENITO URINARY SYSTEM AND SEX HORMONES	785 601	814 970	835 075	859 359	876 600	166.1	3 888	447 213	278 099	147 400	1 164 181
H SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMONES AND INSULINS	422 537	437 511	445 510	452 531	463 794	87.9	17 922	114 393	196 870	134 609	512 630
J ANTIINFECTIVES FOR SYSTEMIC USE	1 288 914	1 252 912	1 239 437	1 209 403	1 177 724	223.2	127 743	457 401	381 958	210 622	1 501 250
L ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	90 729	95 220	99 426	104 942	111 469	21.1	1 512	25 218	51 335	33 404	4 028 825
M MUSCULO-SKELETAL SYSTEM	925 319	928 438	942 067	946 467	963 353	182.6	15 305	325 959	446 233	175 856	491 216
N NERVOUS SYSTEM	1 327 510	1 354 299	1 380 890	1 412 242	1 450 941	275.0	32 190	459 701	620 719	338 331	3 245 094
P ANTIPARASITIC PRODUCTS, INSECTICIDES AND REPELLENTS	96 547	97 581	94 698	93 310	93 329	17.7	4 347	40 992	35 652	12 338	28 124
R RESPIRATORY SYSTEM	1 220 112	1 259 843	1 296 928	1 330 147	1 374 981	260.6	162 413	500 922	498 654	212 992	1 718 210
S SENSORY ORGANS	612 715	653 581	643 474	646 492	668 750	126.7	107 039	192 919	213 636	155 156	401 363
V VARIOUS	23 985	27 789	30 050	32 701	35 380	6.7	4 807	11 601	11 429	7 543	193 097

3.5 ATC group A – Alimentary tract and metabolism

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70							Sales in 1000 NOK
A	ALIMENTARY TRACT AND METABOLISM	832 937	884 462	942 934	1 010 906	1 081 420	204.9	44 155	265 731	457 365	314 169	2 322 730
A01	STOMATOLOGICAL PREPARATIONS	18 959	23 893	30 608	37 008	43 992	8.3	833	16 644	14 546	11 969	10 462
A01A	STOMATOLOGICAL PREPARATIONS	18 959	23 893	30 608	37 008	43 992	8.3	833	16 644	14 546	11 969	10 462
A01AA	Caries prophylactic agents	14 642	18 919	25 108	31 112	37 554	7.1	304	13 745	12 512	10 993	8 820
A01AA01	sodium fluoride ¹⁾	14 642	18 919	25 108	31 112	37 554	7.1	304	13 745	12 512	10 993	8 820
A01AB	Antiinfectives and antiseptics for local oral treatment	2 441	2 870	3 344	3 577	3 937	0.8	243	1 918	1 170	606	554
A01AB03	chlorhexidine ¹⁾	2 390	2 808	3 272	3 523	3 861	0.7	239	1 900	1 137	585	501
A01AB04	amphotericin B	25	29	28	24	30	0.0	0	7	12	11	32
A01AB09	miconazole	10	7	15	8	14	0.0	<5	5	5	<5	4
A01AB11	various ¹⁾	17	27	30	26	33	0.0	<5	6	17	7	17
A01AC	Corticosteroids for local oral treatment	1 465	1 705	1 731	1 893	2 244	0.4	255	740	853	396	841
A01AC01	triamcinolone	1 435	1 651	1 673	1 772	2 098	0.4	254	725	765	354	516
A01AC03	hydrocortisone	<5	<5	5	<5	<5	-	0	0	<5	0	2
A01AD	Other agents for local oral treatment	519	534	593	629	563	0.1	37	347	124	55	247
A01AD01	epinephrine	14	10	15	8	6	0.0	0	<5	<5	<5	10
A01AD02	benzydamine ¹⁾	477	500	552	592	528	0.1	18	340	119	51	233
A01AD11	various	28	24	26	29	29	0.0	19	6	<5	<5	4
A02	DRUGS FOR ACID RELATED DISORDERS	417 708	441 259	467 772	493 407	521 160	98.8	10 465	108 923	241 178	160 594	321 729
A02A	ANTACIDS	4 719	5 498	6 152	6 361	6 351	1.2	121	1 228	2 181	2 821	10 667
A02AA	Magnesium compounds	12	26	30	69	84	0.0	0	15	22	47	29
A02AA04	magnesium hydroxide	12	26	30	69	84	0.0	0	15	22	47	29
A02AC	Calcium compounds	928	810	724	600	600	0.1	14	128	223	235	371
A02AC01	calcium carbonate ¹⁾	928	810	724	600	600	0.1	14	128	223	235	371
A02AD	Combinations and complexes of aluminium, calcium and magnesium compounds	1 179	1 612	1 824	1 771	1 489	0.3	29	744	453	263	230
A02AD01	ordinary salt combinations ¹⁾	1 179	1 612	1 824	1 771	1 489	0.3	29	744	453	263	230
A02AH	Antacids with sodium bicarbonate	2 837	3 258	3 707	3 996	4 249	0.8	40	342	1 525	2 342	9 397
A02B	DRUGS FOR PEPTIC ULCER AND GASTRO-OESOPHAGEAL REFLUX DISEASE (GORD)	415 383	438 777	465 024	490 594	518 289	98.2	10 386	108 395	240 264	159 244	311 062
A02BA	H ₂ -receptor antagonists	53 694	53 151	49 974	45 877	45 543	8.6	1 431	11 923	20 597	11 592	19 913

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<5	15–44	45–69	≥70
A02BA01	cimetidine	23	29	20	19	18	0.0	<5	<5	13	<5	18
A02BA02	ranitidine ¹⁾	52 431	52 116	49 574	45 523	45 163	8.6	1 410	11 821	20 426	11 506	19 637
A02BA03	famotidine ¹⁾	1 312	1 103	629	434	441	0.1	22	121	187	111	258
A02BB	Prostaglandins	346	358	264	371	476	0.1	<5	382	65	28	152
A02BB01	misoprostol	346	358	264	371	476	0.1	<5	382	65	28	152
A02BC	Proton pump inhibitors	377 400	402 262	433 679	461 724	490 510	93.0	9 177	100 698	228 569	152 066	289 491
A02BC01	omeprazole	45 183	44 226	43 645	42 405	41 463	7.9	3 370	8 660	16 962	12 471	37 630
A02BC02	pantoprazole ¹⁾	171 451	193 342	217 244	239 547	263 785	50.0	1 108	56 923	121 327	84 427	109 322
A02BC03	lansoprazole	43 483	40 451	38 477	36 516	34 983	6.6	378	4 989	17 388	12 228	23 959
A02BC05	esomeprazole	142 299	148 765	159 846	168 378	176 064	33.4	4 972	37 070	84 588	49 434	118 580
A02BX	Other drugs for peptic ulcer and gastro-oesophageal reflux disease (GORD)	2 724	3 210	3 788	4 273	5 367	1.0	528	1 901	1 841	1 097	1 505
A02BX02	sucralfate	470	488	471	461	509	0.1	<5	121	216	168	435
A02BX12	bismuth subnitrate	29	36	34	37	58	0.0	0	28	23	7	60
A02BX13	alginic acid ¹⁾	2 239	2 705	3 300	3 788	4 824	0.9	525	1 755	1 608	936	1 010
A03	DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS	72 122	67 041	66 786	68 127	70 684	13.4	940	23 612	26 600	19 532	15 009
A03A	DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS	4 373	4 619	4 773	5 059	5 738	1.1	212	1 059	1 946	2 521	2 506
A03AA	Synthetic anticholinergics, esters with tertiary amino group	30	35	41	36	56	0.0	<5	28	19	8	67
A03AA04	mebeverine	30	34	40	33	53	0.0	<5	26	19	7	48
A03AA05	trimebutine	0	0	0	<5	<5	-	0	<5	0	<5	17
A03AA07	dicycloverine	0	<5	<5	<5	<5	-	0	<5	0	0	3
A03AB	Synthetic anticholinergics, quaternary ammonium compounds	497	680	936	1 155	1 382	0.3	<5	31	378	970	434
A03AB02	glycopyrronium bromide	491	676	930	1 148	1 373	0.3	<5	27	376	967	407
A03AB05	propantheline	6	<5	6	5	6	0.0	0	<5	<5	<5	16
A03AB07	methantheline	0	0	0	<5	<5	-	0	<5	0	<5	11
A03AD	Papaverine and derivatives	39	49	36	42	45	0.0	0	11	17	17	49
A03AD01	papaverine	39	49	36	42	45	0.0	0	11	17	17	49
A03AX	Other drugs for functional gastrointestinal disorders	3 815	3 872	3 777	3 848	4 284	0.8	208	992	1 542	1 542	1 956
A03AX13	silicones ¹⁾	3 815	3 872	3 777	3 848	4 284	0.8	208	992	1 542	1 542	1 956
A03B	BELLADONNA AND DERIVATIVES, PLAIN	2 376	2 517	2 595	2 680	3 108	0.6	19	1 328	1 247	514	1 470
A03BA	Belladonna alkaloids, tertiary amines	1 811	1 857	1 879	1 850	1 919	0.4	6	825	735	353	787

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
								<15	15–44	45–69	≥70	
A03BA01	atropine	24	28	21	21	8	0.0	0	<5	6	<5	9
A03BA03	hyoscyamine	1 787	1 829	1 858	1 830	1 911	0.4	6	824	729	352	778
A03BB	Belladonna alkaloids, semisynthetic, quaternary ammonium compounds	578	672	729	842	1 202	0.2	13	512	514	163	684
A03BB01	butylscopolamine	564	659	716	842	1 202	0.2	13	512	514	163	684
A03BB03	methylscopolamine	14	14	14	0	0	0.0	0	0	0	0	0
A03C	ANTISPASMODICS IN COMBINATION WITH PSYCHOLEPTICS	14	17	14	19	22	0.0	0	6	9	7	26
A03CA	Synthetic anticholinergic agents in combination with psycholeptics	14	17	14	19	22	0.0	0	6	9	7	26
A03CA02	clidinium and psycholeptics	14	17	14	19	22	0.0	0	6	9	7	26
A03F	PROPULSIVES	66 521	61 033	60 678	61 727	63 378	12.0	713	21 507	24 021	17 137	11 007
A03FA	Propulsives	66 521	61 033	60 678	61 727	63 378	12.0	713	21 507	24 021	17 137	11 007
A03FA01	metoclopramide	66 391	60 932	60 583	61 627	63 262	12.0	698	21 477	23 982	17 105	10 712
A03FA02	cisapride	59	14	0	0	0	0.0	0	0	0	0	0
A03FA03	domperidone	80	96	97	110	133	0.0	17	42	42	32	278
A03FA05	alizapride	9	13	9	6	<5	-	0	0	<5	<5	17
A04	ANTIEMETICS AND ANTINAUSEANTS	16 026	17 291	18 971	19 680	20 854	4.0	573	4 725	9 572	5 984	46 716
A04A	ANTIEMETICS AND ANTINAUSEANTS	16 026	17 291	18 971	19 680	20 854	4.0	573	4 725	9 572	5 984	46 716
A04AA	Serotonin (5HT₃) antagonists	12 856	14 013	15 454	16 470	18 169	3.4	496	3 776	8 379	5 518	42 719
A04AA01	ondansetron	12 840	13 992	15 366	15 859	15 811	3.0	491	3 489	6 873	4 958	30 613
A04AA02	granisetron	<5	13	62	80	85	0.0	18	8	33	26	711
A04AA03	tropisetron	26	<5	<5	0	0	0.0	0	0	0	0	0
A04AA05	palonosetron	16	51	107	83	52	0.0	0	6	28	18	240
A04AA55	palonosetron, combinations	0	0	0	983	3 760	0.7	0	466	2 407	887	11 156
A04AD	Other antiemetics	5 735	6 100	6 483	5 953	3 785	0.7	81	1 071	1 892	741	3 997
A04AD01	scopolamine	2 424	2 393	2 487	2 355	2 572	0.5	79	924	1 118	451	1 025
A04AD12	aprepitant	3 323	3 724	4 008	3 605	1 223	0.2	<5	148	781	291	2 972
A05	BILE AND LIVER THERAPY	2 728	2 890	3 012	3 210	3 373	0.6	112	981	1 519	761	9 642
A05A	BILE THERAPY	2 728	2 890	3 012	3 210	3 373	0.6	112	981	1 519	761	9 642
A05AA	Bile acids and derivatives	2 728	2 890	3 012	3 210	3 373	0.6	112	981	1 519	761	9 642
A05AA01	chenodeoxycholic acid	0	0	0	<5	<5	-	0	<5	0	0	625
A05AA02	ursodeoxycholic acid	2 728	2 890	3 012	3 209	3 373	0.6	112	981	1 519	761	7 907
A05AA04	obeticholic acid	0	0	0	0	7	0.0	0	<5	6	0	1 110
A06	DRUGS FOR CONSTIPATION	55 321	65 798	73 407	83 960	94 189	17.9	19 100	15 173	27 238	32 678	68 250
A06A	DRUGS FOR CONSTIPATION	55 321	65 798	73 407	83 960	94 189	17.9	19 100	15 173	27 238	32 678	68 250

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
A06AA	Softeners, emollients	699	1 056	1 111	1 295	1 344	0.3	127	149	421	647	883
A06AA01	liquid paraffin ¹⁾	699	1 056	1 111	1 295	1 344	0.3	127	149	421	647	883
A06AB	Contact laxatives	24 463	27 607	28 653	30 656	30 836	5.8	517	3 653	12 608	14 058	9 818
A06AB02	bisacodyl ¹⁾	5 666	5 701	5 586	5 667	5 533	1.1	89	721	1 897	2 826	1 914
A06AB06	senna glycosides ¹⁾	2 216	1 760	1 475	1 462	1 329	0.3	5	158	333	833	744
A06AB08	sodium picosulfate ¹⁾	12 659	14 083	15 123	16 038	16 766	3.2	362	2 014	5 879	8 511	4 302
A06AB20	contact laxatives in combination ¹⁾	<5	27	22	21	16	0.0	0	<5	6	7	11
A06AB56	senna glycosides, combinations	8	38	58	<5	0	0.0	0	0	0	0	0
A06AB58	sodium picosulfate, combinations ¹⁾	5 410	7 639	7 993	9 198	8 889	1.7	76	888	5 127	2 798	2 847
A06AC	Bulk-forming laxatives	2 266	2 512	3 049	3 643	4 717	0.9	90	1 321	1 811	1 495	1 928
A06AC01	ispaghula (psylla seeds) ¹⁾	2 266	2 511	3 049	3 643	4 717	0.9	90	1 321	1 811	1 495	1 928
A06AC51	ispaghula, combinations ¹⁾	0	<5	0	0	0	0.0	0	0	0	0	0
A06AD	Osmotically acting laxatives	32 340	39 680	46 203	54 417	64 136	12.2	18 625	9 848	14 755	20 908	31 535
A06AD11	lactulose ¹⁾	14 837	16 269	16 701	17 324	18 482	3.5	904	2 525	6 208	8 845	5 442
A06AD12	lactitol	39	34	37	36	23	0.0	15	7	0	<5	36
A06AD15	macrogol	221	239	212	33	28	0.0	25	<5	<5	<5	94
A06AD17	sodium phosphate	2 015	1 687	1 055	671	801	0.2	0	199	414	188	189
A06AD65	macrogol, combinations ¹⁾	16 618	23 193	30 257	38 581	47 418	9.0	17 918	7 383	9 032	13 085	25 773
A06AG	Enemas	5 498	6 203	6 095	6 254	6 790	1.3	798	1 431	2 129	2 432	13 279
A06AG02	bisacodyl ¹⁾	1 699	1 808	1 674	1 556	1 452	0.3	46	346	613	447	776
A06AG04	glycerol ¹⁾	763	939	894	819	1 024	0.2	189	284	251	300	7 145
A06AG06	oil	44	59	64	129	114	0.0	14	28	29	43	306
A06AG10	docusate sodium, incl. combinations ¹⁾	1 412	1 626	1 578	1 709	1 900	0.4	125	397	622	756	2 426
A06AG11	sodium lauryl sulfoacetate, incl. combinations ¹⁾	1 920	2 197	2 276	2 470	2 779	0.5	447	480	765	1 087	2 626
A06AH	Peripheral opioid receptor antagonists	177	173	194	637	801	0.2	<5	103	363	334	3 144
A06AH01	methylnaltrexone bromide	177	173	138	153	132	0.0	0	12	65	55	842
A06AH03	naloxegol	0	0	59	498	693	0.1	<5	93	313	286	2 302
A06AX	Other drugs for constipation	474	1 174	1 811	2 478	2 676	0.5	15	997	1 165	499	7 662
A06AX01	glycerol ¹⁾	0	0	40	137	134	0.0	0	6	54	74	52
A06AX04	linaclootide	216	769	1 362	1 927	2 160	0.4	14	882	938	326	6 076
A06AX05	prucalopride	271	452	475	504	480	0.1	<5	143	217	118	1 534
A07	ANTIDIARRHEALS, INTESTINAL ANTI-INFLAMMATORY/ANTI-INFECTIVE AGENTS	76 993	81 037	83 068	85 501	88 869	16.8	8 943	22 605	35 398	21 923	186 975

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
A07A	INTESTINAL ANTIINFECTIVES	33 905	35 631	35 552	36 202	36 965	7.0	8 405	8 521	11 871	8 168	18 345
A07AA	Antibiotics	33 905	35 631	35 552	36 202	36 965	7.0	8 405	8 521	11 871	8 168	18 345
A07AA01	neomycin ¹⁾	37	28	<5	0	<5	-	0	0	<5	0	1
A07AA02	nystatin	33 307	35 091	35 068	35 641	36 290	6.9	8 389	8 367	11 553	7 981	11 841
A07AA06	paromomycin	322	343	174	77	42	0.0	<5	23	17	0	65
A07AA09	vancomycin	238	239	264	277	391	0.1	7	81	139	164	1 285
A07AA11	rifaximin	230	174	197	276	303	0.1	8	61	192	42	4 953
A07AA12	fidaxomicin	7	6	8	5	11	0.0	0	<5	<5	7	200
A07B	INTESTINAL ADSORBENTS	103	127	176	173	196	0.0	10	70	89	27	54
A07BA	Charcoal preparations	88	87	94	94	65	0.0	9	17	24	15	16
A07BA01	medicinal charcoal ¹⁾	88	87	94	94	65	0.0	9	17	24	15	16
A07BB	Bismuth preparations	15	40	82	79	131	0.0	<5	53	65	12	37
A07C	ELECTROLYTES WITH CARBOHYDRATES	449	490	451	444	445	0.1	208	96	85	56	1 748
A07CA	Oral rehydration salt formulations ¹⁾	442	482	441	427	426	0.1	189	96	85	56	369
A07D	ANTIPROPULSIVES	18 647	19 771	20 595	21 467	23 288	4.4	102	4 194	10 122	8 870	11 474
A07DA	Antipropulsives	18 647	19 771	20 595	21 467	23 288	4.4	102	4 194	10 122	8 870	11 474
A07DA01	diphenoxylate	<5	<5	<5	<5	0	0.0	0	0	0	0	0
A07DA02	opium	143	224	223	268	306	0.1	0	17	156	133	837
A07DA03	loperamide ¹⁾	18 322	19 567	20 232	21 098	22 778	4.3	100	4 017	9 913	8 748	10 183
A07DA06	eluxadoline	0	0	0	0	119	0.0	0	69	43	7	308
A07DA53	loperamide, combinations ¹⁾	361	197	362	400	437	0.1	<5	151	171	113	146
A07E	INTESTINAL ANTI-INFLAMMATORY AGENTS	25 601	26 754	28 206	29 560	30 654	5.8	227	10 134	14 588	5 705	154 182
A07EA	Corticosteroids acting locally	5 537	5 811	6 043	6 834	7 507	1.4	62	2 318	3 352	1 775	22 857
A07EA01	prednisolone	1 163	1 122	69	0	10	0.0	0	<5	5	<5	12
A07EA02	hydrocortisone	327	324	339	390	322	0.1	<5	86	179	55	664
A07EA06	budesonide	4 153	4 476	5 720	6 500	7 230	1.4	61	2 248	3 195	1 726	22 182
A07EB	Antiallergic agents, excl. corticosteroids	35	43	46	42	47	0.0	<5	14	24	5	1 094
A07EB01	cromoglicic acid	35	43	46	42	47	0.0	<5	14	24	5	1 094
A07EC	Aminosalicylic acid and similar agents	22 091	23 005	24 109	25 111	25 797	4.9	191	9 018	12 335	4 253	130 067
A07EC01	sulfasalazine	5 666	5 737	5 768	5 683	5 457	1.0	8	1 240	3 012	1 197	6 677
A07EC02	mesalazine	16 050	16 912	18 009	19 121	20 045	3.8	184	7 723	9 165	2 973	120 585
A07EC03	olsalazine	381	346	343	281	273	0.1	<5	47	160	65	939
A07EC04	balsalazide	589	555	528	479	471	0.1	0	119	244	108	1 867

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ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
A07F	ANTIDIARRHEAL MICROORGANISMS	1 228	1 334	1 181	725	559	0.1	14	226	233	86	1 039
A07FA	Antidiarrheal microorganisms	1 228	1 334	1 181	725	559	0.1	14	226	233	86	1 039
A07FA01	lactic acid producing organisms	806	882	737	370	294	0.1	9	129	143	13	865
A07FA02	saccharomyces boulardii	505	556	528	377	287	0.1	5	109	100	73	153
A07FA51	lactic acid producing organisms, combinations	14	13	20	53	<5	-	0	<5	0	<5	10
A07X	OTHER ANTIDIARRHEALS	43	29	67	7	<5	-	0	<5	0	0	2
A07XA	Other antidiarrheals	43	29	67	7	<5	-	0	<5	0	0	2
A07XA04	racecadotril	0	18	57	<5	0	0.0	0	0	0	0	0
A08	ANTIOBESITY PREPARATIONS, EXCL. DIET PRODUCTS	7 245	6 716	6 361	6 293	6 256	1.2	<5	1 998	3 583	674	12 563
A08A	ANTIOBESITY PREPARATIONS, EXCL. DIET PRODUCTS	7 245	6 716	6 361	6 293	6 256	1.2	<5	1 998	3 583	674	12 563
A08AA	Centrally acting obesity products	0	0	0	0	265	0.1	0	115	141	9	330
A08AA62	bupropion and naltrexone	0	0	0	0	265	0.1	0	115	141	9	330
A08AB	Peripherally acting obesity products	7 245	6 716	6 361	6 293	6 019	1.1	<5	1 896	3 457	665	12 233
A08AB01	orlistat	7 245	6 716	6 361	6 293	6 019	1.1	<5	1 896	3 457	665	12 233
A09	DIGESTIVES, INCL. ENZYMES	5 720	5 758	5 926	6 091	6 597	1.3	122	840	2 967	2 668	19 804
A09A	DIGESTIVES, INCL. ENZYMES	5 720	5 758	5 926	6 091	6 597	1.3	122	840	2 967	2 668	19 804
A09AA	Enzyme preparations	5 637	5 683	5 850	6 022	6 364	1.2	120	751	2 858	2 635	19 561
A09AA02	multienzymes (lipase, protease etc.) ¹⁾	5 628	5 676	5 840	6 012	6 359	1.2	120	750	2 855	2 634	19 552
A09AB	Acid preparations	63	64	50	64	65	0.0	<5	17	17	30	54
A09AB01	glutamic acid hydrochloride	45	35	36	53	51	0.0	0	10	12	29	43
A09AB02	betaine hydrochloride	10	22	10	9	9	0.0	<5	<5	<5	0	11
A09AB03	hydrochloric acid ¹⁾	8	7	<5	<5	5	0.0	0	<5	<5	<5	1
A09AC	Enzyme and acid preparations, combinations	33	23	31	31	195	0.0	<5	80	104	10	189
A09AC01	pepsin and acid preparations	0	0	5	28	194	0.0	<5	80	103	10	188
A09AC02	multienzymes and acid preparations	33	23	26	<5	<5	-	0	0	<5	0	1
A10	DRUGS USED IN DIABETES	165 315	170 495	176 609	183 452	192 542	36.5	2 042	25 920	96 703	67 877	971 126
A10A	INSULINS AND ANALOGUES	58 187	59 804	61 558	63 529	65 733	12.5	2 015	14 958	28 825	19 935	433 652
A10AB	Insulins and analogues for injection, fast-acting	38 386	39 557	40 728	42 145	43 534	8.3	2 012	13 534	18 560	9 428	161 896
A10AB01	insulin (human)	1 144	1 024	911	825	742	0.1	<5	67	386	287	1 982

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ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
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A10AB04	insulin lispro	9 462	9 804	10 212	10 717	11 202	2.1	500	3 920	4 923	1 859	43 806
A10AB05	insulin aspart	28 325	29 231	30 073	31 059	32 700	6.2	1 642	10 066	13 661	7 331	114 415
A10AB06	insulin glulisine	408	419	430	456	459	0.1	<5	145	241	71	1 692
A10AC	Insulins and analogues for injection, intermediate-acting	32 559	33 082	33 618	34 174	33 804	6.4	427	4 137	15 477	13 763	105 993
A10AC01	insulin (human)	32 559	33 082	33 618	34 174	33 804	6.4	427	4 137	15 477	13 763	105 993
A10AD	Insulins and analogues for injection, intermediate- or long-acting combined with fast-acting	7 154	6 561	5 938	5 323	4 678	0.9	<5	242	1 808	2 624	23 092
A10AD03	insulin (pork)	0	<5	0	0	0	0.0	0	0	0	0	0
A10AD04	insulin lispro	645	616	541	481	405	0.1	<5	52	173	179	1 720
A10AD05	insulin aspart	6 522	5 957	5 404	4 853	4 278	0.8	<5	191	1 637	2 447	21 372
A10AE	Insulins and analogues for injection, long-acting	17 686	18 621	19 708	21 381	25 315	4.8	1 018	8 247	11 610	4 440	142 670
A10AE02	insulin (beef)	<5	<5	0	<5	0	0.0	0	0	0	0	0
A10AE04	insulin glargine	11 727	12 570	13 617	15 044	16 352	3.1	416	5 462	7 538	2 936	77 130
A10AE05	insulin detemir	6 207	6 261	6 284	6 126	5 721	1.1	595	1 969	2 272	885	30 647
A10AE06	insulin degludec	0	5	127	1 087	3 386	0.6	74	1 328	1 558	426	17 334
A10AE56	insulin degludec and liraglutide	0	0	0	46	1 642	0.3	0	157	1 072	413	17 559
A10B	BLOOD GLUCOSE LOWERING DRUGS, EXCL. INSULINS	128 629	133 286	139 066	145 510	154 588	29.3	34	12 887	82 572	59 095	537 474
A10BA	Biguanides	106 357	108 031	110 643	113 917	120 061	22.8	23	11 105	65 386	43 547	59 376
A10BA02	metformin	106 357	108 031	110 643	113 917	120 061	22.8	23	11 105	65 386	43 547	59 376
A10BB	Sulfonylureas	38 381	36 011	34 200	32 265	29 721	5.6	8	1 160	14 754	13 799	13 722
A10BB01	glibenclamide	1 098	981	813	677	615	0.1	7	31	268	309	321
A10BB07	glipizide	3 413	3 057	2 790	2 466	2 109	0.4	0	52	847	1 210	1 247
A10BB12	glimepiride	34 007	32 089	30 774	29 212	27 064	5.1	<5	1 085	13 666	12 312	12 154
A10BD	Combinations of oral blood glucose lowering drugs	15 765	18 377	20 715	23 050	26 294	5.0	<5	1 495	16 161	8 637	115 318
A10BD05	metformin and pioglitazone	30	34	36	27	23	0.0	0	<5	16	5	111
A10BD07	metformin and sitagliptin	6 295	7 749	9 170	10 815	13 391	2.5	<5	817	8 214	4 359	55 089
A10BD08	metformin and vildagliptin	9 360	10 113	10 627	10 786	10 655	2.0	0	516	6 433	3 706	48 567
A10BD10	metformin and saxagliptin	43	81	109	117	110	0.0	0	6	73	31	523
A10BD11	metformin and linagliptin	166	369	533	632	669	0.1	0	42	403	224	2 946
A10BD15	metformin and dapagliflozin	0	165	436	588	852	0.2	0	63	600	189	4 015
A10BD20	metformin and empagliflozin	0	0	<5	331	881	0.2	0	71	604	206	3 669
A10BD21	saxagliptin and dapagliflozin	0	0	0	0	91	0.0	0	8	52	31	400
A10BF	Alpha glucosidase inhibitors	597	519	495	463	442	0.1	0	37	225	180	609

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
A10BF01	acarbose	597	519	495	463	442	0.1	0	37	225	180	609
A10BG	Thiazolidinediones	1 579	1 552	1 500	1 492	1 415	0.3	0	56	801	558	3 003
A10BG03	pioglitazone	1 579	1 552	1 500	1 492	1 415	0.3	0	56	801	558	3 003
A10BH	Dipeptidyl peptidase 4 (DPP-4) inhibitors	13 439	16 324	19 047	21 861	25 212	4.8	0	1 063	12 146	12 003	101 254
A10BH01	sitagliptin	7 621	8 852	10 157	12 060	14 903	2.8	0	734	7 739	6 430	57 437
A10BH02	vildagliptin	2 289	2 519	2 540	2 500	2 374	0.5	0	96	1 057	1 221	9 095
A10BH03	saxagliptin	1 684	1 547	1 438	1 351	1 233	0.2	0	47	673	513	5 673
A10BH05	linagliptin	2 145	3 716	5 225	6 268	7 066	1.3	0	194	2 808	4 064	29 050
A10BJ	Glucagon-like peptide-1 (GLP-1) analogues	6 595	8 101	9 715	11 074	12 861	2.4	<5	1 244	8 704	2 911	158 624
A10BJ01	exenatide	972	1 067	1 317	1 324	1 251	0.2	0	95	856	300	11 544
A10BJ02	liraglutide	5 666	6 715	7 488	7 980	9 083	1.7	<5	876	6 181	2 025	117 602
A10BJ03	lixisenatide	73	488	940	725	525	0.1	0	48	368	109	4 125
A10BJ05	dulaglutide	0	0	335	1 432	2 314	0.4	<5	244	1 530	539	25 353
A10BK	Sodium-glucose co-transporter 2 (SGLT2) inhibitors	1 311	5 713	9 442	14 041	20 330	3.9	0	1 454	13 837	5 039	85 294
A10BK01	dapagliflozin	1 311	5 713	8 475	9 437	10 588	2.0	0	756	7 292	2 540	43 174
A10BK03	empagliflozin	0	0	1 102	4 910	10 105	1.9	0	727	6 805	2 573	42 120
A10BX	Other blood glucose lowering drugs, excl. insulins	213	208	184	172	163	0.0	0	5	80	78	274
A10BX02	repaglinide	213	208	184	172	163	0.0	0	5	80	78	274
A11	VITAMINS	128 838	156 279	186 886	226 346	265 039	50.2	4 721	89 451	97 508	73 359	157 983
A11A	MULTIVITAMINS, COMBINATIONS	138	162	175	183	223	0.0	113	98	12	0	1 125
A11AA	Multivitamins with minerals	138	162	175	183	223	0.0	113	98	12	0	1 125
A11AA03	multivitamins and other minerals, incl. combinations	138	162	175	183	223	0.0	113	98	12	0	1 125
A11B	MULTIVITAMINS, PLAIN	44	52	56	43	71	0.0	67	<5	<5	0	45
A11BA	Multivitamins, plain	44	52	56	43	71	0.0	67	<5	<5	0	45
A11C	VITAMIN A AND D, INCL. COMBINATIONS OF THE TWO	34 758	59 145	86 055	116 905	155 272	29.4	4 006	69 505	55 622	26 139	76 317
A11CA	Vitamin A, plain	51	77	75	94	96	0.0	<5	32	55	6	131
A11CA01	retinol (vit A)	35	58	63	79	85	0.0	<5	25	51	6	53
A11CA02	betacarotene	16	19	12	15	11	0.0	0	7	<5	0	78
A11CC	Vitamin D and analogues	34 722	59 091	86 014	116 856	155 234	29.4	4 003	69 491	55 603	26 137	76 186
A11CC01	ergocalciferol	49	26	44	35	115	0.0	0	47	51	17	76
A11CC03	alfacalcidol	4 730	4 733	4 850	4 880	4 960	0.9	113	607	1 860	2 380	7 760
A11CC04	calcitriol	3 068	2 972	3 119	3 265	3 267	0.6	<5	435	1 325	1 504	4 189

ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
A11CC05	colecalciferol	27 121	51 659	78 509	109 295	147 685	28.0		3 888	68 554	52 722	22 521	64 160
A11D	VITAMIN B1, PLAIN AND IN COMBINATION WITH VITAMIN B6 AND B12	784	930	1 029	984	1 140	0.2	29	166	625	320	1 200	
A11DA	Vitamin B1, plain	774	920	1 020	976	1 131	0.2	29	164	620	318	1 196	
A11DA01	thiamine (vit B1) ¹⁾	774	920	1 020	976	1 131	0.2	29	164	620	318	1 196	
A11DB	Vitamin B1 in combination with vitamin B6 and/or vitamin B12	10	10	9	8	9	0.0	0	<5	5	<5	4	
A11E	VITAMIN B-COMPLEX, INCL. COMBINATIONS	93 711	100 038	107 797	120 911	126 088	23.9	494	25 635	48 277	51 682	75 983	
A11EA	Vitamin B-complex, plain ¹⁾	92 410	98 596	106 246	119 520	124 436	23.6	442	25 318	47 660	51 016	74 583	
A11EB	Vitamin B-complex with vitamin C ¹⁾	270	593	713	597	807	0.2	8	233	312	254	261	
A11EX	Vitamin B-complex, other combinations	1 083	961	942	897	976	0.2	44	105	366	461	1 138	
A11G	ASCORBIC ACID (VITAMIN C), INCL. COMBINATIONS	3 502	3 425	3 033	2 933	2 702	0.5	8	337	673	1 684	1 055	
A11GA	Ascorbic acid (vitamin C), plain	3 502	3 425	3 033	2 933	2 702	0.5	8	337	673	1 684	1 055	
A11GA01	ascorbic acid (vit C) ¹⁾	3 502	3 425	3 033	2 933	2 702	0.5	8	337	673	1 684	1 055	
A11H	OTHER PLAIN VITAMIN PREPARATIONS	1 757	1 808	1 502	1 472	1 577	0.3	208	836	383	150	1 865	
A11HA	Other plain vitamin preparations	1 757	1 808	1 502	1 472	1 577	0.3	208	836	383	150	1 865	
A11HA01	nicotinamide ¹⁾	11	20	29	35	35	0.0	0	6	21	8	21	
A11HA02	pyridoxine (vit B6) ¹⁾	1 374	1 459	1 165	1 168	1 296	0.3	114	772	308	102	690	
A11HA03	tocopherol (vit E) ¹⁾	289	266	257	222	195	0.0	70	43	44	38	627	
A11HA04	riboflavin (vit B2) ¹⁾	21	20	18	18	15	0.0	<5	5	7	<5	9	
A11HA05	biotin	<5	8	13	19	27	0.0	15	10	<5	0	331	
A11HA06	pyridoxal phosphate	56	35	21	5	<5	-	<5	<5	<5	<5	23	
A11HA08	tocoferolsolan	<5	<5	5	8	7	0.0	7	0	0	0	164	
A11J	OTHER VITAMIN PRODUCTS, COMBINATIONS	79	70	74	71	70	0.0	60	9	0	<5	386	
A11JA	Combinations of vitamins	62	63	71	71	70	0.0	60	9	0	<5	386	
A11JB	Vitamins with minerals	17	7	<5	0	0	0.0	0	0	0	0	0	
A12	MINERAL SUPPLEMENTS	134 703	141 418	149 611	159 592	169 017	32.0	472	11 749	68 037	88 759	139 100	
A12A	CALCIUM	113 030	120 026	128 584	138 349	147 490	28.0	262	10 323	60 943	75 962	110 507	
A12AA	Calcium	987	1 088	1 183	1 193	1 233	0.2	81	225	463	464	1 439	
A12AA02	calcium gluconate	<5	<5	0	<5	0	0.0	0	0	0	0	0	
A12AA03	calcium gluconate	0	0	<5	8	5	0.0	5	0	0	0	12	
A12AA06	calcium lactate gluconate ¹⁾	984	1 083	1 175	1 184	1 228	0.2	76	225	463	464	1 426	

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ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
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									<15	15–44	45–69	≥70
A12AX	Calcium, combinations with vitamin D and/or other drugs ¹⁾	112 275	119 209	127 679	137 414	146 576	27.8	183	10 167	60 589	75 637	109 069
A12B	POTASSIUM	21 980	21 269	20 553	20 684	20 365	3.9	104	1 119	6 411	12 731	17 712
A12BA	Potassium	21 980	21 269	20 553	20 684	20 365	3.9	104	1 119	6 411	12 731	17 712
A12BA01	potassium chloride ¹⁾	19 870	19 263	18 468	18 437	18 209	3.5	21	892	5 700	11 596	12 017
A12BA02	potassium citrate ¹⁾	2 446	2 358	3 048	2 705	2 647	0.5	91	282	872	1 402	5 647
A12BA30	combinations	5	<5	6	<5	5	0.0	0	<5	<5	<5	48
A12C	OTHER MINERAL SUPPLEMENTS	5 736	6 770	7 479	8 088	8 996	1.7	142	635	2 992	5 227	10 880
A12CA	Sodium	1 182	1 443	1 851	2 277	2 554	0.5	9	109	724	1 712	3 234
A12CA01	sodium chloride ¹⁾	1 182	1 443	1 851	2 277	2 554	0.5	9	109	724	1 712	3 234
A12CB	Zinc	714	712	621	607	566	0.1	39	137	192	198	394
A12CB01	zinc sulfate	714	712	621	607	566	0.1	39	137	192	198	394
A12CC	Magnesium	3 941	4 747	5 144	5 385	6 063	1.2	94	389	2 142	3 438	7 111
A12CC01	magnesium chloride	0	0	<5	0	0	0.0	0	0	0	0	0
A12CC04	magnesium citrate	0	0	18	27	53	0.0	9	7	18	19	98
A12CC10	magnesium oxide	164	158	189	222	289	0.1	13	25	107	144	314
A12CC30	magnesium (different salts in combination) ¹⁾	3 792	4 615	4 938	5 139	5 750	1.1	49	361	2 032	3 308	6 042
A12CX	Other mineral products	<5	7	10	16	17	0.0	5	6	<5	<5	141
A13	TONICS	0	0	<5	<5	<5	-	0	0	<5	0	0
A14	ANABOLIC AGENTS FOR SYSTEMIC USE	1 008	1 239	1 279	1 067	1 017	0.2	<5	299	642	75	896
A14A	ANABOLIC STEROIDS	1 008	1 239	1 279	1 067	1 017	0.2	<5	299	642	75	896
A14AA	Androstan derivatives	963	1 198	1 230	1 030	974	0.2	<5	284	615	74	716
A14AA07	prasterone	963	1 198	1 228	1 028	973	0.2	<5	283	615	74	693
A14AA08	oxandrolone	0	0	<5	<5	<5	-	0	<5	0	0	23
A14AB	Estren derivatives	26	29	28	21	20	0.0	0	8	11	<5	50
A14AB01	nandrolone	26	29	28	21	20	0.0	0	8	11	<5	50
A16	OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS	507	417	399	404	456	0.1	155	171	98	32	362 440
A16A	OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS	396	392	397	403	456	0.1	155	171	98	32	362 440
A16AA	Amino acids and derivatives	164	186	199	208	229	0.0	114	70	28	17	24 688
A16AA01	levocarnitine	99	129	146	168	186	0.0	107	47	16	16	3 307
A16AA03	glutamine	17	14	16	7	5	0.0	0	<5	<5	0	9
A16AA04	mercaptamine	8	9	9	10	10	0.0	<5	6	0	0	17 583
A16AA05	carglumic acid	0	0	0	<5	5	0.0	5	0	0	0	2 622

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ATC group A

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
A16AA06	betaine	23	23	25	23	24	0.0	<5	15	5	0	1 162
A16AB	Enzymes	65	69	80	82	86	0.0	11	35	36	<5	235 697
A16AB02	imiglucerase	7	8	9	8	8	0.0	0	<5	<5	<5	24 943
A16AB03	agalsidase alfa	24	22	20	17	16	0.0	0	6	7	<5	31 424
A16AB04	agalsidase beta	23	30	39	40	41	0.0	0	20	21	0	70 579
A16AB05	laronidase	<5	<5	0	0	0	0.0	0	0	0	0	0
A16AB07	alglucosidase alfa	<5	<5	<5	<5	<5	-	0	0	<5	0	11 415
A16AB08	galsulfase	<5	<5	<5	<5	<5	-	<5	0	0	0	17 635
A16AB09	idursulfase	<5	<5	<5	<5	<5	-	<5	<5	0	0	15 537
A16AB10	velaglucerase alfa	5	<5	<5	<5	<5	-	0	<5	<5	0	7 178
A16AB12	elosulfase alfa	0	0	<5	6	10	0.0	5	<5	<5	0	56 986
A16AX	Various alimentary tract and metabolism products	170	144	124	116	149	0.0	37	66	35	11	102 056
A16AX01	thioctic acid	118	82	63	41	42	0.0	<5	16	17	8	47
A16AX03	sodium phenylbutyrate	<5	<5	<5	<5	<5	-	<5	<5	0	0	147
A16AX04	nitisinone	16	17	16	15	16	0.0	9	7	0	0	15 188
A16AX05	zinc acetate	11	16	13	14	14	0.0	<5	8	<5	0	139
A16AX06	miglustat	<5	5	6	6	8	0.0	<5	<5	0	0	6 987
A16AX07	saproterin	20	23	21	22	33	0.0	9	22	<5	0	24 460
A16AX08	teduglutide	0	0	<5	10	26	0.0	9	5	9	<5	43 819
A16AX10	eliglustat	0	0	<5	<5	<5	-	0	0	<5	0	3 978
A16AX12	trinteline	0	0	0	5	6	0.0	0	<5	<5	0	5 424
A16AX14	migalastat	0	0	0	0	<5	-	0	0	<5	0	1 867

3.6 ATC group B – Blood and bloodforming organs

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
B	BLOOD AND BLOOD FORMING ORGANS	629 097	640 857	658 262	678 638	699 782	132.6	4 920	79 288	280 250	335 324	1 831 416
B01	ANTITHROMBOTIC AGENTS	519 085	525 381	533 682	542 849	551 056	104.4	503	24 681	217 293	308 579	1 185 931
B01A	ANTITHROMBOTIC AGENTS	519 085	525 381	533 682	542 849	551 056	104.4	503	24 681	217 293	308 579	1 185 931
B01AA	Vitamin K antagonists	88 089	77 831	69 358	60 605	51 304	9.7	38	1 709	13 051	36 506	49 084
B01AA01	dicoumarol	70	63	51	47	39	0.0	0	7	14	18	221
B01AA02	phenindione	<5	<5	0	0	0	0.0	0	0	0	0	0
B01AA03	warfarin	88 017	77 769	69 307	60 561	51 268	9.7	38	1 703	13 039	36 488	48 863
B01AB	Heparin group	49 253	50 696	54 116	56 268	56 928	10.8	230	12 843	25 057	18 798	140 766
B01AB01	heparin	1 141	1 209	1 179	1 184	1 327	0.3	156	188	587	396	2 248
B01AB04	dalteparin	28 495	27 592	31 785	34 748	36 168	6.9	54	7 087	16 622	12 405	86 182
B01AB05	enoxaparin	20 454	22 732	21 964	21 078	20 307	3.9	25	5 698	8 299	6 285	52 336
B01AB10	tinzaparin	10	<5	0	0	0	0.0	0	0	0	0	0
B01AC	Platelet aggregation inhibitors excl. heparin	400 083	397 622	396 112	395 053	393 102	74.5	250	9 301	165 670	217 881	290 294
B01AC04	clopidogrel	25 620	25 588	26 627	27 618	30 764	5.8	<5	590	12 023	18 149	30 307
B01AC05	ticlopidine	187	180	132	108	104	0.0	0	<5	28	74	289
B01AC06	acetylsalicylic acid	378 066	373 995	370 940	368 557	364 426	69.1	247	8 797	154 860	200 522	95 087
B01AC07	dipyridamole	19 830	19 568	19 030	18 752	17 789	3.4	0	199	6 173	11 417	23 195
B01AC09	epoprostenol	<5	<5	<5	<5	<5	-	0	0	<5	0	1 672
B01AC11	iloprost	9	8	<5	5	<5	-	0	0	<5	0	56
B01AC21	treprostil	15	16	17	20	24	0.0	<5	8	11	<5	38 994
B01AC22	prasugrel	1 711	1 747	1 744	1 627	1 625	0.3	0	87	1 234	304	7 055
B01AC24	ticagrelor	6 773	8 738	9 022	9 476	9 588	1.8	0	341	6 246	3 001	51 459
B01AC27	seleipag	0	0	0	9	13	0.0	0	<5	8	<5	12 057
B01AC30	combinations	14 622	15 573	16 238	16 805	16 809	3.2	0	265	6 369	10 175	30 123
B01AC56	acetylsalicylic acid, combinations with proton pump inhibitors	312	0	0	0	0	0.0	0	0	0	0	0
B01AD	Enzymes	<5	<5	<5	<5	<5	-	<5	0	<5	0	508
B01AD02	alteplase	<5	<5	<5	<5	<5	-	<5	0	<5	0	508
B01AE	Direct thrombin inhibitors	13 879	15 365	13 846	13 331	13 118	2.5	0	132	3 279	9 707	100 332
B01AE07	dabigatran etexilate	13 879	15 365	13 846	13 331	13 118	2.5	0	132	3 279	9 707	100 332
B01AF	Direct factor Xa inhibitors	15 590	28 940	45 990	65 036	83 783	15.9	<5	2 458	24 379	56 943	604 883
B01AF01	rivaroxaban	13 426	20 804	25 493	28 935	30 795	5.8	<5	1 332	10 126	19 335	231 690
B01AF02	apixaban	2 261	8 651	21 515	37 297	54 002	10.2	<5	1 163	14 526	38 312	370 960
B01AF03	edoxaban	0	0	0	15	448	0.1	0	9	132	307	2 233
B01AX	Other antithrombotic agents	6	12	12	18	21	0.0	0	<5	12	6	63

ATC group B

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
								<15	15–44	45–69	≥70	
B01AX05	fondaparinux	6	12	12	18	21	0.0	0	<5	12	6	63
B02	ANTIHEMORRHAGICS	13 981	13 825	13 699	13 711	14 447	2.7	343	7 326	6 017	761	348 294
B02A	ANTIFIBRINOLYTICS	13 492	13 321	13 162	13 112	13 819	2.6	207	7 102	5 879	631	6 352
B02AA	Amino acids	13 490	13 319	13 160	13 110	13 817	2.6	207	7 100	5 879	631	5 149
B02AA02	tranexamic acid	13 490	13 319	13 160	13 110	13 817	2.6	207	7 100	5 879	631	5 149
B02AB	Proteinase inhibitors	<5	<5	<5	<5	<5	-	0	<5	0	0	1 203
B02AB02	alfa1 antitrypsin	<5	<5	<5	<5	<5	-	0	<5	0	0	1 203
B02B	VITAMIN K AND OTHER HEMOSTATICS	564	590	626	697	740	0.1	162	264	172	142	341 943
B02BA	Vitamin K	246	259	259	280	269	0.1	75	91	34	69	164
B02BA01	phytomenadione	246	259	259	280	269	0.1	75	91	34	69	164
B02BB	Fibrinogen	<5	<5	<5	<5	<5	-	0	0	<5	0	280
B02BB01	fibrinogen, human	<5	<5	<5	<5	<5	-	0	0	<5	0	280
B02BC	Local hemostatics	0	<5	<5	0	0	0.0	0	0	0	0	0
B02BC30	combinations	0	<5	<5	0	0	0.0	0	0	0	0	0
B02BD	Blood coagulation factors	258	256	274	280	287	0.1	86	130	65	6	300 054
B02BD01	coagulation factor IX, II, VII and X in combination	<5	<5	<5	<5	<5	-	<5	0	<5	0	436
B02BD02	coagulation factor VIII	176	182	189	191	198	0.0	66	87	43	<5	243 360
B02BD03	factor VIII inhibitor bypassing activity	9	9	9	11	8	0.0	<5	<5	<5	0	15 874
B02BD04	coagulation factor IX	46	38	47	49	51	0.0	14	26	9	<5	20 020
B02BD06	von Willebrand factor and coagulation factor VIII in combination	15	15	16	12	14	0.0	<5	5	<5	<5	4 582
B02BD07	coagulation factor XIII	<5	<5	<5	<5	<5	-	0	0	<5	0	183
B02BD08	coagulation factor VIIa	12	11	10	17	15	0.0	<5	7	<5	0	8 693
B02BD10	von Willebrand factor	<5	<5	<5	<5	<5	-	0	<5	0	0	6 906
B02BX	Other systemic hemostatics	59	72	91	137	182	0.0	<5	43	71	67	41 444
B02BX04	romiprostim	20	17	23	30	41	0.0	0	8	19	14	16 194
B02BX05	eltrombopag	39	59	72	113	150	0.0	<5	37	56	56	25 250
B03	ANTIANEMIC PREPARATIONS	146 457	153 378	164 553	180 060	196 585	37.3	3 766	50 597	74 936	67 286	156 328
B03A	IRON PREPARATIONS	27 377	30 391	33 871	38 027	41 525	7.9	2 239	14 721	8 918	15 647	15 008
B03AA	Iron bivalent, oral preparations	25 635	28 833	32 311	36 331	39 712	7.5	2 235	13 807	8 293	15 377	12 870
B03AA01	ferrous glycine sulfate ¹⁾	6 968	8 744	9 521	11 113	10 275	2.0	225	3 979	2 338	3 733	5 034
B03AA02	ferrous fumarate ¹⁾	1 466	1 685	1 626	1 822	1 959	0.4	1 454	193	113	199	438
B03AA07	ferrous sulfate ¹⁾	17 470	18 758	21 569	23 850	28 907	5.5	583	9 874	6 089	12 361	7 398

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group B

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
B03AC	Iron, parenteral preparations	1 869	1 667	1 702	1 853	1 968	0.4	<5	980	673	311	2 138
B03B	VITAMIN B12 AND FOLIC ACID	122 663	126 704	134 436	146 564	160 606	30.4	1 668	38 196	67 217	53 525	97 821
B03BA	Vitamin B12 (cyanocobalamin and analogues)	83 417	86 847	97 514	102 261	104 146	19.7	394	24 320	43 017	36 415	70 642
B03BA01	cyanocobalamin	8 210	12 834	15 168	14 032	20 180	3.8	138	6 119	8 307	5 616	10 200
B03BA02	cyanocobalamin tannin complex	43 570	9 833	0	<5	<5	-	0	0	0	<5	0
B03BA03	hydroxocobalamin	33 807	68 907	85 107	91 031	87 855	16.7	262	19 278	36 314	32 001	60 308
B03BA05	mecobalamin	211	253	257	173	179	0.0	<5	58	102	18	132
B03BB	Folic acid and derivatives	44 258	44 351	40 765	49 263	62 657	11.9	1 296	15 092	26 455	19 814	27 179
B03BB01	folic acid ¹⁾	44 258	44 351	40 719	49 204	62 614	11.9	1 296	15 070	26 439	19 809	27 136
B03X	OTHER ANTIANEMIC PREPARATIONS	3 287	3 389	3 491	3 591	3 653	0.7	31	298	1 216	2 108	43 498
B03XA	Other antianemic preparations	3 287	3 389	3 491	3 591	3 653	0.7	31	298	1 216	2 108	43 498
B03XA01	erythropoietin	255	267	284	259	237	0.0	<5	19	76	139	3 899
B03XA02	darbepoetin alfa	2 778	2 895	2 985	3 190	3 336	0.6	29	268	1 118	1 921	38 440
B03XA03	methoxy polyethylene glycol-epoetin beta	291	261	244	205	109	0.0	0	11	37	61	1 159
B06	OTHER HEMATOLOGICAL AGENTS	84	95	110	117	135	0.0	12	62	51	10	94 311
B06A	OTHER HEMATOLOGICAL AGENTS	84	95	110	117	135	0.0	12	62	51	10	94 311
B06AA	Enzymes	<5	10	10	5	8	0.0	0	<5	5	0	14
B06AA03	hyaluronidase	<5	10	10	5	8	0.0	0	<5	5	0	14
B06AB	Other hem products	<5	0	0	<5	<5	-	0	0	<5	0	330
B06AC	Drugs used in hereditary angioedema	80	85	100	111	126	0.0	12	59	45	10	93 967
B06AC01	c1-inhibitor, plasma derived	55	58	63	72	88	0.0	11	43	27	7	64 502
B06AC02	icatibant	57	58	65	73	87	0.0	6	39	37	5	29 465
B06AC04	conestat alfa	<5	<5	0	0	0	0.0	0	0	0	0	0

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

3.7 ATC group C – Cardiovascular system

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK				
			Number of individuals per age group								
			<15	15–44	45–69	≥70					
C CARDIOVASCULAR SYSTEM	1 040 279	1 060 407	1 076 271	1 100 521	1 117 743	211.8	9 702	100 154	553 183	454 704	1 794 102
C01 CARDIAC THERAPY	113 974	113 053	108 885	110 225	109 551	20.8	7 201	10 588	35 984	55 778	108 077
C01A CARDIAC GLYCOSIDES	16 077	14 063	12 900	11 878	11 153	2.1	15	61	1 709	9 368	4 900
C01AA Digitalis glycosides	16 077	14 063	12 900	11 878	11 153	2.1	15	61	1 709	9 368	4 900
C01AA04 digitoxin	3 070	935	657	525	398	0.1	0	<5	47	350	143
C01AA05 digoxin	14 333	13 215	12 279	11 377	10 769	2.0	15	60	1 664	9 030	4 758
C01B ANTIARRHYTHMICS, CLASS I AND III	13 951	14 593	15 233	16 006	16 810	3.2	82	593	7 461	8 674	40 662
C01BA Antiarrhythmics, class Ia	114	103	91	100	100	0.0	<5	<5	30	65	259
C01BA01 quinidine	<5	<5	<5	<5	<5	-	<5	0	0	<5	43
C01BA03 disopyramide	112	101	89	96	96	0.0	0	<5	30	63	216
C01BB Antiarrhythmics, class Ib	17	26	33	37	39	0.0	0	9	21	9	831
C01BB02 mexiletine	17	26	33	37	39	0.0	0	9	21	9	831
C01BC Antiarrhythmics, class Ic	7 373	7 600	7 755	7 890	8 152	1.5	78	436	4 297	3 341	15 887
C01BC03 propafenone	<5	6	5	5	7	0.0	0	<5	<5	<5	16
C01BC04 flecainide	7 371	7 594	7 750	7 885	8 145	1.5	78	435	4 293	3 339	15 871
C01BD Antiarrhythmics, class III	6 750	7 167	7 717	8 315	8 871	1.7	<5	156	3 316	5 397	23 684
C01BD01 amiodarone	5 593	5 784	5 978	6 232	6 551	1.2	<5	113	2 268	4 168	4 715
C01BD07 dronedarone	1 269	1 526	1 924	2 253	2 520	0.5	0	45	1 156	1 319	18 969
C01C CARDIAC STIMULANTS EXCL. CARDIAC GLYCOSIDES	19 662	22 904	21 927	25 873	27 585	5.2	7 104	9 196	8 874	2 411	29 312
C01CA Adrenergic and dopaminergic agents	19 662	22 904	21 927	25 873	27 585	5.2	7 104	9 196	8 874	2 411	29 312
C01CA01 etilefrine	100	116	78	66	59	0.0	<5	22	25	11	126
C01CA03 norepinephrine	0	0	0	<5	0	0.0	0	0	0	0	0
C01CA06 phenylephrine	<5	<5	0	0	<5	-	0	<5	<5	0	2
C01CA17 midodrine	28	29	44	54	69	0.0	0	18	21	30	524
C01CA24 epinephrine	19 530	22 754	21 811	25 751	27 454	5.2	7 103	9 156	8 825	2 370	28 449
C01CA26 ephedrine	6	8	<5	<5	5	0.0	0	<5	<5	0	17
C01CA27 droxidopa	0	0	0	0	<5	-	0	0	<5	0	194
C01D VASODILATORS USED IN CARDIAC DISEASES	69 136	65 806	62 792	60 017	57 317	10.9	0	753	18 632	37 932	32 302
C01DA Organic nitrates	69 136	65 805	62 792	60 017	57 316	10.9	0	753	18 631	37 932	32 301
C01DA02 glyceryl trinitrate	53 076	50 736	48 661	46 507	44 297	8.4	0	707	16 243	27 347	9 576
C01DA08 isosorbide dinitrate	1 377	1 153	933	722	231	0.0	0	<5	18	211	43
C01DA14 isosorbide mononitrate	28 711	27 093	25 699	24 237	23 752	4.5	0	103	4 889	18 760	22 682
C01DX Other vasodilators used in cardiac diseases	0	<5	<5	<5	<5	-	0	0	<5	0	1
C01DX12 molsidomine	0	<5	<5	<5	<5	-	0	0	<5	0	1

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
C01E	OTHER CARDIAC PREPARATIONS	29	62	83	172	286	0.1	0	44	182	60	901
C01EB	Other cardiac preparations	29	62	83	172	286	0.1	0	44	182	60	901
C01EB15	trimetazidine	8	5	5	6	10	0.0	0	0	7	<5	12
C01EB17	ivabradine	15	42	58	141	249	0.1	0	44	162	43	547
C01EB18	ranolazine	6	15	20	25	28	0.0	0	0	14	14	343
C02	ANTIHYPERTENSIVES	17 267	16 939	16 820	17 147	17 723	3.4	333	949	7 433	9 008	112 869
C02A	ANTIADRENERGIC AGENTS, CENTRALLY ACTING	6 532	6 485	6 468	6 644	7 025	1.3	324	414	3 199	3 088	9 833
C02AB	Methyldopa	65	65	58	57	46	0.0	0	26	12	8	135
C02AB01	methyldopa (levorotatory)	65	65	58	57	46	0.0	0	26	12	8	135
C02AC	Imidazoline receptor agonists	6 476	6 430	6 419	6 592	6 982	1.3	324	388	3 190	3 080	9 698
C02AC01	clonidine	92	107	100	125	200	0.0	7	73	98	22	369
C02AC02	guanfacine	0	0	0	96	417	0.1	317	93	7	0	3 511
C02AC05	moxonidine	6 385	6 324	6 320	6 373	6 367	1.2	0	224	3 085	3 058	5 818
C02C	ANTIADRENERGIC AGENTS, PERIPHERALLY ACTING	10 952	10 638	10 486	10 610	10 818	2.1	<5	467	4 340	6 008	13 994
C02CA	Alpha-adrenoreceptor antagonists	10 952	10 638	10 486	10 610	10 818	2.1	<5	467	4 340	6 008	13 994
C02CA01	prazosin	35	64	79	95	140	0.0	<5	101	37	0	232
C02CA04	doxazosin	10 920	10 574	10 410	10 517	10 681	2.0	<5	368	4 304	6 008	13 763
C02D	ARTERIOLAR SMOOTH MUSCLE, AGENTS ACTING ON	335	337	360	383	383	0.1	<5	26	146	210	590
C02DB	Hydrazinophthalazine derivatives	316	306	312	330	322	0.1	<5	14	106	201	227
C02DB02	hydralazine	316	306	312	330	322	0.1	<5	14	106	201	227
C02DC	Pyrimidine derivatives	20	31	48	56	62	0.0	0	12	41	9	362
C02DC01	minoxidil	20	31	48	56	62	0.0	0	12	41	9	362
C02K	OTHER ANTIHYPERTENSIVES	193	230	268	304	326	0.1	7	81	160	78	88 452
C02KD	Serotonin antagonists	13	12	11	11	10	0.0	0	<5	5	<5	395
C02KD01	ketanserin	13	12	11	11	10	0.0	0	<5	5	<5	395
C02KK	Antihypertensives for pulmonary arterial hypertension	182	219	258	294	317	0.1	7	79	156	75	88 057
C02KX01	bosentan	132	133	117	111	106	0.0	7	36	43	20	25 508
C02KX02	ambrisentan	50	56	55	55	58	0.0	0	17	31	10	14 235
C02KX04	macitentan	0	38	87	114	144	0.0	0	27	75	42	42 255
C02KX05	riociguat	0	7	11	19	21	0.0	0	<5	11	9	6 059
C03	DIURETICS	194 790	187 618	180 736	175 921	170 540	32.3	229	6 376	58 406	105 529	108 308

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
C03A	LOW-CEILING DIURETICS, THIAZIDES	44 778	40 871	37 626	35 304	32 893	6.2	19	1 022	14 961	16 891	16 274
C03AA	Thiazides, plain	14 014	13 434	12 992	12 857	12 495	2.4	16	520	5 770	6 189	3 664
C03AA01	bendroflumethiazide	0	0	0	0	<5	-	<5	0	<5	<5	3
C03AA03	hydrochlorothiazide	14 014	13 434	12 992	12 857	12 492	2.4	15	520	5 769	6 188	3 661
C03AB	Thiazides and potassium in combination	30 853	27 546	24 716	22 519	20 465	3.9	<5	507	9 214	10 741	12 610
C03AB01	bendroflumethiazide and potassium	30 853	27 546	24 716	22 519	20 465	3.9	<5	507	9 214	10 741	12 610
C03B	LOW-CEILING DIURETICS, EXCL. THIAZIDES	9	17	14	11	7	0.0	0	<5	<5	<5	23
C03BA	Sulfonamides, plain	9	17	14	11	7	0.0	0	<5	<5	<5	23
C03BA04	chlortalidone	7	10	7	8	6	0.0	0	<5	<5	<5	5
C03BA08	metolazone	<5	7	7	<5	<5	-	0	0	0	<5	18
C03C	HIGH-CEILING DIURETICS	124 184	122 417	119 814	118 174	115 668	21.9	192	4 066	33 723	77 687	56 970
C03CA	Sulfonamides, plain	124 184	122 417	119 814	118 174	115 668	21.9	192	4 066	33 723	77 687	56 970
C03CA01	furosemide	90 249	86 842	82 938	79 694	75 970	14.4	190	3 173	24 212	48 395	19 135
C03CA02	bumetanide	38 766	40 285	41 465	42 921	44 130	8.4	<5	978	10 438	32 712	37 835
C03CA04	torasemide	<5	<5	<5	0	0	0.0	0	0	0	0	0
C03D	POTASSIUM-SPARING AGENTS	19 007	19 299	20 003	21 421	22 492	4.3	40	1 334	8 484	12 634	13 428
C03DA	Aldosterone antagonists	18 990	19 280	19 981	21 406	22 476	4.3	40	1 332	8 476	12 628	13 330
C03DA01	spironolactone	18 084	18 221	18 794	20 091	20 980	4.0	40	1 250	7 643	12 047	8 176
C03DA02	potassium canrenoate	<5	0	<5	0	0	0.0	0	0	0	0	0
C03DA04	eplerenone	1 030	1 208	1 339	1 489	1 671	0.3	0	97	916	658	5 154
C03DB	Other potassium-sparing agents	19	21	23	16	18	0.0	0	<5	9	6	98
C03DB01	amiloride	19	21	23	16	18	0.0	0	<5	9	6	98
C03E	DIURETICS AND POTASSIUM-SPARING AGENTS IN COMBINATION	23 234	20 874	18 854	16 977	15 279	2.9	8	267	6 071	8 933	2 924
C03EA	Low-ceiling diuretics and potassium-sparing agents	23 234	20 874	18 854	16 977	15 279	2.9	8	267	6 071	8 933	2 924
C03EA01	hydrochlorothiazide and potassium-sparing agents	23 234	20 874	18 854	16 977	15 279	2.9	8	267	6 071	8 933	2 924
C03X	OTHER DIURETICS	35	61	55	78	160	0.0	0	33	80	47	18 688
C03XA	Vasopressin antagonists	35	61	55	78	160	0.0	0	33	80	47	18 688
C03XA01	tolvaptan	35	61	55	78	160	0.0	0	33	80	47	18 688
C04	PERIPHERAL VASODILATORS	810	739	655	634	567	0.1	0	33	162	372	597
C04A	PERIPHERAL VASODILATORS	810	739	655	634	567	0.1	0	33	162	372	597
C04AB	Imidazoline derivatives	<5	0	0	0	0	0.0	0	0	0	0	0
C04AB01	phentolamine	<5	0	0	0	0	0.0	0	0	0	0	0

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
C04AD	Purine derivatives	808	737	654	631	565	0.1		0	33	160	372	571
C04AD03	pentoxifylline	808	737	654	631	565	0.1		0	33	160	372	571
C04AX	Other peripheral vasodilators	0	<5	<5	<5	<5	-		0	0	<5	0	26
C04AX02	phenoxybenzamine	0	<5	<5	<5	<5	-		0	0	<5	0	26
C05	VASOPROTECTIVES	66 461	72 167	71 990	69 880	55 372	10.5		669	22 603	21 646	10 454	18 246
C05A	AGENTS FOR TREATMENT OF HEMORRHOIDS AND ANAL FISSURES FOR TOPICAL USE	60 385	65 990	65 838	63 639	48 839	9.3		631	21 417	18 903	7 888	13 207
C05AA	Corticosteroids	57 822	63 521	63 228	60 591	45 308	8.6		612	19 592	17 553	7 551	9 440
C05AA01	hydrocortisone ¹⁾	6 121	4 107	3 214	3 254	2 993	0.6		78	1 161	1 220	534	466
C05AA04	prednisolone ¹⁾	53 098	60 659	60 923	58 216	42 937	8.1		537	18 696	16 573	7 131	8 975
C05AE	Muscle relaxants	3 568	4 037	4 287	4 826	4 896	0.9		21	2 518	1 888	469	3 717
C05AE01	glyceryl trinitrate	3 568	4 037	4 287	4 826	4 896	0.9		21	2 518	1 888	469	3 717
C05AX	Other agents for treatment of hemorrhoids and anal fissures for topical use	841	160	62	76	86	0.0		<5	40	23	19	50
C05AX03	other preparations, combinations ¹⁾	819	148	49	68	69	0.0		<5	32	17	16	16
C05B	ANTIVARICOSE THERAPY	6 294	6 430	6 395	6 467	6 741	1.3		38	1 237	2 824	2 642	5 029
C05BA	Heparins or heparinoids for topical use	6 288	6 419	6 385	6 457	6 729	1.3		38	1 233	2 817	2 641	5 016
C05BA01	organo-heparinoid ¹⁾	6 249	6 382	6 328	6 397	6 668	1.3		38	1 220	2 784	2 626	1 043
C05BA04	pentosan polysulfate sodium	40	37	58	60	61	0.0		0	13	33	15	3 973
C05BB	Sclerosing agents for local injection	6	11	10	10	12	0.0		0	<5	7	<5	13
C05BB02	polidocanol	6	11	10	10	12	0.0		0	<5	7	<5	13
C05C	CAPILLARY STABILIZING AGENTS	8	7	7	12	8	0.0		0	<5	<5	<5	10
C05CA	Bioflavonoids	8	7	7	12	8	0.0		0	<5	<5	<5	10
C05CA01	rutoside	8	7	7	12	8	0.0		0	<5	<5	<5	10
C07	BETA BLOCKING AGENTS	371 823	372 668	373 049	375 425	378 400	71.7		685	23 015	151 975	202 725	218 472
C07A	BETA BLOCKING AGENTS	367 435	369 031	369 644	372 172	375 321	71.1		685	22 911	150 279	201 446	216 271
C07AA	Beta blocking agents, non-selective	24 423	23 139	20 979	20 165	20 491	3.9		321	4 817	8 323	7 030	22 352
C07AA03	pindolol	12	11	12	13	11	0.0		0	<5	6	<5	18
C07AA05	propranolol	18 262	17 453	15 716	15 274	15 992	3.0		295	4 598	6 955	4 144	16 077
C07AA06	timolol	7	13	11	8	13	0.0		0	0	8	5	134
C07AA07	sotalol	6 098	5 608	5 228	4 768	4 346	0.8		<5	136	1 319	2 889	2 943
C07AA12	nadolol	88	109	122	139	163	0.0		24	91	48	0	3 180

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
C07AB	Beta blocking agents, selective	324 369	328 613	330 826	333 820	336 587	63.8	363	15 850	134 374	186 000	177 323
C07AB02	metoprolol	270 550	274 751	277 452	280 496	283 411	53.7	323	13 583	114 230	155 275	150 103
C07AB03	atenolol	29 679	27 982	26 316	24 654	23 277	4.4	40	1 292	8 581	13 364	6 515
C07AB07	bisoprolol	27 355	29 022	30 298	31 582	33 069	6.3	<5	1 128	12 706	19 233	20 674
C07AB12	nebivolol	9	36	22	41	79	0.0	0	21	41	17	30
C07AG	Alpha and beta blocking agents	22 479	22 109	21 959	21 956	22 064	4.2	17	2 631	9 066	10 350	16 596
C07AG01	labetalol	2 442	2 469	2 671	2 789	2 819	0.5	<5	1 966	543	306	2 235
C07AG02	carvedilol	20 062	19 658	19 313	19 189	19 267	3.7	13	672	8 533	10 049	14 361
C07B	BETA BLOCKING AGENTS AND THIAZIDES	4 816	4 030	3 728	3 563	3 342	0.6	0	111	1 815	1 416	2 201
C07BB	Beta blocking agents, selective, and thiazides	4 816	4 030	3 728	3 563	3 342	0.6	0	111	1 815	1 416	2 201
C07BB07	bisoprolol and thiazides	4 816	4 028	3 724	3 556	3 336	0.6	0	109	1 812	1 415	2 197
C07BB12	nebivolol and thiazides	<5	<5	<5	7	6	0.0	0	<5	<5	<5	5
C08	CALCIUM CHANNEL BLOCKERS	235 380	237 478	241 881	249 493	256 070	48.5	147	10 072	113 625	132 226	149 690
C08C	SELECTIVE CALCIUM CHANNEL BLOCKERS WITH MAINLY VASCULAR EFFECTS	218 463	221 504	226 734	234 822	241 764	45.8	139	9 326	108 541	123 758	134 610
C08CA	Dihydropyridine derivatives	218 463	221 504	226 734	234 822	241 764	45.8	139	9 326	108 541	123 758	134 610
C08CA01	amlodipine	129 021	129 550	131 315	134 703	137 090	26.0	117	4 436	61 999	70 538	47 630
C08CA02	felodipine	14 850	14 310	13 945	13 522	12 982	2.5	0	251	4 948	7 783	9 289
C08CA03	isradipine	493	458	446	422	351	0.1	<5	7	127	214	683
C08CA05	nifedipine	36 991	38 829	42 096	46 124	50 280	9.5	17	3 592	22 896	23 775	53 825
C08CA06	nimodipine	39	38	41	31	45	0.0	<5	12	24	8	35
C08CA13	lercanidipine	40 491	41 539	42 239	43 626	44 738	8.5	<5	1 176	20 111	23 450	23 149
C08D	SELECTIVE CALCIUM CHANNEL BLOCKERS WITH DIRECT CARDIAC EFFECTS	18 080	17 062	16 231	15 746	15 374	2.9	8	791	5 493	9 082	15 080
C08DA	Phenylalkylamine derivatives	13 847	13 057	12 396	11 965	11 662	2.2	8	684	4 198	6 772	8 336
C08DA01	verapamil	13 847	13 057	12 396	11 965	11 662	2.2	8	684	4 198	6 772	8 336
C08DB	Benzothiazepine derivatives	4 281	4 050	3 941	3 850	3 763	0.7	0	110	1 310	2 343	6 744
C08DB01	diltiazem	4 281	4 050	3 941	3 850	3 763	0.7	0	110	1 310	2 343	6 744
C09	AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	552 012	565 340	576 981	592 066	607 098	115.1	568	29 800	310 633	266 097	520 555
C09A	ACE INHIBITORS, PLAIN	135 072	134 833	134 850	135 955	137 321	26.0	409	6 665	62 114	68 133	66 715
C09AA	ACE inhibitors, plain	135 072	134 833	134 850	135 955	137 321	26.0	409	6 665	62 114	68 133	66 715
C09AA01	captopril	1 962	1 718	1 535	1 381	1 339	0.3	175	83	428	653	3 352
C09AA02	enalapril	46 508	45 946	45 637	46 041	46 333	8.8	236	2 861	22 210	21 026	19 431

ATC group C

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK	
			Number of individuals per age group					
			<15	15–44	45–69	≥70		
C09AA03 lisinopril	24 380	23 394	22 234	21 466	20 709	3.9	<5 993 9 578 10 135 9 450	
C09AA04 perindopril	0	14	24	39	52	0.0	0 5 35 12 28	
C09AA05 ramipril	62 787	64 292	65 936	67 562	69 406	13.2	<5 2 763 30 076 36 564 34 453	
C09AA10 trandolapril	77	62	41	0	0	0.0	0 0 0 0 0	
C09AA15 zofenopril	0	<5	<5	0	<5	-	0 <5 0 0 1	
C09B ACE INHIBITORS, COMBINATIONS	34 166	32 710	31 300	30 217	29 243	5.5	0 804 13 713 14 726 22 837	
C09BA ACE inhibitors and diuretics	32 644	31 140	29 647	28 485	27 337	5.2	0 716 12 679 13 942 20 475	
C09BA02 enalapril and diuretics	19 540	18 916	18 211	17 658	17 149	3.3	0 496 8 231 8 422 13 558	
C09BA03 lisinopril and diuretics	13 133	12 243	11 448	10 836	10 189	1.9	0 219 4 450 5 520 6 911	
C09BA06 quinapril and diuretics	0	0	<5	<5	<5	-	0 0 0 <5 4	
C09BA15 zofenopril and diuretics	0	0	<5	0	<5	-	0 <5 <5 <5 2	
C09BB ACE inhibitors and calcium channel blockers	1 546	1 593	1 669	1 755	1 930	0.4	0 89 1 047 794 2 362	
C09BB02 enalapril and lercanidipine	1 546	1 593	1 669	1 755	1 930	0.4	0 89 1 047 794 2 362	
C09C ANGIOTENSIN II ANTAGONISTS, PLAIN	206 884	215 131	225 372	236 972	248 444	47.1	171 16 887 132 095 99 291 159 724	
C09CA Angiotensin II antagonists, plain	206 884	215 131	225 372	236 972	248 444	47.1	171 16 887 132 095 99 291 159 724	
C09CA01 losartan	63 676	64 088	65 537	66 606	67 344	12.8	38 3 290 35 007 29 009 33 185	
C09CA02 eprosartan	1 443	1 285	1 183	1 105	988	0.2	0 12 376 600 1 960	
C09CA03 valsartan	28 100	30 018	32 325	35 101	38 060	7.2	<5 2 147 20 580 15 332 33 763	
C09CA04 irbesartan	19 088	18 711	18 445	18 209	17 853	3.4	0 572 8 763 8 518 17 840	
C09CA06 candesartan	88 885	95 249	102 228	110 321	118 609	22.5	132 10 654 64 379 43 444 63 385	
C09CA07 telmisartan	5 822	5 699	5 656	5 705	5 680	1.1	0 246 2 976 2 458 6 625	
C09CA08 olmesartan medoxomil	1 639	1 600	1 555	1 542	1 538	0.3	0 76 857 605 2 966	
C09D ANGIOTENSIN II ANTAGONISTS, COMBINATIONS	217 369	221 086	222 453	226 709	230 147	43.6	0 7 350 121 918 100 879 271 210	
C09DA Angiotensin II antagonists and diuretics	182 682	181 504	178 639	178 238	176 742	33.5	0 4 774 90 757 81 211 140 032	
C09DA01 losartan and diuretics	67 346	66 303	64 606	64 474	63 337	12.0	0 1 591 31 499 30 247 34 953	
C09DA02 eprosartan and diuretics	1 552	1 394	1 267	1 201	1 113	0.2	0 24 508 581 2 441	
C09DA03 valsartan and diuretics	26 635	26 794	26 698	26 633	26 833	5.1	0 756 13 972 12 105 30 765	
C09DA04 irbesartan and diuretics	27 373	26 036	24 755	23 578	22 301	4.2	0 350 10 542 11 409 24 478	
C09DA06 candesartan and diuretics	55 802	56 924	57 398	58 597	59 488	11.3	0 1 975 32 354 25 159 40 675	
C09DA07 telmisartan and diuretics	3 785	3 689	3 548	3 414	3 266	0.6	0 87 1 674 1 505 4 661	
C09DA08 olmesartan medoxomil and diuretics	1 087	1 087	1 020	992	972	0.2	0 18 518 436 2 058	

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
C09DB	Angiotensin II antagonists and calcium channel blockers	23 699	25 205	26 971	29 272	31 687	6.0	0	1 638	18 360	11 689	57 250
C09DB01	valsartan and amlodipine	23 407	24 907	26 658	28 939	31 375	6.0	0	1 627	18 164	11 584	56 458
C09DB02	olmesartan medoxomil and amlodipine	297	304	315	336	321	0.1	0	13	201	107	792
C09DX	Angiotensin II antagonists, other combinations	16 435	19 311	21 559	24 276	26 922	5.1	0	1 210	15 756	9 956	73 928
C09DX01	valsartan, amlodipine and hydrochlorothiazide	16 435	19 311	21 557	23 861	26 003	4.9	0	1 177	15 334	9 492	60 738
C09DX03	olmesartan medoxomil, amlodipine and hydrochlorothiazide	0	0	<5	0	0	0.0	0	0	0	0	0
C09DX04	valsartan and sacubitril	0	0	0	417	921	0.2	0	33	423	465	13 190
C09X	OTHER AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	69	53	40	35	32	0.0	0	0	20	12	70
C09XA	Renin-inhibitors	69	53	40	35	32	0.0	0	0	20	12	70
C09XA02	aliskiren	69	53	40	35	32	0.0	0	0	20	12	70
C10	LIPID MODIFYING AGENTS	509 945	518 485	530 285	546 563	567 610	107.6	268	20 821	286 613	259 908	557 287
C10A	LIPID MODIFYING AGENTS, PLAIN	506 662	514 628	524 924	536 005	553 452	104.9	265	20 135	278 159	254 893	474 327
C10AA	HMG CoA reductase inhibitors	499 107	506 319	515 540	524 774	540 449	102.4	238	19 017	271 260	249 934	263 132
C10AA01	simvastatin	290 634	271 504	252 754	232 429	212 312	40.2	22	5 052	91 382	115 856	65 084
C10AA02	lovastatin	930	825	770	705	719	0.1	0	14	249	456	1 116
C10AA03	pravastatin	19 842	19 189	18 616	18 317	17 903	3.4	15	428	7 658	9 802	13 129
C10AA04	fluvastatin	7 372	7 432	7 590	7 731	7 469	1.4	<5	471	3 873	3 123	11 608
C10AA05	atorvastatin	189 401	211 717	237 276	264 578	295 715	56.0	162	12 233	163 185	120 135	128 233
C10AA07	rosuvastatin	9 506	12 552	15 939	20 448	25 959	4.9	48	1 568	15 753	8 590	41 886
C10AA08	pitavastatin	6	24	32	49	48	0.0	0	<5	32	15	2 077
C10AB	Fibrates	314	315	311	301	316	0.1	<5	42	223	49	1 590
C10AB02	bezafibrate	47	44	42	36	36	0.0	0	<5	27	8	129
C10AB04	gemfibrozil	85	90	74	68	67	0.0	0	11	43	13	609
C10AB05	fenofibrate	184	182	195	197	215	0.0	<5	31	154	28	852
C10AC	Bile acid sequestrants	2 530	2 556	2 754	3 011	3 277	0.6	21	717	1 746	793	10 302
C10AC01	colestyramine	1 864	1 866	2 049	2 328	2 610	0.5	21	636	1 366	587	2 893
C10AC02	colestipol	287	268	256	242	216	0.0	0	19	94	103	631
C10AC04	colesevelam	444	454	471	464	478	0.1	0	69	303	106	6 778
C10AD	Nicotinic acid and derivatives	58	25	20	15	13	0.0	0	<5	6	6	599
C10AD02	nicotinic acid	29	18	14	11	10	0.0	0	<5	<5	6	574
C10AD06	acipimox	6	7	6	<5	<5	-	0	0	<5	0	24

ATC group C

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
C10AD52	nicotinic acid, combinations	27	0	0	0	0	0.0		0	0	0	0
C10AX	Other lipid modifying agents	24 366	26 228	29 682	33 353	38 964	7.4		11	1 972	23 469	13 512
C10AX06	omega-3-triglycerides incl. other esters and acids	4 199	4 233	4 400	4 480	4 725	0.9		<5	548	3 290	884
C10AX09	ezetimibe	20 751	22 561	25 883	29 420	34 729	6.6		8	1 419	20 574	12 728
C10AX12	lomitapide	0	0	0	<5	<5	-		<5	0	0	0
C10AX13	evolocumab	0	0	45	217	317	0.1		<5	46	227	43
C10AX14	alirocumab	0	0	10	185	280	0.1		0	26	204	50
C10B	LIPID MODIFYING AGENTS, COMBINATIONS	3 215	3 664	8 136	14 974	20 260	3.8		11	1 070	12 541	6 638
C10BA	HMG CoA reductase inhibitors in combination with other lipid modifying agents	3 215	3 664	8 136	14 974	20 260	3.8		11	1 070	12 541	6 638
C10BA02	simvastatin and ezetimibe	3 215	3 664	4 127	4 251	4 555	0.9		0	146	2 577	1 832
C10BA05	atorvastatin and ezetimibe	0	0	4 136	10 871	15 847	3.0		11	933	10 048	4 855
												57 049

3.8 ATC group D – Dermatologicals

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK				
			Number of individuals per age group								
			<15	15–44	45–69	≥70					
D DERMATOLOGICALS	645 692	674 324	686 915	713 156	747 278	141.6	102 824	277 104	241 159	126 191	405 264
D01 ANTIFUNGALS FOR DERMATOLOGICAL USE	128 325	138 096	141 401	145 187	150 144	28.5	14 316	55 093	53 687	27 048	38 914
D01A ANTIFUNGALS FOR TOPICAL USE	111 180	120 842	124 073	127 061	132 033	25.0	14 031	48 695	44 628	24 679	21 361
D01AA Antibiotics	41	43	32	13	27	0.0	<5	12	6	5	8
D01AA01 nystatin	41	43	32	13	27	0.0	<5	12	6	5	8
D01AC Imidazole and triazole derivatives	87 831	95 521	99 331	102 356	107 077	20.3	11 922	39 168	35 332	20 655	14 556
D01AC01 clotrimazole ¹⁾	8 572	9 356	9 703	10 096	10 505	2.0	1 522	3 979	2 608	2 396	1 655
D01AC02 miconazole ¹⁾	2 157	2 421	2 313	2 321	2 309	0.4	370	775	723	441	409
D01AC03 econazole ¹⁾	732	839	950	975	1 016	0.2	40	183	360	433	157
D01AC08 ketoconazole ¹⁾	16 928	18 365	18 824	19 256	20 378	3.9	1 321	9 716	6 615	2 726	3 903
D01AC20 imidazoles/triazoles in combination with corticosteroids ¹⁾	63 529	69 350	72 619	74 981	78 325	14.8	9 124	26 670	26 749	15 782	8 432
D01AE Other antifungals for topical use	26 681	28 894	28 410	28 410	28 823	5.5	2 473	10 995	10 562	4 793	6 797
D01AE02 methylrosaniline ¹⁾	736	878	907	812	873	0.2	246	201	213	213	118
D01AE14 ciclopirox	841	2 763	3 825	4 645	4 773	0.9	83	1 431	2 350	909	1 808
D01AE15 terbinafine ¹⁾	19 247	19 949	19 118	19 117	19 520	3.7	2 047	8 336	6 190	2 947	3 412
D01AE16 amorolfine ¹⁾	6 333	5 820	5 033	4 335	4 152	0.8	108	1 205	2 019	820	1 460
D01B ANTIFUNGALS FOR SYSTEMIC USE	21 092	21 538	21 815	22 551	22 760	4.3	486	8 288	11 023	2 963	17 552
D01BA Antifungals for systemic use	21 092	21 538	21 815	22 551	22 760	4.3	486	8 288	11 023	2 963	17 552
D01BA01 griseofulvin	38	30	22	19	33	0.0	28	5	0	0	39
D01BA02 terbinafine	21 060	21 513	21 798	22 533	22 733	4.3	462	8 285	11 023	2 963	17 513
D02 EMOLLIENTS AND PROTECTIVES	2 548	3 153	3 500	28 189	75 655	14.3	33 852	21 327	13 314	7 162	67 697
D02A EMOLLIENTS AND PROTECTIVES	2 548	3 153	3 500	28 180	75 646	14.3	33 851	21 323	13 311	7 161	67 684
D02AB Zinc products ¹⁾	9	9	5	10	11	0.0	0	<5	6	<5	3
D02AC Soft paraffin and fat products	0	0	0	0	7	0.0	<5	0	<5	<5	4
D02AE Carbamide products	1 153	1 423	1 665	26 158	73 598	14.0	33 341	20 841	12 608	6 808	66 953
D02AE01 carbamide ¹⁾	1 153	1 423	1 665	26 158	73 598	14.0	33 341	20 841	12 608	6 808	66 953
D02AF Salicylic acid preparations ¹⁾	1 179	1 398	1 422	1 611	1 651	0.3	179	469	702	301	390
D02AX Other emollients and protectives ¹⁾	244	353	463	641	881	0.2	595	111	90	85	334
D02B PROTECTIVES AGAINST UV-RADIATION	0	0	0	10	9	0.0	<5	<5	<5	<5	13
D02BA Protectives against UV-radiation for topical use	0	0	0	10	9	0.0	<5	<5	<5	<5	13

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ATC group D

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
D03	PREPARATIONS FOR TREATMENT OF WOUNDS AND ULCERS	85	71	63	47	67	0.0	5	15	23	24	18
D03A	CICATRIZANTS	85	71	63	47	67	0.0	5	15	23	24	18
D03AX	Other cicatrizers	85	71	63	47	67	0.0	5	15	23	24	18
D03AX03	dexpanthenol	85	71	63	47	67	0.0	5	15	23	24	18
D04	ANTIPRURITICS, INCL. ANTIHISTAMINES, ANESTHETICS, ETC.	6 698	8 038	8 387	8 560	8 761	1.7	1 011	3 612	2 250	1 888	1 617
D04A	ANTIPRURITICS, INCL. ANTIHISTAMINES, ANESTHETICS, ETC.	6 698	8 038	8 387	8 560	8 761	1.7	1 011	3 612	2 250	1 888	1 617
D04AA	Antihistamines for topical use	8	<5	15	17	6	0.0	0	<5	<5	<5	2
D04AA13	dimetindene	8	<5	15	17	6	0.0	0	<5	<5	<5	2
D04AB	Anesthetics for topical use	5 405	6 538	6 758	6 809	6 949	1.3	649	3 079	1 876	1 345	1 327
D04AB01	lidocaine ¹⁾	5 405	6 538	6 758	6 809	6 949	1.3	649	3 079	1 876	1 345	1 327
D04AX	Other antipruritics	1 307	1 522	1 644	1 765	1 838	0.4	367	539	380	552	287
D05	ANTIPSORIATICS	30 335	29 403	30 300	30 801	31 251	5.9	578	8 804	15 603	6 266	49 186
D05A	ANTIPSORIATICS FOR TOPICAL USE	28 872	27 839	28 529	28 920	29 303	5.6	565	8 443	14 392	5 903	39 679
D05AA	Tars ¹⁾	960	1 102	1 299	1 550	1 917	0.4	170	646	615	486	478
D05AC	Antracen derivatives	10	11	10	<5	7	0.0	0	5	<5	0	4
D05AC01	dithranol	10	11	10	<5	7	0.0	0	5	<5	0	4
D05AD	Psoralens for topical use	0	0	0	0	<5	-	0	<5	0	0	0
D05AD02	methoxsalen	0	0	0	0	<5	-	0	<5	0	0	0
D05AX	Other antipsoriatics for topical use	28 055	26 883	27 415	27 610	27 683	5.3	401	7 924	13 893	5 465	39 193
D05AX02	calcipotriol	1 559	902	20	116	369	0.1	6	106	171	86	257
D05AX03	calcitriol	1 170	1 439	1 406	1 284	1 162	0.2	27	273	620	242	873
D05AX52	calcipotriol, combinations	26 578	25 685	26 545	26 701	26 676	5.1	378	7 688	13 363	5 247	38 064
D05B	ANTIPSORIATICS FOR SYSTEMIC USE	2 106	2 117	2 360	2 446	2 520	0.5	13	482	1 574	451	9 506
D05BA	Psoralens for systemic use	20	14	17	11	16	0.0	0	<5	8	6	13
D05BA02	methoxsalen	20	14	17	11	16	0.0	0	<5	8	6	13
D05BB	Retinoids for treatment of psoriasis	2 026	2 047	2 277	2 361	2 442	0.5	13	458	1 530	441	6 620
D05BB02	acitretin	2 026	2 047	2 277	2 361	2 442	0.5	13	458	1 530	441	6 620
D05BX	Other antipsoriatics for systemic use	63	60	71	78	68	0.0	0	26	38	<5	2 873
D05BX51	fumaric acid derivatives, combinations	63	60	71	78	66	0.0	0	25	37	<5	2 863

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ATC group D

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
D06	ANTIBIOTICS AND CHEMO-THERAPEUTICS FOR DERMATOLOGICAL USE	110 706	114 774	114 325	111 663	108 688	20.6	11 901	39 881	35 449	21 457	33 373
D06A	ANTIBIOTICS FOR TOPICAL USE	57 381	58 416	57 382	56 016	54 255	10.3	10 160	16 923	16 706	10 466	5 098
D06AA	Tetracycline and derivatives	3 260	3 258	3 341	3 230	3 226	0.6	351	924	1 246	705	425
D06AA02	chlortetracycline	27	25	26	16	29	0.0	0	10	11	8	10
D06AA03	oxytetracycline	3 234	3 235	3 316	3 214	3 198	0.6	351	914	1 235	698	416
D06AX	Other antibiotics for topical use	54 292	55 337	54 250	52 966	51 217	9.7	9 832	16 049	15 524	9 812	4 673
D06AX01	fusidic acid	51 166	51 972	50 697	48 979	47 857	9.1	8 689	14 975	14 864	9 329	4 195
D06AX05	bacitracin ¹⁾	2 231	2 121	2 139	2 357	2 893	0.6	914	910	595	474	359
D06AX07	gentamicin	0	0	0	<5	<5	-	<5	<5	0	<5	1
D06AX09	mupirocin	90	97	96	47	43	0.0	11	17	12	<5	17
D06AX13	retapamulin	1 046	1 387	1 552	1 813	640	0.1	304	192	100	44	102
D06B	CHEMOTHERAPEUTICS FOR TOPICAL USE	55 283	58 373	58 976	57 534	56 248	10.7	1 841	23 579	19 341	11 487	28 275
D06BA	Sulfonamides	3 482	3 577	3 304	3 124	2 866	0.5	462	971	867	566	435
D06BA01	silver sulfadiazine	3 482	3 577	3 304	3 124	2 866	0.5	462	971	867	566	435
D06BB	Antivirals	38 980	38 267	36 189	35 673	35 270	6.7	1 125	17 413	10 528	6 204	17 882
D06BB03	aciclovir ¹⁾	16 801	16 329	15 254	14 818	15 101	2.9	810	6 422	5 901	1 968	2 702
D06BB04	podophyllotoxin	13 095	13 286	12 621	12 096	10 834	2.1	114	9 178	1 449	93	2 383
D06BB06	penciclovir ¹⁾	1 560	1 385	1 087	958	871	0.2	38	321	354	158	190
D06BB10	imiquimod	8 386	8 079	7 993	8 494	9 299	1.8	163	2 148	2 957	4 031	12 606
D06BB12	sinecatechins	0	102	169	75	0	0.0	0	0	0	0	0
D06BX	Other chemotherapeutics	13 197	17 174	20 174	19 386	18 720	3.6	255	5 308	8 178	4 979	9 958
D06BX01	metronidazole ¹⁾	12 942	14 089	14 666	14 082	13 311	2.5	255	5 199	5 783	2 074	2 754
D06BX02	ingenol mebutate	259	3 132	5 571	5 363	5 459	1.0	0	110	2 419	2 930	7 205
D07	CORTICOSTEROIDS, DERMATOLOGICAL PREPARATIONS	368 248	383 757	390 661	406 760	420 091	79.6	64 397	129 050	145 430	81 214	99 498
D07A	CORTICOSTEROIDS, PLAIN	314 148	326 739	336 813	349 112	360 719	68.4	58 625	110 105	123 109	68 880	76 876
D07AA	Corticosteroids, weak (group I)	29 934	31 278	32 870	34 121	36 466	6.9	17 781	9 467	5 838	3 380	4 310
D07AA02	hydrocortisone ¹⁾	29 931	31 278	32 870	34 121	36 466	6.9	17 781	9 467	5 838	3 380	4 310
D07AB	Corticosteroids, moderately potent (group II)	105 292	108 829	114 464	117 426	124 714	23.6	32 046	37 565	34 448	20 655	17 664
D07AB02	hydrocortisone butyrate	85 367	86 711	90 271	92 705	98 183	18.6	26 098	29 878	26 356	15 851	13 809
D07AB08	desonide	21 365	23 447	25 652	26 249	28 161	5.3	6 595	8 097	8 430	5 039	3 855
D07AC	Corticosteroids, potent (group III)	163 406	169 282	169 891	176 406	176 748	33.5	18 213	57 878	63 966	36 691	38 409

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ATC group D

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK				
			Number of individuals per age group								
			<15	15–44	45–69	≥70					
D07AC01 betamethasone	58 313	61 411	50 587	58 525	55 767	10.6	3 724	18 104	21 544	12 395	8 273
D07AC03 desoximetasone	11 671	11 620	14 876	12 571	11 848	2.3	544	3 065	5 062	3 177	5 084
D07AC04 fluocinolone acetonide	5 421	5 246	7 312	5 773	5 634	1.1	188	1 180	2 503	1 763	994
D07AC08 fluocinonide	541	498	477	446	376	0.1	5	55	186	130	67
D07AC13 mometasone	83 267	86 651	100 753	98 164	102 116	19.4	13 033	35 053	34 566	19 464	22 002
D07AC17 fluticasone	11 613	11 447	5 704	8 791	8 661	1.6	1 357	2 852	2 911	1 541	1 989
D07AD Corticosteroids, very potent (group IV)	60 150	64 294	69 391	71 624	74 810	14.2	2 575	21 661	34 253	16 321	16 493
D07AD01 clobetasol	60 150	64 294	69 391	71 624	74 810	14.2	2 575	21 661	34 253	16 321	16 493
D07B CORTICOSTEROIDS, COMBINATIONS WITH ANTISEPTICS	29 528	32 142	26 807	32 087	32 979	6.3	4 403	9 655	11 742	7 179	4 964
D07BB Corticosteroids, moderately potent, combinations with antiseptics	1 955	6 059	10 013	9 621	4 673	0.9	1 237	1 121	1 444	871	699
D07BB02 desonide and antiseptics	1 955	6 059	10 013	9 621	4 673	0.9	1 237	1 121	1 444	871	699
D07BC Corticosteroids, potent, combinations with antiseptics	27 796	26 519	17 797	23 369	28 949	5.5	3 380	8 667	10 470	6 432	4 265
D07BC01 betamethasone and antiseptics	25 387	23 822	12 284	19 354	26 980	5.1	3 243	8 173	9 640	5 924	4 037
D07BC02 fluocinolone acetonide and antiseptics	2 540	3 030	6 371	4 786	2 260	0.4	170	553	944	593	228
D07C CORTICOSTEROIDS, COMBINATIONS WITH ANTIBIOTICS	25 078	25 863	26 065	26 192	26 831	5.1	4 933	7 945	8 737	5 216	3 493
D07CA Corticosteroids, weak, combinations with antibiotics	25 072	25 856	25 994	25 707	26 181	5.0	4 819	7 699	8 543	5 120	3 347
D07CA01 hydrocortisone and antibiotics	25 072	25 856	25 994	25 707	26 181	5.0	4 819	7 699	8 543	5 120	3 347
D07CB Corticosteroids, moderately potent, combinations with antibiotics	<5	<5	<5	0	0	0.0	0	0	0	0	0
D07CB01 triamcinolone and antibiotics	<5	<5	<5	0	0	0.0	0	0	0	0	0
D07CC Corticosteroids, potent, combinations with antibiotics	<5	6	77	514	687	0.1	124	259	202	102	147
D07CC01 betamethasone and antibiotics	<5	5	76	513	684	0.1	124	257	201	102	144
D07CC05 fluocinonide and antibiotics	<5	<5	<5	<5	<5	-	0	<5	<5	0	2
D07X CORTICOSTEROIDS, OTHER COMBINATIONS	26 722	28 040	29 013	30 276	31 931	6.1	1 023	11 057	13 278	6 573	14 165
D07XA Corticosteroids, weak, other combinations	7	12	10	5	11	0.0	<5	<5	<5	<5	10
D07XA01 hydrocortisone	7	12	10	5	11	0.0	<5	<5	<5	<5	10

ATC group D

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
D07XC	Corticosteroids, potent, other combinations	26 715	28 028	29 003	30 271	31 920	6.1	1 020	11 056	13 275	6 569	14 155
D07XC01	betamethasone	26 715	28 028	29 003	30 271	31 920	6.1	1 020	11 056	13 275	6 569	14 155
D08	ANTISEPTICS AND DISINFECTANTS	20 441	20 798	20 485	20 934	22 159	4.2	3 813	8 505	6 565	3 276	4 566
D08A	ANTISEPTICS AND DISINFECTANTS	20 441	20 798	20 485	20 934	22 159	4.2	3 813	8 505	6 565	3 276	4 566
D08AB	Aluminium agents ¹⁾	429	462	524	570	753	0.1	241	231	168	113	113
D08AC	Biguanides and amidines	17 326	17 537	17 159	17 667	18 699	3.5	2 899	7 506	5 706	2 588	3 803
D08AC01	dibromopropamide ¹⁾	5 561	6 341	6 359	6 234	6 662	1.3	2 201	2 058	1 371	1 032	1 219
D08AC02	chlorhexidine ¹⁾	12 076	11 595	11 222	11 815	12 426	2.4	815	5 589	4 415	1 607	2 584
D08AG	Iodine products	79	111	118	93	111	0.0	5	21	28	57	30
D08AG02	povidone-iodine	50	78	76	66	83	0.0	0	11	22	50	26
D08AG03	iodine ¹⁾	29	33	42	27	28	0.0	5	10	6	7	4
D08AJ	Quaternary ammonium compounds	124	156	139	180	198	0.0	27	72	45	54	75
D08AJ03	cetylpyridinium ¹⁾	124	156	139	180	198	0.0	27	72	45	54	75
D08AL	Silver compounds	10	26	22	16	12	0.0	0	<5	10	<5	12
D08AL01	silver nitrate	10	26	22	16	12	0.0	0	<5	10	<5	12
D08AX	Other antiseptics and disinfectants	2 618	2 683	2 686	2 570	2 596	0.5	717	746	645	488	533
D08AX01	hydrogen peroxide ¹⁾	1 526	1 442	1 453	1 188	1 166	0.2	301	299	295	271	164
D08AX06	potassium permanganate ¹⁾	1 103	1 260	1 239	1 391	1 436	0.3	420	449	348	219	366
D09	MEDICATED DRESSINGS	1 718	1 670	1 425	1 330	1 144	0.2	90	189	380	485	398
D09A	MEDICATED DRESSINGS	1 718	1 670	1 425	1 330	1 144	0.2	90	189	380	485	398
D09AA	Medicated dressings with antiinfectives	1 607	1 539	1 324	1 238	1 067	0.2	85	186	355	441	151
D09AA02	fusidic acid	1 607	1 539	1 324	1 238	1 067	0.2	85	186	355	441	151
D09AB	Zinc bandages	112	135	101	92	77	0.0	5	<5	25	44	247
D09AB01	zinc bandage without supplements	112	135	101	92	77	0.0	5	<5	25	44	247
D10	ANTI-ACNE PREPARATIONS	70 355	73 127	75 656	78 061	82 095	15.6	4 892	63 105	11 298	2 800	67 413
D10A	ANTI-ACNE PREPARATIONS FOR TOPICAL USE	64 217	66 073	67 316	68 595	71 573	13.6	4 693	53 556	10 577	2 747	26 782
D10AD	Retinoids for topical use in acne	37 161	38 278	40 392	43 437	46 115	8.7	3 562	38 276	3 330	947	19 886
D10AD01	tretinoïn	6 861	2 728	3 113	3 253	3 483	0.7	34	1 489	1 457	503	1 082
D10AD02	retinol	63	0	0	0	0	0.0	0	0	0	0	0
D10AD03	adapalene	6 750	8 037	7 718	7 161	6 883	1.3	494	5 309	740	340	1 493
D10AD51	tretinoïn, combinations	<5	741	4 942	9 127	10 042	1.9	804	8 738	453	47	3 036
D10AD53	adapalene, combinations	24 781	27 931	26 589	26 519	28 445	5.4	2 495	25 137	752	61	14 274

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ATC group D

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
D10AE	Peroxides	2 995	2 886	2 736	2 630	3 390	0.6	405	2 833	127	25	767
D10AE01	benzoyl peroxide ¹⁾	2 995	2 886	2 736	2 630	3 390	0.6	405	2 833	127	25	767
D10AF	Antiinfectives for treatment of acne	17 498	17 315	16 536	15 651	14 791	2.8	929	10 046	3 223	593	2 868
D10AF01	clindamycin	17 450	17 279	16 506	15 619	14 758	2.8	923	10 026	3 216	593	2 855
D10AF02	erythromycin	50	38	31	33	35	0.0	6	22	7	0	13
D10AX	Other anti-acne preparations for topical use	15 685	16 600	15 938	14 338	14 562	2.8	461	8 533	4 342	1 226	3 260
D10AX03	azelaic acid	15 673	16 593	15 934	14 334	14 554	2.8	461	8 530	4 337	1 226	3 259
D10AX30	various combinations ¹⁾	12	7	<5	<5	8	0.0	0	<5	5	0	2
D10B	ANTI-ACNE PREPARATIONS FOR SYSTEMIC USE	9 255	10 676	12 523	14 285	15 925	3.0	417	14 519	926	63	40 631
D10BA	Retinoids for treatment of acne	9 255	10 676	12 523	14 285	15 925	3.0	417	14 519	926	63	40 631
D10BA01	isotretinoin	9 255	10 676	12 523	14 285	15 925	3.0	417	14 519	926	63	40 631
D11	OTHER DERMATOLOGICAL PREPARATIONS	19 641	23 400	27 566	32 631	38 672	7.3	4 163	17 353	13 357	3 799	42 585
D11A	OTHER DERMATOLOGICAL PREPARATIONS	19 641	23 400	27 566	32 631	38 672	7.3	4 163	17 353	13 357	3 799	42 585
D11AC	Medicated shampoos	1 449	1 721	1 809	2 134	2 237	0.4	194	1 431	476	136	326
D11AC03	selenium compounds ¹⁾	1 449	1 721	1 809	2 134	2 237	0.4	194	1 431	476	136	326
D11AF	Wart and anti-corn preparations ¹⁾	2 333	2 701	2 853	2 884	3 214	0.6	1 388	1 222	454	150	599
D11AH	Agents for dermatitis, excluding corticosteroids	13 169	14 358	16 457	17 758	19 667	3.7	2 568	9 022	6 390	1 687	31 540
D11AH01	tacrolimus	8 887	9 659	10 394	10 859	11 229	2.1	1 409	5 015	3 754	1 051	5 197
D11AH02	pimecrolimus	4 224	4 571	5 746	6 543	8 054	1.5	1 249	3 942	2 272	591	3 825
D11AH04	alitretinoin	317	364	733	853	967	0.2	0	360	531	76	22 518
D11AX	Other dermatologicals	2 771	4 777	6 704	10 323	14 238	2.7	40	6 012	6 306	1 880	10 120
D11AX01	minoxidil ¹⁾	292	325	358	397	469	0.1	<5	271	146	50	244
D11AX10	finasteride	583	582	540	515	519	0.1	0	362	152	5	2 713
D11AX16	eflornithine	380	560	685	790	934	0.2	5	538	323	68	736
D11AX18	diclofenac	465	339	249	368	406	0.1	<5	6	152	247	442
D11AX21	brimonidine	0	1 572	2 489	1 954	1 805	0.3	<5	770	851	181	1 241
D11AX22	ivermectin	0	0	840	4 655	8 311	1.6	23	3 020	4 136	1 132	3 757
D11AX24	deoxycholic acid	0	0	0	0	<5	-	0	0	<5	0	10

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3.9 ATC group G – Genito urinary system and sex hormones

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK				
			Number of individuals per age group								
			<15	15–44	45–69	≥70					
G GENITO URINARY SYSTEM AND SEX HORMONES	785 601	814 970	835 075	859 359	876 600	166.1	3 888	447 213	278 099	147 400	1 164 181
G01 GYNECOLOGICAL ANTIINFECTIVES AND ANTISEPTICS	35 989	37 665	38 581	40 070	42 519	8.1	137	31 028	9 477	1 877	9 955
G01A ANTIINFECTIVES AND ANTISEPTICS, EXCL. COMBINATIONS WITH CORTICOSTEROIDS	35 989	37 665	38 581	40 070	42 519	8.1	137	31 028	9 477	1 877	9 955
G01AA Antibiotics	22 040	22 764	23 982	24 308	23 450	4.4	54	17 324	5 236	836	5 591
G01AA10 clindamycin	22 040	22 764	23 982	24 308	23 450	4.4	54	17 324	5 236	836	5 591
G01AC Quinoline derivatives	0	0	11	1 928	6 558	1.2	<5	4 841	1 565	148	1 543
G01AC05 dequalinium	0	0	11	1 928	6 558	1.2	<5	4 841	1 565	148	1 543
G01AD Organic acids	7	11	15	12	10	0.0	<5	<5	6	<5	14
G01AD02 acetic acid	7	11	15	12	10	0.0	<5	<5	6	<5	14
G01AF Imidazole derivatives	15 467	16 475	16 264	15 785	15 115	2.9	80	10 882	3 172	981	2 786
G01AF01 metronidazole	7 569	7 559	7 376	6 968	6 303	1.2	9	4 518	1 526	250	877
G01AF02 clotrimazole ¹⁾	6 873	7 953	8 020	7 976	7 989	1.5	59	5 811	1 480	639	1 692
G01AF05 econazole ¹⁾	1 322	1 268	1 168	1 127	1 127	0.2	14	785	220	108	216
G01AX Other antiinfectives and antiseptics	9	8	9	10	8	0.0	0	<5	5	<5	21
G01AX03 policresulen	9	8	9	10	8	0.0	0	<5	5	<5	21
G02 OTHER GYNECOLOGICALS	47 703	48 836	49 294	50 823	52 144	9.9	12	44 713	7 181	238	65 087
G02A UTEROTONICS	6	9	10	7	11	0.0	0	10	<5	0	2
G02AB Ergot alkaloids	5	9	10	7	11	0.0	0	10	<5	0	2
G02AB01 methylergometrine	5	9	10	7	11	0.0	0	10	<5	0	2
G02AD Prostaglandins	<5	0	0	0	0	0.0	0	0	0	0	0
G02AD02 dinoprostone	<5	0	0	0	0	0.0	0	0	0	0	0
G02B CONTRACEPTIVES FOR TOPICAL USE	45 532	46 545	46 912	48 551	49 912	9.5	10	43 451	6 447	<5	62 103
G02BA Intrauterine contraceptives	25 540	27 849	28 970	31 358	34 139	6.5	8	28 333	5 794	<5	44 299
G02BA03 plastic IUD with progestogen	25 540	27 849	28 970	31 358	34 139	6.5	8	28 333	5 794	<5	44 299
G02BB Intravaginal contraceptives	20 195	19 002	18 258	17 547	16 170	3.1	<5	15 502	666	0	17 804
G02BB01 vaginal ring with progestogen and estrogen	20 195	19 002	18 258	17 547	16 170	3.1	<5	15 502	666	0	17 804
G02C OTHER GYNECOLOGICALS	2 270	2 374	2 440	2 331	2 296	0.4	<5	1 321	739	234	2 982
G02CB Prolactine inhibitors	2 270	2 310	2 279	2 315	2 293	0.4	<5	1 321	736	234	2 981
G02CB01 bromocriptine	998	936	797	728	654	0.1	<5	448	141	64	463
G02CB03 cabergoline	1 104	1 196	1 320	1 424	1 503	0.3	<5	835	511	156	1 855
G02CB04 quinagolide	224	215	200	206	175	0.0	0	64	94	17	664

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group G

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
G02CX	Other gynecologicals	0	64	161	16	<5	-	0	0	<5	0	1
G02CX04	Cimicifugae rhizoma ¹⁾	0	64	161	16	<5	-	0	0	<5	0	1
G03	SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM	558 156	575 031	583 888	593 953	594 870	112.7	2 955	376 231	162 836	52 848	529 962
G03A	HORMONAL CONTRACEPTIVES FOR SYSTEMIC USE	336 365	344 874	350 587	353 941	351 197	66.6	1 642	330 427	19 118	10	186 651
G03AA	Progestogens and estrogens, fixed combinations	233 755	237 366	238 563	236 034	230 419	43.7	1 211	222 771	6 432	5	117 156
G03AA07	levonorgestrel and ethinylestradiol	125 595	138 553	145 945	150 143	152 705	28.9	975	148 705	3 021	<5	54 112
G03AA09	desogestrel and ethinylestradiol	51 914	45 974	41 677	37 097	31 982	6.1	101	30 545	1 336	0	13 889
G03AA12	drospirenone and ethinylestradiol	56 408	51 713	48 901	46 233	43 520	8.3	167	41 635	1 718	0	41 847
G03AA13	norelgestromin and ethinylestradiol	8 904	9 061	8 751	8 394	7 926	1.5	14	7 562	350	0	6 239
G03AA14	nomegestrol and estradiol	1 194	1 140	1 152	1 095	1 068	0.2	<5	1 000	66	<5	1 068
G03AB	Progestogens and estrogens, sequential preparations	13 478	12 601	11 539	10 426	9 293	1.8	23	8 344	925	<5	4 361
G03AB04	norethisterone and ethinylestradiol	11 584	10 762	9 765	8 750	7 727	1.5	14	6 961	751	<5	2 622
G03AB08	dienogest and estradiol	1 921	1 860	1 796	1 694	1 577	0.3	9	1 394	174	0	1 739
G03AC	Progestogens	105 909	112 335	119 624	128 200	132 116	25.0	506	119 562	12 044	<5	65 095
G03AC01	norethisterone	5 776	5 326	4 908	4 625	4 256	0.8	7	3 462	787	0	1 040
G03AC06	medroxyprogesterone	18 870	18 607	18 083	17 296	16 340	3.1	36	12 204	4 097	<5	4 174
G03AC08	etonogestrel	6 642	8 044	12 689	19 677	23 778	4.5	118	23 301	359	0	27 265
G03AC09	desogestrel	77 052	83 077	87 454	90 935	92 421	17.5	361	85 157	6 902	<5	32 616
G03AD	Emergency contraceptives	241	1 091	285	151	141	0.0	8	125	8	0	39
G03AD01	levonorgestrel ¹⁾	113	131	71	64	56	0.0	<5	51	<5	0	13
G03AD02	ulipristal ¹⁾	129	962	216	88	85	0.0	6	74	5	0	26
G03B	ANDROGENS	8 752	10 714	12 260	14 554	15 427	2.9	33	3 932	9 162	2 300	63 799
G03BA	3-oxoandosten (4) derivatives	8 741	10 706	12 256	14 550	15 422	2.9	33	3 928	9 161	2 300	63 719
G03BA03	testosterone	8 741	10 706	12 256	14 550	15 422	2.9	33	3 928	9 161	2 300	63 719
G03BB	5-androstanon (3) derivatives	11	11	5	8	9	0.0	0	8	<5	0	80
G03BB01	mesterolone	11	11	5	8	9	0.0	0	8	<5	0	80
G03C	ESTROGENS	126 359	134 122	138 248	144 129	150 015	28.4	158	6 946	96 318	46 593	117 546
G03CA	Natural and semisynthetic estrogens, plain	119 654	127 204	131 606	137 669	143 976	27.3	157	6 814	91 344	45 661	108 497
G03CA01	ethinylestradiol	48	35	22	13	17	0.0	7	<5	5	<5	272

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ATC group G

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
G03CA03	estradiol	109 820	118 044	123 113	129 932	136 672	25.9		30	6 541	89 053	41 048	104 600
G03CA04	estriol ¹⁾	11 302	10 657	9 956	9 242	8 853	1.7		120	308	3 030	5 395	3 622
G03CA57	conjugated estrogens	<5	6	5	<5	5	0.0		0	0	<5	<5	2
G03CX	Other estrogens	7 534	7 896	7 503	7 301	6 897	1.3		<5	177	5 682	1 036	9 049
G03CX01	tibolone	7 534	7 896	7 503	7 301	6 897	1.3		<5	177	5 682	1 036	9 049
G03D	PROGESTOGENS	41 850	40 263	38 820	38 079	39 183	7.4		1 137	28 178	9 682	186	25 078
G03DA	Pregnen (4) derivatives	14 386	15 007	15 505	15 875	16 568	3.1		27	11 774	4 593	174	22 407
G03DA02	medroxyprogesterone	6 590	6 557	6 510	6 469	6 869	1.3		27	3 747	2 998	97	1 315
G03DA04	progesterone	7 929	8 612	9 172	9 584	9 934	1.9		0	8 223	1 634	77	21 091
G03DB	Pregnadien derivatives	159	169	172	191	241	0.1		<5	208	32	0	583
G03DB01	dydrogesterone	0	0	0	0	64	0.0		0	63	<5	0	66
G03DB06	chlormadinone	0	0	<5	<5	0	0.0		0	0	0	0	0
G03DB08	dienogest	159	169	171	190	177	0.0		<5	145	31	0	517
G03DC	Estren derivatives	28 086	25 847	23 943	22 767	23 274	4.4		1 113	16 957	5 191	13	2 089
G03DC02	norethisterone	28 086	25 847	23 943	22 767	23 274	4.4		1 113	16 957	5 191	13	2 089
G03F	PROGESTOGENS AND ESTROGENS IN COMBINATION	41 341	43 978	42 973	42 769	41 514	7.9		<5	2 661	34 800	4 051	35 946
G03FA	Progesterogens and estrogens, fixed combinations	32 658	34 657	33 672	33 661	32 749	6.2		<5	752	28 104	3 891	29 870
G03FA01	norethisterone and estrogen	31 956	33 829	32 779	32 742	31 823	6.0		<5	693	27 309	3 819	28 773
G03FA12	medroxyprogesterone and estrogen	801	954	997	1 014	1 027	0.2		0	61	893	73	1 097
G03FB	Progesterogens and estrogens, sequential preparations	9 671	10 426	10 358	10 196	9 801	1.9		0	1 978	7 659	164	6 076
G03FB05	norethisterone and estrogen	9 671	10 426	10 358	10 196	9 801	1.9		0	1 978	7 659	164	6 076
G03G	GONADOTROPINS AND OTHER OVULATION STIMULANTS	10 334	10 411	10 672	10 733	9 047	1.7		0	8 604	430	13	83 490
G03GA	Gonadotropins	6 317	6 475	6 933	7 143	7 587	1.4		0	7 310	271	6	82 138
G03GA01	chorionic gonadotrophin	1 143	990	655	639	736	0.1		0	560	170	6	428
G03GA02	human menopausal gonadotrophin	2 101	2 220	2 494	2 832	2 849	0.5		0	2 789	60	0	27 629
G03GA04	urofollitropin	268	461	81	5	<5	-		0	<5	0	0	8
G03GA05	follitropin alfa	1 926	2 004	2 628	2 812	3 532	0.7		0	3 478	54	0	34 456
G03GA06	follitropin beta	2 335	2 039	2 000	2 086	1 324	0.3		0	1 311	13	0	9 985
G03GA07	lutropin alfa	9	8	<5	0	0	0.0		0	0	0	0	0
G03GA08	choriogonadotropin alfa	5 007	5 308	6 007	6 240	6 467	1.2		0	6 375	92	0	3 698
G03GA09	corifollitropin alfa	323	289	313	352	486	0.1		0	473	13	0	3 756
G03GA10	follitropin delta	0	0	0	0	98	0.0		0	98	0	0	978

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group G

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
G03GA30	combinations	8	28	69	34	96	0.0		0	95	<5	0	1 200
G03GB	Ovulation stimulants, synthetic	5 048	4 883	4 732	4 489	1 935	0.4		0	1 739	189	7	1 351
G03GB02	clomifene	5 048	4 883	4 732	4 489	1 935	0.4		0	1 739	189	7	1 351
G03H	ANTIANDROGENS	17 481	15 961	15 321	14 968	14 553	2.8		101	13 936	453	63	6 585
G03HA	Antiandrogens, plain	175	160	199	221	255	0.1		0	146	47	62	640
G03HA01	ciproterone	175	160	199	221	255	0.1		0	146	47	62	640
G03HB	Antiandrogens and estrogens	17 309	15 802	15 127	14 749	14 301	2.7		101	13 793	406	<5	5 945
G03HB01	ciproterone and estrogen	17 309	15 802	15 127	14 749	14 301	2.7		101	13 793	406	<5	5 945
G03X	OTHER SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM	767	838	1 346	1 903	2 062	0.4		<5	738	1 124	199	10 866
G03XA	Antigonadotropins and similar agents	53	57	42	46	46	0.0		<5	14	21	10	199
G03XA01	danazol	53	57	42	46	46	0.0		<5	14	21	10	199
G03XB	Progesterone receptor modulators	15	255	965	1 559	1 766	0.3		0	724	1 041	<5	9 962
G03XB01	mifepristone	0	0	<5	<5	<5	-		0	0	<5	0	1
G03XB02	ulipristal	15	255	961	1 557	1 765	0.3		0	724	1 040	<5	9 961
G03XC	Selective estrogen receptor modulators	699	526	339	298	250	0.1		0	0	62	188	706
G03XC01	raloxifene	699	526	339	298	250	0.1		0	0	62	188	706
G04	UROLOGICALS	185 262	198 294	210 558	224 501	239 837	45.5		806	24 678	113 260	101 093	559 177
G04B	UROLOGICALS	128 788	136 885	144 559	154 260	165 502	31.4		806	21 338	87 899	55 459	447 045
G04BA	Acidifiers	0	<5	<5	<5	5	0.0		<5	<5	<5	0	51
G04BD	Drugs for urinary frequency and incontinence	52 117	56 111	59 253	62 109	65 824	12.5		757	6 007	25 301	33 759	206 057
G04BD04	oxybutynin	1 468	1 624	1 881	2 364	2 839	0.5		161	1 536	736	406	14 080
G04BD07	tolterodine	11 304	9 815	8 622	7 939	7 389	1.4		374	397	2 368	4 250	15 597
G04BD08	solifenacin	20 910	18 606	17 575	17 047	16 400	3.1		242	1 089	6 368	8 701	46 797
G04BD10	darifenacin	3 475	2 862	2 453	2 187	2 011	0.4		<5	87	713	1 207	6 067
G04BD11	fesoterodine	13 441	11 256	10 029	9 437	8 942	1.7		<5	541	3 616	4 783	28 156
G04BD12	mirabegron	6 735	17 823	24 298	28 867	34 219	6.5		25	2 813	13 822	17 559	95 359
G04BE	Drugs used in erectile dysfunction	78 488	82 779	87 397	94 327	101 982	19.3		42	15 320	63 843	22 777	240 653
G04BE01	alprostadil	2 893	3 165	3 134	3 169	3 091	0.6		0	144	1 748	1 199	5 866
G04BE03	sildenafil	35 222	36 589	39 748	44 279	49 803	9.4		42	7 559	30 694	11 508	68 644
G04BE04	yohimbine	11	11	<5	0	0	0.0		0	0	0	0	0
G04BE08	tadalafil	40 063	43 262	45 286	48 390	50 838	9.6		0	8 033	32 599	10 206	150 526
G04BE09	vardenafil	8 785	8 321	8 096	8 256	8 188	1.6		0	990	5 246	1 952	13 773

ATC group G

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
G04BE10	avanafil	0	0	0	0	286	0.1		0	39	193	54	149
G04BE30	combinations	293	326	333	403	636	0.1		0	27	412	197	1 695
G04BX	Other urologicals	23	37	55	169	317	0.1		<5	207	97	9	285
G04BX01	magnesium hydroxide	19	20	14	23	17	0.0		<5	7	<5	<5	32
G04BX13	dimethyl sulfoxide	0	0	<5	<5	<5	-		0	0	<5	0	18
G04BX14	dapoxetine	0	13	37	139	294	0.1		0	198	92	<5	180
G04BX16	tiopronin	<5	<5	<5	<5	5	0.0		<5	<5	0	<5	55
G04C	DRUGS USED IN BENIGN PROSTATIC HYPERPLASIA	66 317	72 725	78 573	83 917	89 368	16.9		0	3 627	31 637	54 104	112 132
G04CA	Alpha-adrenoreceptor antagonists	53 898	60 216	66 020	71 252	76 632	14.5		0	1 849	29 016	45 767	93 176
G04CA01	alfuzosin	48	16	27	28	23	0.0		0	0	9	14	52
G04CA02	tamsulosin	45 144	47 791	50 318	52 615	55 027	10.4		0	1 746	22 424	30 857	41 283
G04CA03	terazosin	601	547	502	509	421	0.1		0	47	168	206	387
G04CA52	tamsulosin and dutasteride	10 799	14 946	18 363	21 617	24 463	4.6		0	47	7 628	16 788	49 623
G04CA53	tamsulosin and solifenacin	0	0	25	348	703	0.1		0	21	311	371	1 830
G04CB	Testosterone-5-alpha reductase inhibitors	18 209	17 815	17 547	17 492	17 414	3.3		0	1 788	3 752	11 874	18 956
G04CB01	finasteride	17 016	16 774	16 639	16 687	16 763	3.2		0	1 752	3 625	11 386	17 137
G04CB02	dutasteride	1 258	1 098	962	846	686	0.1		0	47	134	505	1 819

3.10 ATC group H – Systemic hormonal preparations, excl. sex hormones and insulins

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
H	SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMONES AND INSULINS	422 537	437 511	445 510	452 531	463 794	87.9	17 922	114 393	196 870	134 609	512 630
H01	PITUITARY AND HYPOTHALAMIC HORMONES AND ANALOGUES	25 586	26 356	26 936	26 687	27 881	5.3	9 853	14 462	2 027	1 539	289 967
H01A	ANTERIOR PITUITARY LOBE HORMONES AND ANALOGUES	1 975	2 027	2 079	2 091	2 133	0.4	1 151	606	320	56	88 097
H01AA	ACTH	<5	0	<5	<5	<5	-	<5	<5	0	0	20
H01AA02	tetracosactide	<5	0	<5	<5	<5	-	<5	<5	0	0	20
H01AB	Thyrotropin	16	0	0	<5	0	0.0	0	0	0	0	0
H01AB01	thyrotropin alfa	16	0	0	<5	0	0.0	0	0	0	0	0
H01AC	Somatotropin and somatotropin agonists	1 928	1 995	2 042	2 048	2 087	0.4	1 148	595	294	50	75 244
H01AC01	somatotropin	1 928	1 995	2 042	2 046	2 083	0.4	1 147	592	294	50	74 861
H01AC03	mecasermin	0	0	0	<5	6	0.0	<5	<5	<5	0	383
H01AX	Other anterior pituitary lobe hormones and analogues	30	32	35	40	42	0.0	0	10	26	6	12 832
H01AX01	pegvisomant	30	32	35	40	42	0.0	0	10	26	6	12 832
H01B	POSTERIOR PITUITARY LOBE HORMONES	19 133	18 980	18 918	18 399	19 303	3.7	8 741	8 236	1 216	1 110	49 014
H01BA	Vasopressin and analogues	11 257	11 736	11 854	11 662	11 983	2.3	8 688	1 041	1 148	1 106	47 371
H01BA02	desmopressin	11 257	11 736	11 854	11 662	11 982	2.3	8 688	1 041	1 148	1 105	47 344
H01BA04	terlipressin	0	0	0	0	<5	-	0	0	0	<5	27
H01BB	Oxytocin and analogues	7 878	7 249	7 066	6 737	7 320	1.4	53	7 195	68	<5	1 643
H01BB02	oxytocin	7 878	7 249	7 066	6 737	7 320	1.4	53	7 195	68	<5	1 643
H01C	HYPOTHALAMIC HORMONES	4 737	5 608	6 197	6 487	6 745	1.3	10	5 775	576	384	152 856
H01CA	Gonadotropin-releasing hormones	2 337	2 833	3 031	2 954	2 632	0.5	<5	2 603	28	0	5 993
H01CA02	nafarelin	2 337	2 833	3 031	2 954	2 632	0.5	<5	2 603	28	0	5 993
H01CB	Somatostatin and analogues	751	830	895	927	944	0.2	9	61	490	384	134 860
H01CB02	octreotide	569	603	638	616	617	0.1	<5	44	320	252	74 817
H01CB03	lanreotide	204	248	291	329	351	0.1	9	17	180	145	56 861
H01CB05	pasireotide	<5	<5	5	5	11	0.0	0	<5	7	<5	3 181
H01CC	Anti-gonadotropin-releasing hormones	1 934	2 304	2 686	3 082	3 650	0.7	0	3 586	64	0	12 004
H01CC01	ganirelix	1 504	2 075	2 608	3 011	3 071	0.6	0	3 014	57	0	9 730
H01CC02	cetrorelix	451	286	109	143	753	0.1	0	743	10	0	2 274
H02	CORTICOSTEROIDS FOR SYSTEMIC USE	216 737	227 420	231 199	233 848	240 224	45.5	5 835	62 161	100 628	71 600	78 816

ATC group H

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
H02A	CORTICOSTEROIDS FOR SYSTEMIC USE, PLAIN	216 497	227 187	230 961	233 616	240 195	45.5	5 835	62 158	100 609	71 593	78 802
H02AA	Mineralocorticoids	1 367	1 403	1 442	1 490	1 546	0.3	93	457	654	342	455
H02AA02	fludrocortisone	1 367	1 403	1 442	1 490	1 546	0.3	93	457	654	342	455
H02AB	Glucocorticoids	216 331	227 005	230 772	233 414	239 986	45.5	5 828	62 121	100 549	71 488	78 347
H02AB01	betamethasone	1 988	2 307	2 651	2 982	3 476	0.7	1 987	514	739	236	833
H02AB02	dexamethasone	3 485	5 508	7 265	8 837	10 446	2.0	323	991	5 243	3 889	15 319
H02AB04	methylprednisolone	11 015	10 306	9 767	9 093	7 919	1.5	32	1 641	3 873	2 373	2 884
H02AB06	prednisolone	168 968	174 044	177 337	181 260	187 335	35.5	3 020	41 433	78 998	63 884	33 691
H02AB07	prednisone	347	330	303	294	268	0.1	0	37	98	133	821
H02AB08	triamcinolone	34 019	38 537	37 520	35 086	34 710	6.6	356	18 117	13 656	2 581	5 340
H02AB09	hydrocortisone	637	683	700	827	948	0.2	89	340	432	87	12 526
H02AB10	cortisone	2 820	2 905	3 006	3 130	3 254	0.6	107	808	1 501	838	6 610
H02AB13	deflazacort	26	36	45	51	55	0.0	29	16	5	5	324
H02B	CORTICOSTEROIDS FOR SYSTEMIC USE, COMBINATIONS	386	416	418	402	107	0.0	0	11	59	37	15
H02BX	Corticosteroids for systemic use, combinations	386	416	418	402	107	0.0	0	11	59	37	15
H02BX01	methylprednisolone, combinations	386	416	418	402	107	0.0	0	11	59	37	15
H03	THYROID THERAPY	197 795	202 576	207 060	212 089	216 620	41.1	1 359	40 237	103 533	71 491	92 629
H03A	THYROID PREPARATIONS	193 254	197 828	202 208	207 170	211 335	40.1	1 325	38 702	101 212	70 096	85 431
H03AA	Thyroid hormones	193 254	197 828	202 208	207 170	211 335	40.1	1 325	38 702	101 212	70 096	85 431
H03AA01	levothyroxine sodium	192 528	196 793	200 932	205 630	209 382	39.7	1 318	38 096	99 994	69 974	65 230
H03AA02	liothyronine sodium	4 750	5 361	6 206	7 273	8 412	1.6	19	2 457	5 066	870	6 116
H03AA03	combinations of levothyroxine and liothyronine	<5	<5	<5	<5	<5	-	0	<5	<5	0	4
H03AA05	thyroid gland preparations	1 196	1 828	2 656	3 407	4 144	0.8	<5	1 325	2 596	219	14 080
H03B	ANTITHYROID PREPARATIONS	6 398	6 713	6 923	7 103	7 525	1.4	61	2 384	3 399	1 681	7 194
H03BA	Thiouracils	581	733	629	557	559	0.1	<5	274	224	58	609
H03BA02	propylthiouracil	581	733	629	557	559	0.1	<5	274	224	58	609
H03BB	Sulfur-containing imidazole derivatives	6 039	6 239	6 483	6 729	7 157	1.4	59	2 228	3 234	1 636	6 586
H03BB01	carbimazole	6 039	6 239	6 483	6 729	7 157	1.4	59	2 228	3 234	1 636	6 586
H03C	IODINE THERAPY	<5	6	12	7	<5	-	0	<5	0	<5	3
H03CA	Iodine therapy	<5	6	12	7	<5	-	0	<5	0	<5	3
H04	PANCREATIC HORMONES	5 688	5 495	5 398	5 588	5 427	1.0	1 185	2 358	1 479	405	2 208

ATC group H

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
H04A	GLYCOGENOLYTIC HORMONES	5 688	5 495	5 398	5 588	5 427	1.0	1 185	2 358	1 479	405	2 208
H04AA	Glycogenolytic hormones	5 688	5 495	5 398	5 588	5 427	1.0	1 185	2 358	1 479	405	2 208
H04AA01	glucagon	5 688	5 495	5 398	5 588	5 427	1.0	1 185	2 358	1 479	405	2 208
H05	CALCIUM HOMEOSTASIS	1 224	1 375	1 559	1 827	2 096	0.4	0	160	990	946	49 007
H05A	PARATHYROID HORMONES AND ANALOGUES	468	608	720	931	1 151	0.2	0	78	623	450	36 179
H05AA	Parathyroid hormones and analogues	468	608	720	931	1 151	0.2	0	78	623	450	36 179
H05AA02	teriparatide	467	608	720	931	1 151	0.2	0	78	623	450	35 700
H05AA03	parathyroid hormone	<5	0	0	0	<5	-	0	0	<5	0	479
H05B	ANTI-PARATHYROID AGENTS	756	767	839	896	945	0.2	0	82	367	496	12 828
H05BA	Calcitonin preparations	21	16	8	7	8	0.0	0	0	<5	<5	80
H05BA01	calcitonin (salmon synthetic)	21	16	8	7	8	0.0	0	0	<5	<5	80
H05BX	Other anti-parathyroid agents	735	751	831	889	937	0.2	0	82	363	492	12 748
H05BX01	cinacalcet	525	520	569	615	674	0.1	0	45	242	387	8 605
H05BX02	paricalcitol	284	289	309	341	333	0.1	0	47	156	130	4 143

3.11 ATC group J – Antiinfectives for systemic use

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
J	ANTIINFECTIVES FOR SYSTEMIC USE	1 288 914	1 252 912	1 239 437	1 209 403	1 177 724	223.2	127 743	457 401	381 958	210 622	1 501 250
J01	ANTIBACTERIALS FOR SYSTEMIC USE	1 195 320	1 172 061	1 151 022	1 109 722	1 063 315	201.5	121 674	405 823	342 861	192 957	298 886
J01A	TETRACYCLINES	187 918	179 821	181 376	168 809	159 385	30.2	2 429	81 634	51 481	23 841	31 885
J01AA	Tetracyclines	187 918	179 821	181 376	168 809	159 385	30.2	2 429	81 634	51 481	23 841	31 885
J01AA02	doxycycline	145 943	138 206	141 612	131 272	122 266	23.2	1 210	54 889	43 818	22 349	19 022
J01AA04	lymecycline	23 686	24 963	24 562	23 337	24 396	4.6	852	18 258	4 539	747	9 108
J01AA06	oxytetracycline	10	32	21	30	26	0.0	<5	9	16	0	9
J01AA07	tetracycline	20 959	19 709	18 062	16 804	15 267	2.9	412	10 244	3 754	857	3 710
J01AA08	minocycline	240	95	56	35	28	0.0	0	14	8	6	36
J01AA12	tigecycline	<5	<5	<5	<5	0	0.0	0	0	0	0	0
J01B	AMPHENICOLS	0	0	0	<5	0	0.0	0	0	0	0	0
J01BA	Amphenicols	0	0	0	<5	0	0.0	0	0	0	0	0
J01BA01	chloramphenicol	0	0	0	<5	0	0.0	0	0	0	0	0
J01C	BETA-LACTAM ANTI-BACTERIALS, PENICILLINS	774 820	774 578	769 300	750 891	730 187	138.4	91 513	271 347	231 051	136 276	134 989
J01CA	Penicillins with extended spectrum	321 225	323 045	319 427	311 008	298 397	56.6	23 937	92 647	100 180	81 633	57 128
J01CA01	ampicillin	57	46	49	62	54	0.0	<5	6	20	27	68
J01CA04	amoxicillin	134 844	133 023	132 453	125 992	119 990	22.7	19 930	27 151	41 750	31 159	18 257
J01CA08	pivmecillinam	200 464	203 727	200 845	198 004	190 781	36.2	4 248	67 899	62 699	55 935	38 764
J01CA11	mecillinam	8	11	10	16	18	0.0	<5	<5	10	6	39
J01CE	Beta-lactamase sensitive penicillins	438 658	421 779	417 056	404 417	394 483	74.8	67 896	158 497	116 722	51 368	53 769
J01CE01	benzylpenicillin	103	127	120	149	166	0.0	<5	15	61	88	196
J01CE02	phenoxyethylpenicillin	438 508	421 648	416 910	404 289	394 344	74.7	67 893	158 463	116 667	51 321	53 291
J01CE08	benzathine benzylpenicillin	112	82	87	60	57	0.0	<5	32	18	<5	282
J01CF	Beta-lactamase resistant penicillins	87 628	104 462	105 979	105 128	103 589	19.6	5 369	42 368	35 887	19 965	22 566
J01CF01	dicloxacillin	81 161	101 196	104 231	103 820	103 272	19.6	5 265	42 296	35 815	19 896	22 068
J01CF02	cloxacillin	8 105	3 964	2 210	1 624	379	0.1	61	97	123	98	302
J01CF05	flucloxacillin	28	22	29	47	66	0.0	62	<5	0	<5	195
J01CR	Combinations of penicillins, incl. beta-lactamase inhibitors	434	652	770	1 017	1 652	0.3	868	164	293	327	1 527
J01CR02	amoxicillin and beta-lactamase inhibitor	381	599	695	916	1 588	0.3	867	153	271	297	1 263
J01CR05	piperacillin and beta-lactamase inhibitor	53	53	79	104	66	0.0	<5	11	23	31	264
J01D	OTHER BETA-LACTAM ANTIBACTERIALS	22 070	19 475	17 367	14 827	13 449	2.6	2 040	4 818	4 366	2 225	6 531

ATC group J

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
J01DB	First-generation cephalosporins	20 949	18 026	16 071	13 968	12 546	2.4	1 969	4 480	4 083	2 014	1 966
J01DB01	cefalexin	20 940	18 012	16 055	13 951	12 529	2.4	1 969	4 473	4 080	2 007	1 949
J01DB03	cefalotin	9	15	16	19	17	0.0	0	7	<5	7	18
J01DC	Second-generation cephalosporins	98	78	93	97	72	0.0	<5	<5	22	45	61
J01DC02	cefuroxime	98	78	93	97	72	0.0	<5	<5	22	45	61
J01DD	Third-generation cephalosporins	1 010	1 373	1 172	740	785	0.2	71	323	240	151	2 366
J01DD01	cefotaxime	703	1 054	790	363	305	0.1	<5	110	125	67	652
J01DD02	ceftazidime	73	77	69	68	75	0.0	11	30	19	15	524
J01DD04	ceftriaxone	238	244	313	312	412	0.1	57	186	99	70	1 190
J01DF	Monobactams	10	13	14	13	16	0.0	<5	9	<5	<5	801
J01DF01	aztreonam	10	13	14	13	16	0.0	<5	9	<5	<5	801
J01DH	Carbapenems	85	65	86	73	86	0.0	<5	25	25	34	1 143
J01DH02	meropenem	62	49	49	58	63	0.0	<5	20	18	24	674
J01DH03	ertapenem	17	16	32	10	21	0.0	0	5	6	10	352
J01DH51	imipenem and cilastatin	7	<5	9	8	<5	-	<5	<5	<5	<5	117
J01DI	Other cephalosporins and penems	0	0	0	0	<5	-	0	<5	0	0	194
J01DI54	ceftolozane and beta-lactamase inhibitor	0	0	0	0	<5	-	0	<5	0	0	194
J01E	SULFONAMIDES AND TRIMETHOPRIM	116 722	121 251	121 068	121 722	121 434	23.0	12 527	30 180	41 081	37 646	13 786
J01EA	Trimethoprim and derivatives	78 689	76 472	72 142	69 823	68 123	12.9	7 299	18 100	21 375	21 349	5 935
J01EA01	trimethoprim	78 689	76 472	72 142	69 823	68 123	12.9	7 299	18 100	21 375	21 349	5 935
J01EC	Intermediate-acting sulfonamides	0	0	0	<5	9	0.0	0	6	<5	<5	15
J01EC02	sulfadiazine	0	0	0	<5	9	0.0	0	6	<5	<5	15
J01EE	Combinations of sulfonamides and trimethoprim, incl. derivatives	42 790	49 930	54 153	57 183	58 807	11.1	5 697	12 966	21 394	18 750	7 836
J01EE01	sulfamethoxazole and trimethoprim	42 790	49 930	54 153	57 183	58 807	11.1	5 697	12 966	21 394	18 750	7 836
J01F	MACROLIDES, LINCOSAMIDES AND STREPTOGRAMINS	296 521	267 602	242 347	217 006	187 736	35.6	26 987	77 748	61 776	21 225	32 767
J01FA	Macrolides	238 975	212 200	190 231	168 977	145 999	27.7	23 084	61 743	46 570	14 602	23 337
J01FA01	erythromycin	120 963	110 826	101 160	92 247	82 929	15.7	19 363	30 200	24 745	8 621	12 671
J01FA02	spiramycin	2 018	1 863	1 652	1 307	1 065	0.2	18	356	515	176	174
J01FA06	roxithromycin	<5	5	<5	10	<5	-	0	<5	0	<5	3
J01FA09	clarithromycin	34 941	29 173	24 069	18 856	15 730	3.0	1 504	5 882	6 058	2 286	2 994

ATC group J

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
J01FA10	azithromycin	90 289	77 639	69 386	61 238	49 933	9.5	2 589	26 896	16 575	3 873	7 496
J01FA15	telithromycin	6	<5	<5	0	0	0.0	0	0	0	0	0
J01FF	Lincosamides	66 378	63 250	59 149	53 932	46 587	8.8	4 415	18 046	16 911	7 215	9 430
J01FF01	clindamycin	66 378	63 250	59 149	53 932	46 587	8.8	4 415	18 046	16 911	7 215	9 430
J01G	AMINOGLYCOSIDE ANTIBACTERIALS	242	258	214	216	222	0.0	48	100	49	25	9 034
J01GA	Streptomycins	<5	<5	0	<5	0	0.0	0	0	0	0	0
J01GA01	streptomycin	<5	<5	0	<5	0	0.0	0	0	0	0	0
J01GB	Other aminoglycosides	241	257	214	215	222	0.0	48	100	49	25	9 034
J01GB01	tobramycin	211	213	177	168	172	0.0	42	82	29	19	6 427
J01GB03	gentamicin	21	34	24	32	32	0.0	5	8	13	6	1 234
J01GB06	amikacin	9	11	13	15	20	0.0	<5	11	7	0	1 373
J01M	QUINOLONE ANTIBACTERIALS	68 203	65 117	58 858	53 197	45 649	8.7	384	11 168	18 479	15 618	12 009
J01MA	Fluoroquinolones	68 203	65 117	58 858	53 197	45 649	8.7	384	11 168	18 479	15 618	12 009
J01MA01	ofloxacin	1 647	1 496	1 312	1 083	941	0.2	<5	243	414	283	308
J01MA02	ciprofloxacin	66 556	63 320	56 847	51 047	43 221	8.2	381	9 430	18 041	15 369	10 125
J01MA12	levofloxacin	18	29	21	24	60	0.0	<5	27	24	8	306
J01MA14	moxifloxacin	290	547	939	1 247	1 600	0.3	<5	1 519	70	10	1 269
J01X	OTHER ANTIBACTERIALS	61 581	63 139	64 278	65 539	66 806	12.7	1 153	11 691	23 001	30 961	57 885
J01XA	Glycopeptide antibiotics	29	31	44	47	43	0.0	8	8	15	12	349
J01XA01	vancomycin	28	30	44	47	42	0.0	8	7	15	12	340
J01XA02	teicoplanin	<5	<5	0	0	<5	-	0	<5	0	0	9
J01XB	Polymyxins	79	88	94	111	111	0.0	6	60	34	11	3 812
J01XB01	colistin	79	88	94	111	111	0.0	6	60	34	11	3 812
J01XC	Steroid antibacterials	646	481	411	346	326	0.1	18	107	112	89	272
J01XC01	fusidic acid	646	481	411	346	326	0.1	18	107	112	89	272
J01XD	Imidazole derivatives	28	30	34	30	27	0.0	0	<5	16	9	75
J01XD01	metronidazole	28	30	34	30	27	0.0	0	<5	16	9	75
J01XE	Nitrofuran derivatives	36 821	36 895	36 527	36 830	37 003	7.0	1 025	8 426	13 012	14 540	4 333
J01XE01	nitrofurantoin	36 821	36 895	36 527	36 830	37 003	7.0	1 025	8 426	13 012	14 540	4 333
J01XX	Other antibacterials	29 569	31 554	33 306	34 356	35 522	6.7	134	3 844	11 909	19 635	49 044
J01XX01	fosfomycin	6	7	19	19	30	0.0	0	10	7	13	143
J01XX05	methenamine	29 300	31 313	33 030	34 039	35 183	6.7	134	3 791	11 765	19 493	41 481
J01XX08	linezolid	273	250	275	305	314	0.1	0	42	137	135	4 751
J01XX09	daptomycin	<5	0	<5	0	0	0.0	0	0	0	0	0
J01XX11	tedizolid	0	0	0	9	18	0.0	0	<5	11	5	2 669

ATC group J

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
J02	ANTIMYCOTICS FOR SYSTEMIC USE	48 187	48 649	47 203	43 725	41 387	7.8	442	25 356	12 071	3 518	31 208
J02A	ANTIMYCOTICS FOR SYSTEMIC USE	48 187	48 649	47 203	43 725	41 387	7.8	442	25 356	12 071	3 518	31 208
J02AA	Antibiotics	<5	<5	5	<5	<5	-	<5	0	0	<5	199
J02AA01	amphotericin B	<5	<5	5	<5	<5	-	<5	0	0	<5	199
J02AB	Imidazole derivatives	1 716	0	25	11	8	0.0	0	5	<5	0	281
J02AB02	ketoconazole	1 716	0	25	11	8	0.0	0	5	<5	0	281
J02AC	Triazole derivatives	46 571	48 646	47 180	43 708	41 371	7.8	441	25 350	12 067	3 513	29 559
J02AC01	fluconazole ¹⁾	46 203	48 145	46 746	43 304	41 008	7.8	433	25 184	11 925	3 466	17 323
J02AC02	itraconazole	576	703	526	401	365	0.1	<5	218	116	30	697
J02AC03	voriconazole	87	85	103	105	97	0.0	<5	22	45	26	3 987
J02AC04	posaconazole	63	85	101	120	106	0.0	8	28	61	9	7 322
J02AC05	isavuconazole	0	0	0	0	<5	-	0	<5	<5	<5	230
J02AX	Other antimycotics for systemic use	7	5	8	10	10	0.0	0	<5	<5	<5	1 169
J02AX04	caspofungin	<5	<5	<5	<5	<5	-	0	0	0	<5	27
J02AX05	micafungin	<5	<5	5	<5	<5	-	0	0	<5	<5	503
J02AX06	anidulafungin	0	0	<5	5	5	0.0	0	<5	<5	<5	639
J04	ANTIMYCOBACTERIALS	1 980	2 105	1 792	1 971	1 998	0.4	183	778	637	400	8 008
J04A	DRUGS FOR TREATMENT OF TUBERCULOSIS	1 524	1 636	1 347	1 496	1 517	0.3	171	674	404	268	7 607
J04AA	Aminosalicylic acid and derivatives	0	0	<5	<5	0	0.0	0	0	0	0	0
J04AA01	4-aminosalicylic acid	0	0	<5	<5	0	0.0	0	0	0	0	0
J04AB	Antibiotics	563	656	636	940	1 031	0.2	156	366	278	231	4 402
J04AB01	cycloserine	0	0	12	13	12	0.0	0	8	<5	0	903
J04AB02	rifampicin	555	644	583	651	696	0.1	82	160	226	228	1 245
J04AB04	rifabutin	9	12	5	6	11	0.0	0	<5	6	<5	274
J04AB05	rifapentine	0	0	36	272	319	0.1	78	195	44	<5	1 980
J04AB30	capreomycin	0	0	0	<5	0	0.0	0	0	0	0	0
J04AC	Hydrazides	95	78	115	336	378	0.1	84	219	64	11	361
J04AC01	isoniazid	95	78	115	336	378	0.1	84	219	64	11	361
J04AD	Thiocarbamide derivatives	0	0	6	6	11	0.0	0	8	<5	0	153
J04AD01	protionamide	0	0	6	6	11	0.0	0	8	<5	0	153
J04AK	Other drugs for treatment of tuberculosis	318	291	233	204	177	0.0	12	81	45	39	995
J04AK01	pyrazinamide	68	58	41	46	40	0.0	11	22	<5	5	81
J04AK02	ethambutol	304	273	219	181	162	0.0	6	74	45	37	672

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group J

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
J04AK05	bedaquiline	0	<5	0	0	<5	-	0	0	<5	0	242
J04AM	Combinations of drugs for treatment of tuberculosis	917	976	678	529	471	0.1	17	307	114	33	1 694
J04AM02	rifampicin and isoniazid	856	915	636	466	420	0.1	15	270	107	28	1 134
J04AM05	rifampicin, pyrazinamide and isoniazid	225	178	129	126	95	0.0	<5	64	21	8	208
J04AM06	rifampicin, pyrazinamide, ethambutol and isoniazid	14	53	68	101	128	0.0	5	86	28	9	352
J04B	DRUGS FOR TREATMENT OF LEPROSY	457	470	448	475	485	0.1	12	106	235	132	401
J04BA	Drugs for treatment of leprosy	457	470	448	475	485	0.1	12	106	235	132	401
J04BA01	clofazimine	0	0	<5	5	9	0.0	<5	<5	<5	0	44
J04BA02	dapsone	457	470	445	470	476	0.1	10	102	232	132	357
J05	ANTIVIRALS FOR SYSTEMIC USE	39 342	39 587	43 664	48 150	53 194	10.1	816	26 089	19 800	6 489	1 013 184
J05A	DIRECT ACTING ANTIVIRALS	39 342	39 587	43 664	48 150	53 194	10.1	816	26 089	19 800	6 489	1 013 184
J05AB	Nucleosides and nucleotides excl. reverse transcriptase inhibitors	31 271	33 914	37 004	40 201	43 852	8.3	721	21 843	15 366	5 922	45 447
J05AB01	aciclovir	12 598	12 720	13 191	13 449	13 519	2.6	480	7 168	4 470	1 401	5 873
J05AB06	ganciclovir	<5	<5	<5	<5	<5	-	<5	0	<5	0	7
J05AB09	famciclovir	<5	<5	<5	<5	<5	-	0	<5	<5	0	8
J05AB11	valacyclovir	18 985	21 583	24 257	27 263	30 907	5.9	243	15 175	10 976	4 513	27 681
J05AB14	valganciclovir	365	379	371	377	439	0.1	18	103	241	77	11 877
J05AD	Phosphonic acid derivatives	<5	<5	<5	0	0	0.0	0	0	0	0	0
J05AD01	foscarnet	<5	<5	<5	0	0	0.0	0	0	0	0	0
J05AE	Protease inhibitors	1 307	1 339	1 064	772	508	0.1	<5	250	243	13	22 505
J05AE01	saquinavir	7	5	<5	<5	<5	-	0	<5	0	<5	63
J05AE03	ritonavir	963	1 004	811	605	399	0.1	<5	203	183	11	1 511
J05AE07	fosamprenavir	<5	0	0	0	0	0.0	0	0	0	0	0
J05AE08	atazanavir	1 140	1 121	850	573	353	0.1	<5	173	172	6	14 616
J05AE10	darunavir	177	228	218	200	148	0.0	0	74	67	7	6 316
J05AF	Nucleoside and nucleotide reverse transcriptase inhibitors	587	663	778	941	1 095	0.2	21	494	539	41	30 829
J05AF01	zidovudine	36	21	15	14	19	0.0	8	<5	9	0	79
J05AF02	didanosine	15	11	5	0	0	0.0	0	0	0	0	0
J05AF05	lamivudine	100	89	94	84	75	0.0	13	14	41	7	806
J05AF06	abacavir	66	58	67	67	58	0.0	13	12	29	<5	1 651
J05AF07	tenofovir disoproxil	297	355	421	514	557	0.1	0	294	250	13	8 099
J05AF08	adefovir dipivoxil	10	10	9	6	5	0.0	0	<5	<5	0	272

ATC group J

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
J05AF09	emtricitabine	8	7	6	6	<5	-	0	0	<5	0	50
J05AF10	entecavir	175	210	271	343	410	0.1	0	168	223	19	16 495
J05AF11	telbivudine	<5	<5	<5	<5	0	0.0	0	0	0	0	0
J05AF13	tenofovir alafenamide	0	0	0	0	121	0.0	0	60	56	5	3 376
J05AG	Non-nucleoside reverse transcriptase inhibitors	398	346	307	246	197	0.0	6	58	120	13	4 994
J05AG01	nevirapine	164	158	147	126	99	0.0	<5	34	56	7	2 365
J05AG03	efavirenz	192	147	119	76	46	0.0	<5	9	28	5	1 081
J05AG04	etravirine	35	31	29	28	24	0.0	0	8	16	0	823
J05AG05	rilpivirine	12	15	14	19	31	0.0	0	7	23	<5	724
J05AH	Neuraminidase inhibitors	3 993	1 098	1 528	2 153	1 923	0.4	64	717	759	383	495
J05AH01	zanamivir	85	18	52	25	0	0.0	0	0	0	0	0
J05AH02	oseltamivir	3 911	1 080	1 477	2 129	1 923	0.4	64	717	759	383	495
J05AP	Antivirals for treatment of HCV infections	790	799	1 037	1 175	1 955	0.4	<5	753	1 178	23	477 516
J05AP01	ribavirin	785	696	561	754	380	0.1	<5	126	250	<5	3 963
J05AP02	telaprevir	85	25	0	0	0	0.0	0	0	0	0	0
J05AP03	boceprevir	161	61	<5	0	0	0.0	0	0	0	0	0
J05AP05	simeprevir	0	94	69	5	<5	-	0	0	<5	0	533
J05AP07	daclatasvir	0	32	129	235	47	0.0	0	13	34	0	9 049
J05AP08	sofosbuvir	0	450	360	384	101	0.0	0	27	73	<5	36 788
J05AP09	dasabuvir	0	0	12	299	105	0.0	0	41	61	<5	1 244
J05AP51	sofosbuvir and ledipasvir	0	0	534	312	29	0.0	0	6	22	<5	11 073
J05AP53	ombitasvir, paritaprevir and ritonavir	0	0	13	312	107	0.0	0	41	63	<5	14 296
J05AP54	elbasvir and grazoprevir	0	0	0	0	1 152	0.2	0	488	651	13	125 115
J05AP55	sofosbuvir and velpatasvir	0	0	0	51	504	0.1	0	135	366	<5	274 685
J05AP56	sofosbuvir, velpatasvir and voxilaprevir	0	0	0	0	<5	-	0	0	0	<5	606
J05AP57	glecaprevir and pibrentasvir	0	0	0	0	<5	-	0	0	0	<5	162
J05AR	Antivirals for treatment of HIV infections, combinations	3 043	3 369	3 638	4 082	4 821	0.9	17	2 456	2 208	140	398 594
J05AR01	zidovudine and lamivudine	249	181	130	104	64	0.0	<5	21	38	<5	1 873
J05AR02	lamivudine and abacavir	376	424	307	195	131	0.0	5	52	68	6	4 349
J05AR03	tenofovir disoproxil and emtricitabine	1 526	1 589	1 536	1 454	1 627	0.3	<5	1 109	498	18	45 444
J05AR04	zidovudine, lamivudine and abacavir	17	12	11	7	5	0.0	0	<5	<5	<5	295
J05AR06	emtricitabine, tenofovir disoproxil and efavirenz	792	789	732	649	467	0.1	0	188	265	14	36 107

ATC group J

ATC level	ATC group J	2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				Sales in 1000 NOK
		<15	15–44	45–69	≥70	<15	15–44	45–69	≥70	<15	15–44	45–69	
J05AR08	emtricitabine, tenofovir disoproxil and rilpivirine	339	514	576	600	324	0.1	0	165	151	8	21 467	
J05AR09	emtricitabine, tenofovir disoproxil, elvitegravir and cobicistat	33	135	265	259	104	0.0	0	47	55	<5	8 074	
J05AR10	lopinavir and ritonavir	401	298	212	145	89	0.0	5	34	46	<5	3 068	
J05AR13	lamivudine, abacavir and dolutegravir	0	91	610	968	1 200	0.2	5	497	643	55	121 498	
J05AR14	darunavir and cobicistat	0	0	17	48	83	0.0	0	36	46	<5	3 555	
J05AR15	atazanavir and cobicistat	0	0	<5	6	7	0.0	0	<5	<5	0	247	
J05AR17	emtricitabine and tenofovir alafenamide	0	0	0	95	329	0.1	0	116	195	18	15 806	
J05AR18	emtricitabine, tenofovir alafenamide, elvitegravir and cobicistat	0	0	0	482	891	0.2	<5	404	457	28	91 716	
J05AR19	emtricitabine, tenofovir alafenamide and rilpivirine	0	0	0	155	548	0.1	0	244	289	15	45 095	
J05AX	Other antivirals	379	601	743	836	839	0.2	9	475	336	19	32 806	
J05AX05	inosine pranobex	45	40	25	18	13	0.0	<5	5	6	<5	78	
J05AX08	raltegravir	333	470	580	638	583	0.1	8	373	189	13	17 417	
J05AX09	maraviroc	8	8	8	7	6	0.0	0	<5	<5	0	458	
J05AX12	dolutegravir	0	105	143	194	246	0.1	<5	96	144	5	14 852	

3.12 ATC group L – Antineoplastic and immunomodulating agents

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
L	ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	90 729	95 220	99 426	104 942	111 469	21.1	1 512	25 218	51 335	33 404	4 028 825
L02	ENDOCRINE THERAPY	26 900	26 977	27 821	28 869	31 639	6.0	184	5 507	10 615	15 333	394 631
L02A	HORMONES AND RELATED AGENTS	11 171	10 472	10 398	10 452	10 640	2.0	182	1 687	1 855	6 916	102 980
L02AA	Estrogens	<5	0	<5	<5	0	0.0	0	0	0	0	0
L02AA02	polyestradiol phosphate	<5	0	<5	<5	0	0.0	0	0	0	0	0
L02AB	Progestogens	154	142	138	138	130	0.0	0	6	45	79	324
L02AB01	megestrol	154	142	138	138	130	0.0	0	6	45	79	324
L02AE	Gonadotropin releasing hormone analogues	11 019	10 335	10 260	10 315	10 513	2.0	182	1 682	1 810	6 839	102 656
L02AE01	buserelin	1 355	724	495	387	335	0.1	0	325	10	0	499
L02AE02	leuprorelin	3 736	3 477	3 139	2 786	2 467	0.5	182	506	262	1 517	22 721
L02AE03	goserelin	6 028	6 218	6 599	7 001	7 312	1.4	<5	434	1 524	5 353	79 124
L02AE04	tripotorelin	13	23	131	241	479	0.1	0	455	24	0	312
L02AE05	histrelin	20	6	0	0	0	0.0	0	0	0	0	0
L02B	HORMONE ANTAGONISTS AND RELATED AGENTS	19 816	20 708	21 821	22 834	25 548	4.8	<5	4 156	9 825	11 565	291 651
L02BA	Anti-estrogens	4 250	4 417	4 609	4 958	5 439	1.0	<5	882	3 487	1 068	22 770
L02BA01	tamoxifen	4 036	4 181	4 338	4 612	4 963	0.9	<5	864	3 231	866	4 664
L02BA03	fulvestrant	246	263	292	376	522	0.1	0	20	273	229	18 106
L02BB	Anti-androgens	6 964	7 078	7 081	6 985	7 007	1.3	0	<5	1 288	5 718	158 408
L02BB01	flutamide	202	136	108	85	82	0.0	0	0	5	77	603
L02BB03	bicalutamide	6 720	6 480	6 313	6 116	6 041	1.1	0	<5	1 076	4 964	22 400
L02BB04	enzalutamide	85	517	826	938	1 093	0.2	0	0	247	846	135 405
L02BG	Aromatase inhibitors	8 322	8 902	9 813	10 626	12 995	2.5	0	3 325	5 316	4 354	36 966
L02BG03	anastrozole	1 537	1 280	1 028	843	757	0.1	0	40	369	348	3 013
L02BG04	letrozole	6 155	6 999	8 128	9 079	11 537	2.2	0	3 267	4 589	3 681	29 994
L02BG06	exemestane	901	910	983	1 015	974	0.2	0	26	508	440	3 959
L02BX	Other hormone antagonists and related agents	1 182	1 380	1 415	1 401	1 273	0.2	0	0	288	985	73 507
L02BX02	degarelix	487	642	806	872	837	0.2	0	0	217	620	9 494
L02BX03	abiraterone	762	804	660	581	473	0.1	0	0	85	388	64 013
L03	IMMUNOSTIMULANTS	6 747	6 485	6 306	6 819	6 431	1.2	49	1 287	3 814	1 281	174 966
L03A	IMMUNOSTIMULANTS	6 747	6 485	6 306	6 819	6 431	1.2	49	1 287	3 814	1 281	174 966
L03AA	Colony stimulating factors	2 831	3 313	4 159	4 909	4 775	0.9	45	683	2 859	1 188	63 437
L03AA02	filgrastim	623	611	593	583	588	0.1	39	132	295	122	8 051
L03AA13	pegfilgrastim	2 353	2 734	3 138	3 605	3 947	0.8	6	535	2 431	975	50 977
L03AA14	lipegfilgrastim	0	109	676	956	370	0.1	<5	36	224	109	4 409

ATC group L

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
L03AB	Interferons	2 722	2 150	1 375	1 210	952	0.2		<5	335	538	75	62 451
L03AB01	interferon alfa natural	14	8	8	0	0	0.0		0	0	0	0	0
L03AB03	interferon gamma	10	11	10	13	10	0.0		<5	8	0	0	2 223
L03AB04	interferon alfa-2a	25	19	19	19	21	0.0		0	0	6	15	687
L03AB05	interferon alfa-2b	40	47	34	36	40	0.0		0	<5	18	18	974
L03AB07	interferon beta-1a	1 159	872	592	461	372	0.1		<5	103	256	12	32 220
L03AB08	interferon beta-1b	611	489	321	211	134	0.0		0	46	84	<5	7 320
L03AB10	peginterferon alfa-2b	260	171	71	51	50	0.0		<5	12	31	6	1 716
L03AB11	peginterferon alfa-2a	651	550	319	315	214	0.0		0	98	91	25	8 216
L03AB13	peginterferon beta-1a	0	<5	11	149	135	0.0		0	73	62	0	9 096
L03AX	Other immunostimulants	1 322	1 058	789	723	722	0.1		0	278	426	18	49 078
L03AX03	BCG vaccine	12	13	14	13	5	0.0		0	0	<5	<5	33
L03AX13	glatiramer acetate	1 310	1 045	775	710	717	0.1		0	278	423	16	49 044
L04	IMMUNOSUPPRESSANTS	52 031	56 456	60 044	63 829	67 111	12.7		1 188	17 889	34 418	13 616	2 647 667
L04A	IMMUNOSUPPRESSANTS	52 031	56 456	60 044	63 829	67 111	12.7		1 188	17 889	34 418	13 616	2 647 667
L04AA	Selective immunosuppressants	7 280	8 528	9 551	10 333	10 851	2.1		136	2 833	6 161	1 721	570 456
L04AA06	mycophenolic acid	4 207	4 425	4 668	4 925	5 164	1.0		113	1 160	2 914	977	46 384
L04AA10	sirolimus	189	215	242	272	295	0.1		16	38	184	57	7 675
L04AA13	leflunomide	1 785	2 006	2 142	2 225	2 256	0.4		0	251	1 407	598	12 863
L04AA18	everolimus	449	474	484	487	481	0.1		8	70	276	127	36 185
L04AA23	natalizumab	0	0	0	0	<5	-		0	0	<5	0	18
L04AA24	abatacept	72	144	222	258	283	0.1		0	47	171	65	17 773
L04AA25	eculizumab	10	11	17	18	18	0.0		0	9	8	<5	79 665
L04AA27	fingolimod	896	1 110	1 238	1 329	1 411	0.3		<5	715	692	<5	250 837
L04AA28	belatacept	0	0	0	<5	0	0.0		0	0	0	0	0
L04AA29	tofacitinib	0	0	0	0	87	0.0		0	26	49	12	2 097
L04AA31	teriflunomide	140	638	1 069	1 362	1 427	0.3		0	617	793	17	113 762
L04AA32	apremilast	0	0	9	35	27	0.0		0	10	15	<5	1 817
L04AA33	vedolizumab	0	<5	<5	0	0	0.0		0	0	0	0	0
L04AA37	baricitinib	0	0	0	0	28	0.0		0	<5	19	5	1 381
L04AB	Tumor necrosis factor alpha (TNF-α) inhibitors	13 980	15 154	15 163	15 647	16 505	3.1		251	5 808	8 633	1 813	1 225 106
L04AB01	etanercept	6 521	5 968	5 551	5 737	7 350	1.4		140	2 238	3 970	1 002	318 565
L04AB02	infliximab	<5	0	<5	0	<5	-		0	0	<5	0	4
L04AB04	adalimumab	4 962	5 075	4 699	4 448	4 376	0.8		118	1 766	2 107	385	481 451
L04AB05	certolizumab pegol	1 232	3 024	3 506	4 262	3 646	0.7		0	1 372	1 920	354	250 314

ATC group L

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
L04AB06	golimumab	2 145	2 086	2 040	1 848	1 684	0.3	<5	663	898	122	174 772
L04AC	Interleukin inhibitors	436	820	1 407	1 848	2 673	0.5	25	925	1 475	248	230 602
L04AC01	daclizumab	0	0	0	0	14	0.0	0	7	7	0	1 675
L04AC03	anakinra	125	148	170	189	197	0.0	8	90	77	22	14 049
L04AC05	ustekinumab	304	555	764	830	814	0.2	5	300	462	47	76 753
L04AC07	tocilizumab	<5	112	454	521	608	0.1	<5	177	308	122	39 872
L04AC08	canakinumab	6	11	13	23	24	0.0	11	6	5	<5	29 544
L04AC10	secukinumab	0	0	22	371	1 102	0.2	<5	381	662	58	68 709
L04AD	Calcineurin inhibitors	5 524	5 733	5 979	6 203	6 274	1.2	191	1 590	3 413	1 080	139 798
L04AD01	ciclosporin	3 199	3 156	3 156	3 130	2 954	0.6	82	683	1 554	635	47 555
L04AD02	tacrolimus	2 381	2 644	2 889	3 132	3 383	0.6	109	926	1 895	453	92 244
L04AX	Other immunosuppressants	35 841	38 141	40 202	42 349	44 324	8.4	885	10 353	22 329	10 757	481 704
L04AX01	azathioprine	7 362	7 650	7 894	8 280	8 280	1.6	229	3 916	3 296	839	7 509
L04AX02	thalidomide	295	246	238	200	90	0.0	<5	5	33	49	2 587
L04AX03	methotrexate	28 059	30 026	31 706	33 357	35 139	6.7	663	6 478	18 672	9 326	98 416
L04AX04	lenalidomide	257	308	434	612	810	0.2	0	13	332	465	270 309
L04AX05	pirfenidone	50	58	65	69	78	0.0	0	0	36	42	16 433
L04AX06	pomalidomide	0	74	95	130	178	0.0	0	<5	75	99	86 448

3.13 ATC group M – Musculo-skeletal system

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
M	MUSCULO-SKELETAL SYSTEM	925 319	928 438	942 067	946 467	963 353	182.6	15 305	325 959	446 233	175 856	491 216
M01	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS	821 122	817 921	824 426	823 714	834 679	158.2	13 361	313 430	399 555	108 333	274 104
M01A	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS, NON-STEROIDS	821 087	817 896	824 405	823 689	834 663	158.2	13 361	313 427	399 547	108 328	273 709
M01AB	Acetic acid derivatives and related substances	439 563	391 876	376 875	349 105	341 369	64.7	4 782	144 664	159 725	32 198	44 728
M01AB01	indometacin	1 129	1 232	1 178	1 220	1 282	0.2	11	464	654	153	1 187
M01AB02	sulindac	0	0	<5	5	5	0.0	0	0	<5	<5	11
M01AB05	diclofenac ¹⁾	417 775	372 039	357 601	330 952	323 120	61.2	4 742	140 530	149 878	27 970	35 523
M01AB15	ketorolac	12	27	20	18	25	0.0	0	12	13	0	12
M01AB16	aceclofenac	0	0	0	<5	<5	-	0	0	<5	0	4
M01AB55	diclofenac, combinations	25 182	22 213	21 482	19 774	19 896	3.8	32	4 610	10 811	4 443	7 991
M01AC	Oxicams	52 902	48 308	40 894	35 293	31 649	6.0	134	9 422	17 570	4 523	9 993
M01AC01	piroxicam	39 641	36 954	32 480	28 375	25 189	4.8	115	8 047	14 116	2 911	8 122
M01AC06	meloxicam	13 527	11 551	8 736	7 051	6 577	1.3	19	1 414	3 524	1 620	1 871
M01AE	Propionic acid derivatives	343 199	373 687	398 840	429 125	448 361	85.0	8 612	167 342	215 905	56 502	132 171
M01AE01	ibuprofen ¹⁾	217 264	224 042	222 338	222 755	230 829	43.7	7 154	96 932	104 867	21 876	35 895
M01AE02	naproxen ¹⁾	72 012	86 217	95 355	105 672	99 739	18.9	1 356	39 783	45 285	13 315	23 812
M01AE03	ketoprofen	5 438	4 975	4 492	4 252	3 766	0.7	11	748	2 163	844	2 290
M01AE14	dexibuprofen	637	539	200	30	24	0.0	0	7	14	<5	30
M01AE17	dexketoprofen	<5	11	9	9	17	0.0	0	7	8	<5	2
M01AE52	naproxen and esomeprazole	64 416	77 488	99 704	123 511	142 741	27.1	171	40 197	78 892	23 481	70 142
M01AG	Fenamates	337	366	417	454	494	0.1	<5	292	189	9	378
M01AG02	tolfenamic acid	337	366	417	454	494	0.1	<5	292	189	9	378
M01AH	Coxibs	72 688	92 056	97 948	96 791	101 372	19.2	106	30 128	54 623	16 515	69 792
M01AH01	celecoxib	16 437	15 175	14 874	14 296	14 719	2.8	21	4 095	7 622	2 981	13 921
M01AH04	parecoxib	<5	<5	<5	<5	<5	-	0	0	<5	<5	3
M01AH05	etoricoxib	57 270	77 854	84 190	83 452	87 661	16.6	85	26 302	47 590	13 684	55 869
M01AX	Other antiinflammatory and antirheumatic agents, non-steroids	34 782	32 661	32 460	31 596	30 244	5.7	<5	1 530	15 664	13 046	16 646
M01AX01	nabumetone	3 773	3 177	2 886	2 427	2 175	0.4	<5	386	1 166	621	1 145
M01AX05	glucosamine ¹⁾	30 393	28 822	28 914	28 405	27 221	5.2	<5	1 089	14 085	12 045	13 609
M01C	SPECIFIC ANTIRHEUMATIC AGENTS	99	77	66	64	49	0.0	0	<5	31	15	395
M01CB	Gold preparations	71	61	61	59	42	0.0	0	<5	26	15	348
M01CB01	sodium aurothiomalate	19	17	19	24	13	0.0	0	0	5	8	65

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ATC group M

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
M01CB03	auranofin	52	44	42	35	29	0.0		0	<5	21	7	283
M01CC	Penicillamine and similar agents	12	9	5	5	7	0.0		0	<5	5	0	47
M01CC01	penicillamine	12	9	5	5	7	0.0		0	<5	5	0	47
M01CX	Other specific antirheumatic agents	16	7	0	0	0	0.0		0	0	0	0	0
M02	TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN	60 159	64 758	72 625	73 834	77 616	14.7		2 255	21 823	32 703	20 835	14 441
M02A	TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN	60 157	64 751	72 617	73 830	77 611	14.7		2 255	21 822	32 700	20 834	14 440
M02AA	Antiinflammatory preparations, non-steroids for topical use	60 050	64 683	72 605	73 826	77 607	14.7		2 255	21 822	32 700	20 830	14 439
M02AA10	ketoprofen	51 649	51 400	50 448	48 193	46 996	8.9		1 380	13 645	20 062	11 909	5 859
M02AA13	ibuprofen ¹⁾	5 818	5 790	4 996	4 420	3 930	0.7		228	1 150	1 364	1 188	801
M02AA15	diclofenac ¹⁾	2 890	8 030	17 986	22 059	27 659	5.2		655	7 212	11 658	8 134	7 779
M02AB	Capsaicin and similar agents	5	<5	<5	<5	0	0.0		0	0	0	0	0
M02AB01	capsaicin	5	<5	<5	<5	0	0.0		0	0	0	0	0
M02AC	Preparations with salicylic acid derivatives	119	73	0	0	0	0.0		0	0	0	0	0
M02AX	Other topical products for joint and muscular pain	8	5	8	<5	5	0.0		0	0	0	5	1
M02AX10	various	8	5	8	<5	5	0.0		0	0	0	5	1
M03	MUSCLE RELAXANTS	6 104	6 869	7 501	8 272	8 991	1.7		154	2 886	4 779	1 172	51 378
M03B	MUSCLE RELAXANTS, CENTRALLY ACTING AGENTS	5 630	5 779	5 749	5 868	5 883	1.1		148	1 341	3 357	1 037	9 762
M03BA	Carbamic acid esters	745	635	588	495	421	0.1		0	54	323	44	1 484
M03BA02	carisoprodol	745	635	588	495	421	0.1		0	54	323	44	1 484
M03BB	Oxazol, thiazine, and triazine derivatives	<5	20	21	41	44	0.0		0	17	21	6	80
M03BB03	chlorzoxazone	<5	20	21	41	44	0.0		0	17	21	6	80
M03BX	Other centrally acting agents	4 901	5 146	5 159	5 347	5 430	1.0		148	1 271	3 023	988	8 198
M03BX01	baclofen	4 850	5 080	5 075	5 269	5 357	1.0		148	1 242	2 986	981	7 707
M03BX02	tizanidine	78	93	107	105	103	0.0		0	39	56	8	491
M03C	MUSCLE RELAXANTS, DIRECTLY ACTING AGENTS	0	0	0	0	<5	-		<5	0	0	0	1
M03CA	Dantrolene and derivatives	0	0	0	0	<5	-		<5	0	0	0	1
M03CA01	dantrolene	0	0	0	0	<5	-		<5	0	0	0	1
M04	ANTIGOUT PREPARATIONS	47 763	50 836	53 500	56 374	59 343	11.3		30	3 885	24 547	30 881	47 537
M04A	ANTIGOUT PREPARATIONS	47 763	50 836	53 500	56 374	59 343	11.3		30	3 885	24 547	30 881	47 537

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ATC group M

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
M04AA	Preparations inhibiting uric acid production	43 558	46 073	48 334	50 525	53 155	10.1		10	3 147	21 980	28 018	37 444
M04AA01	allopurinol	43 473	45 944	48 142	50 261	52 795	10.0		10	3 108	21 831	27 846	19 800
M04AA03	febuxostat	105	148	218	300	438	0.1		0	50	190	198	17 644
M04AB	Preparations increasing uric acid excretion	1 970	1 942	1 924	1 878	1 788	0.3		<5	105	733	949	2 637
M04AB01	probenecid	1 970	1 942	1 924	1 878	1 788	0.3		<5	105	733	949	2 637
M04AC	Preparations with no effect on uric acid metabolism	5 085	6 207	7 054	8 293	9 200	1.7		19	1 065	4 062	4 054	7 456
M04AC01	colchicine	5 085	6 207	7 054	8 293	9 200	1.7		19	1 065	4 062	4 054	7 456
M05	DRUGS FOR TREATMENT OF BONE DISEASES	61 037	61 688	62 020	63 305	64 868	12.3		<5	674	24 137	40 056	83 385
M05B	DRUGS AFFECTING BONE STRUCTURE AND MINERALIZATION	61 037	61 688	62 020	63 305	64 868	12.3		<5	674	24 137	40 056	83 385
M05BA	Bisphosphonates	58 056	57 770	57 318	57 490	57 746	10.9		<5	630	22 935	34 180	47 549
M05BA01	etidronic acid	22	0	0	0	0	0.0		0	0	0	0	0
M05BA02	clodronic acid	34	13	10	7	<5	-		0	0	0	<5	21
M05BA03	pamidronic acid	18	16	17	9	5	0.0		0	0	<5	<5	26
M05BA04	alendronic acid	53 858	53 144	52 362	52 152	51 864	9.8		<5	496	20 160	31 207	26 507
M05BA06	ibandronic acid	664	658	659	618	597	0.1		0	6	241	350	1 818
M05BA07	risedronic acid	639	481	403	327	309	0.1		0	<5	105	202	765
M05BA08	zoledronic acid	3 378	3 965	4 344	4 921	5 613	1.1		0	135	2 756	2 722	18 413
M05BB	Bisphosphonates, combinations	668	<5	0	0	0	0.0		0	0	0	0	0
M05BB01	etidronic acid and calcium, sequential	668	<5	0	0	0	0.0		0	0	0	0	0
M05BX	Other drugs affecting bone structure and mineralization	3 212	4 412	5 198	6 410	7 906	1.5		0	47	1 367	6 492	35 836
M05BX04	denosumab	3 212	4 412	5 198	6 410	7 906	1.5		0	47	1 367	6 492	35 836
M09	OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM	76	40	60	166	295	0.1		<5	25	236	33	20 371
M09A	OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM	76	40	60	166	295	0.1		<5	25	236	33	20 371
M09AB	Enzymes	76	40	58	164	292	0.1		0	24	235	33	6 313
M09AB02	collagenase clostridium histolyticum	76	40	58	164	292	0.1		0	24	235	33	6 313
M09AX	Other drugs for disorders of the musculo-skeletal system	0	0	<5	<5	<5	-		<5	<5	<5	0	14 058
M09AX03	ataluren	0	0	<5	<5	<5	-		<5	<5	<5	0	14 058

3.14 ATC group N – Nervous system

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
N	NERVOUS SYSTEM	1 327 510	1 354 299	1 380 890	1 412 242	1 450 941	275.0	32 190	459 701	620 719	338 331	3 245 094
N02	ANALGESICS	790 759	818 063	847 861	876 882	913 160	173.1	8 235	282 394	406 783	215 748	815 862
N02A	OPIOIDS	528 299	538 389	550 458	559 406	563 551	106.8	1 735	181 075	251 733	129 008	493 945
N02AA	Natural opium alkaloids	33 494	37 640	42 019	48 789	57 193	10.8	121	9 921	24 911	22 240	113 509
N02AA01	morphine	6 852	7 145	7 565	7 951	8 200	1.6	66	847	3 600	3 687	22 062
N02AA03	hydromorphone	95	130	127	137	123	0.0	0	28	64	31	8 434
N02AA05	oxycodone	26 884	30 548	34 406	40 730	48 755	9.2	58	9 030	21 531	18 136	61 132
N02AA08	dihydrocodeine	53	45	35	42	37	0.0	0	7	28	<5	260
N02AA51	morphine, combinations	0	0	0	0	<5	-	0	0	<5	0	17
N02AA55	oxycodone and naloxone	4 069	5 037	5 713	6 521	7 246	1.4	<5	776	2 731	3 738	21 605
N02AB	Phenylpiperidine derivatives	12 148	12 610	12 729	12 920	12 405	2.4	14	1 848	5 259	5 284	56 922
N02AB01	ketobemidone	4 143	4 342	4 252	4 146	3 604	0.7	<5	1 037	1 895	669	2 935
N02AB02	pethidine	1 281	1 247	1 177	1 112	948	0.2	0	251	551	146	4 066
N02AB03	fentanyl	7 173	7 490	7 753	8 058	8 180	1.6	11	634	2 998	4 537	49 921
N02AC	Diphenylpropylamine derivatives	12	7	12	0	0	0.0	0	0	0	0	0
N02AC04	dextropropoxyphene	12	7	12	0	0	0.0	0	0	0	0	0
N02AD	Benzomorphan derivatives	24	24	20	15	10	0.0	0	<5	6	<5	562
N02AD01	pentazocine	24	24	20	15	10	0.0	0	<5	6	<5	562
N02AE	Oripavine derivatives	15 863	16 731	17 813	18 354	18 403	3.5	6	1 414	4 864	12 119	71 497
N02AE01	buprenorphine	15 863	16 731	17 813	18 354	18 403	3.5	6	1 414	4 864	12 119	71 497
N02AG	Opioids in combination with antispasmodics	1 895	1 812	1 766	1 719	1 688	0.3	0	583	835	270	1 889
N02AG01	morphine and antispasmodics	314	134	<5	0	0	0.0	0	0	0	0	0
N02AG02	ketobemidone and antispasmodics	1 586	1 681	1 765	1 719	1 688	0.3	0	583	835	270	1 889
N02AJ	Opioids in combination with non-opioid analgesics	383 926	378 124	374 905	369 279	356 278	67.5	1 268	123 967	159 033	72 010	149 353
N02AJ06	codeine and paracetamol	383 911	373 346	367 448	361 371	351 291	66.6	1 251	122 320	156 881	70 839	147 130
N02AJ07	codeine and acetylsalicylic acid	18	20	23	20	18	0.0	0	5	8	5	42
N02AJ13	tramadol and paracetamol	0	6 826	10 499	10 761	6 698	1.3	20	2 240	2 897	1 541	2 182
N02AX	Other opioids	172 547	188 983	204 517	217 509	228 155	43.2	408	70 731	105 501	51 515	100 213
N02AX02	tramadol	172 161	188 470	203 288	215 712	225 070	42.7	406	70 103	103 902	50 659	85 903
N02AX06	tapentadol	615	851	2 006	2 822	4 613	0.9	<5	1 021	2 350	1 239	14 310
N02B	OTHER ANALGESICS AND ANTIPYRETICS	386 153	416 641	446 685	481 088	527 266	99.9	4 760	122 158	239 086	161 262	122 712
N02BA	Salicylic acid and derivatives	936	1 019	1 073	1 086	1 261	0.2	248	481	376	156	613
N02BA01	acetylsalicylic acid ¹⁾	931	1 017	1 070	1 082	1 257	0.2	248	481	373	155	571

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ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
N02BA11	diflunisal	<5	<5	<5	<5	<5	-	0	0	<5	<5	41
N02BA51	acetylsalicylic acid, combinations excl. psycholeptics	<5	<5	<5	0	0	0.0	0	0	0	0	0
N02BB	Pyrazolones	1 051	1 031	1 144	1 318	1 550	0.3	9	777	519	245	473
N02BB02	metamizole sodium	18	41	41	49	65	0.0	0	7	32	26	116
N02BB51	phenazone, combinations excl. psycholeptics	1 033	990	1 103	1 269	1 485	0.3	9	770	487	219	358
N02BE	Anilides	384 456	414 896	444 973	479 273	525 156	99.5	4 510	121 235	238 383	161 028	113 253
N02BE01	paracetamol ¹⁾	384 388	414 754	444 756	479 030	524 901	99.5	4 508	121 094	238 307	160 992	113 173
N02BE51	paracetamol, combinations excl. psycholeptics ¹⁾	134	240	322	355	392	0.1	<5	191	137	60	79
N02BG	Other analgesics and antipyretics	404	366	344	326	472	0.1	<5	109	298	62	8 373
N02BG07	fluoxetine	<5	<5	<5	0	0	0.0	0	0	0	0	0
N02BG10	cannabinoids	402	365	340	326	472	0.1	<5	109	298	62	8 373
N02C	ANTIMIGRAINE PREPARATIONS	97 251	101 231	105 199	107 882	115 514	21.9	2 397	55 603	52 083	5 431	199 205
N02CA	Ergot alkaloids	877	454	371	292	246	0.1	0	23	136	87	292
N02CA04	methysergide	<5	0	0	0	0	0.0	0	0	0	0	0
N02CA52	ergotamine, combinations excl. psycholeptics	21	8	9	7	7	0.0	0	0	<5	5	9
N02CA72	ergotamine, combinations with psycholeptics	856	446	364	287	240	0.1	0	23	134	83	283
N02CC	Selective serotonin (5HT₁) agonists	93 214	97 102	101 024	103 715	111 321	21.1	2 343	54 596	49 431	4 951	195 531
N02CC01	sumatriptan	47 946	50 676	52 589	51 695	58 093	11.0	1 886	31 438	22 482	2 287	86 428
N02CC02	naratriptan	1 707	1 941	2 109	2 242	2 485	0.5	13	1 142	1 208	122	6 728
N02CC03	zolmitriptan	15 150	15 840	16 228	20 268	19 321	3.7	425	8 745	9 252	899	42 653
N02CC04	rizatriptan	25 269	26 829	27 935	30 355	31 217	5.9	268	15 778	13 932	1 239	31 375
N02CC05	almotriptan	2 988	3 056	2 889	2 916	2 934	0.6	7	1 305	1 489	133	6 513
N02CC06	eletriptan	11 735	11 871	12 331	12 796	13 275	2.5	41	5 708	6 947	579	21 534
N02CC07	frovatriptan	8	20	180	223	192	0.0	<5	103	86	<5	301
N02CX	Other antimigraine preparations	4 271	4 524	4 622	4 762	4 844	0.9	56	1 287	3 068	433	3 381
N02CX01	pizotifen	72	62	58	50	45	0.0	0	16	23	6	158
N02CX02	clonidine	4 199	4 463	4 567	4 714	4 802	0.9	56	1 272	3 047	427	3 223
N03	ANTIEPILEPTICS	116 903	118 788	122 547	127 262	131 955	25.0	3 618	38 248	61 115	28 974	462 919
N03A	ANTIEPILEPTICS	116 903	118 788	122 547	127 262	131 955	25.0	3 618	38 248	61 115	28 974	462 919
N03AA	Barbiturates and derivatives	2 361	2 246	2 174	2 087	2 006	0.4	67	197	1 002	740	3 957
N03AA02	phenobarbital	2 064	1 920	1 829	1 744	1 630	0.3	66	151	847	566	3 129

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ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
N03AA03	primidone	309	338	357	355	385	0.1	<5	46	157	181	829
N03AB	Hydantoin derivatives	1 704	1 541	1 436	1 281	1 118	0.2	17	122	577	402	2 198
N03AB02	phenytoin	1 704	1 541	1 436	1 281	1 118	0.2	17	122	577	402	2 198
N03AB05	fosphenytoin	0	<5	<5	0	0	0.0	0	0	0	0	0
N03AD	Succinimide derivatives	206	227	224	266	289	0.1	147	117	21	<5	2 352
N03AD01	ethosuximide	206	227	224	266	289	0.1	147	117	21	<5	2 352
N03AE	Benzodiazepine derivatives	11 748	10 909	9 856	8 702	7 198	1.4	143	1 570	3 692	1 793	3 874
N03AE01	clonazepam	11 748	10 909	9 856	8 702	7 198	1.4	143	1 570	3 692	1 793	3 874
N03AF	Carboxamide derivatives	16 961	16 205	15 668	15 310	14 894	2.8	723	3 734	7 382	3 055	38 934
N03AF01	carbamazepine	14 205	13 396	12 720	12 256	11 495	2.2	154	2 482	6 242	2 617	11 795
N03AF02	oxcarbazepine	2 526	2 518	2 635	2 703	2 968	0.6	551	968	1 019	430	11 449
N03AF03	rufinamide	100	98	96	94	90	0.0	23	55	11	<5	1 970
N03AF04	eslicarbazepine	294	332	383	461	590	0.1	<5	319	221	47	13 719
N03AG	Fatty acid derivatives	15 127	15 285	15 209	15 249	15 197	2.9	1 529	5 696	6 312	1 660	46 677
N03AG01	valproic acid	15 047	15 200	15 135	15 167	15 118	2.9	1 499	5 679	6 284	1 656	45 755
N03AG03	aminobutyric acid	16	20	8	16	14	0.0	0	6	8	0	16
N03AG04	vigabatrin	94	90	85	85	87	0.0	47	16	20	<5	610
N03AG06	tiagabine	10	9	9	9	9	0.0	0	<5	5	<5	296
N03AX	Other antiepileptics	82 517	85 807	91 235	97 526	104 042	19.7	2 086	31 233	47 625	23 098	364 927
N03AX03	sultiamide	206	239	238	277	323	0.1	252	69	<5	0	2 520
N03AX09	lamotrigine	27 013	27 569	28 530	29 235	30 145	5.7	870	14 009	11 999	3 267	106 689
N03AX10	felbamate	20	17	22	18	19	0.0	<5	13	<5	0	380
N03AX11	topiramate	3 230	3 649	3 954	4 174	4 617	0.9	229	2 396	1 786	206	12 580
N03AX12	gabapentin	30 998	32 203	35 533	39 417	42 711	8.1	97	8 595	21 685	12 334	65 309
N03AX14	levetiracetam	7 307	7 934	8 528	9 244	9 761	1.9	841	3 233	3 418	2 269	49 698
N03AX15	zonisamide	611	633	638	639	623	0.1	52	335	186	50	9 096
N03AX16	pregabalin	19 654	20 230	20 711	21 852	23 571	4.5	11	5 229	11 953	6 378	96 730
N03AX17	stiripentol	21	25	27	30	33	0.0	18	15	0	0	2 859
N03AX18	lacosamide	445	500	555	625	703	0.1	44	350	244	65	10 220
N03AX21	retigabine	103	36	20	17	<5	-	0	<5	<5	0	64
N03AX22	perampanel	149	220	254	303	360	0.1	34	188	114	24	5 143
N03AX23	brivaracetam	0	0	0	89	201	0.0	13	125	51	12	3 640
N04	ANTI-PARKINSON DRUGS	19 088	20 072	20 744	21 511	22 269	4.2	36	1 697	9 116	11 420	148 127
N04A	ANTICHOLINERGIC AGENTS	2 481	2 348	2 252	2 119	2 071	0.4	22	445	1 287	317	1 578
N04AA	Tertiary amines	2 448	2 322	2 236	2 103	2 055	0.4	22	444	1 274	315	1 547
N04AA01	trihexyphenidyl	27	41	44	52	54	0.0	22	16	14	<5	319
N04AA02	biperiden	2 418	2 279	2 189	2 049	2 000	0.4	0	428	1 259	313	1 226

ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
N04AA04	procyclidine	<5	<5	<5	<5	<5	-	0	<5	<5	0	2
N04AB	Ethers chemically close to antihistamines	34	32	17	17	17	0.0	0	<5	14	<5	32
N04AB02	orphenadrine (chloride)	34	32	17	17	17	0.0	0	<5	14	<5	32
N04B	DOPAMINERGIC AGENTS	16 673	17 785	18 545	19 443	20 262	3.8	15	1 255	7 863	11 129	146 549
N04BA	Dopa and dopa derivatives	8 579	9 033	9 332	9 663	10 093	1.9	15	133	2 849	7 096	89 776
N04BA02	levodopa and decarboxylase inhibitor	7 860	8 339	8 702	9 055	9 513	1.8	15	128	2 658	6 712	75 999
N04BA03	levodopa, decarboxylase inhibitor and COMT inhibitor	1 399	1 391	1 350	1 392	1 387	0.3	0	8	526	853	13 777
N04BB	Adamantane derivatives	161	158	162	191	207	0.0	0	44	126	37	814
N04BB01	amantadine	161	158	162	191	207	0.0	0	44	126	37	814
N04BC	Dopamine agonists	10 874	11 676	12 154	12 849	13 281	2.5	0	1 116	6 304	5 861	39 042
N04BC01	bromocriptine	<5	<5	<5	<5	<5	-	0	0	0	<5	13
N04BC04	ropinirole	2 729	2 869	2 930	2 957	2 923	0.6	0	150	1 451	1 322	13 997
N04BC05	pramipexole	7 750	8 469	8 906	9 577	10 013	1.9	0	950	4 733	4 330	14 939
N04BC06	cabergoline	121	109	88	91	80	0.0	0	8	37	35	197
N04BC07	apomorphine	18	26	30	45	62	0.0	0	<5	32	28	3 706
N04BC09	rotigotine	573	560	533	537	552	0.1	0	34	240	278	6 190
N04BD	Monoamine oxidase B inhibitors	3 652	3 868	4 011	4 134	4 304	0.8	0	48	1 933	2 323	15 559
N04BD01	selegiline	2 183	2 257	2 318	2 400	2 439	0.5	0	29	1 124	1 286	4 325
N04BD02	rasagiline	1 530	1 648	1 739	1 778	1 887	0.4	0	20	831	1 036	10 306
N04BD03	safinamide	0	0	0	10	101	0.0	0	0	41	60	928
N04BX	Other dopaminergic agents	119	111	105	127	142	0.0	0	0	55	87	1 358
N04BX01	tolcapone	8	6	8	9	8	0.0	0	0	5	<5	398
N04BX02	entacapone	111	105	98	118	134	0.0	0	0	50	84	960
N05	PSYCHOLEPTICS	619 567	630 363	631 239	638 090	645 060	122.2	13 291	155 567	276 674	199 528	662 525
N05A	ANTIPSYCHOTICS	106 651	109 198	113 424	118 840	124 611	23.6	1 034	46 527	54 827	22 223	311 449
N05AA	Phenothiazines with aliphatic side-chain	20 118	18 907	17 572	16 472	15 331	2.9	9	3 747	8 062	3 513	5 863
N05AA01	chlorpromazine	222	201	167	168	202	0.0	0	117	59	26	569
N05AA02	levomepromazine	19 912	18 724	17 418	16 313	15 135	2.9	9	3 631	8 007	3 488	5 294
N05AB	Phenothiazines with piperazine structure	13 470	11 104	10 512	9 382	9 108	1.7	15	1 980	3 798	3 315	7 585
N05AB02	fluphenazine	14	17	17	14	9	0.0	0	0	<5	5	39
N05AB03	perphenazine	3 506	1 758	1 706	1 659	1 577	0.3	0	268	991	318	6 040
N05AB04	prochlorperazine	10 061	9 346	8 802	7 715	7 529	1.4	15	1 714	2 807	2 993	1 505
N05AB06	trifluoperazine	<5	<5	<5	0	<5	-	0	0	0	<5	1

ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
N05AC	Phenothiazines with piperidine structure	54	46	44	38	35	0.0		0	<5	20	13	99
N05AC01	periciazine	<5	<5	<5	<5	<5	-		0	0	<5	0	3
N05AC02	thioridazine	49	43	41	36	33	0.0		0	<5	18	13	90
N05AC04	pipotiazine	<5	<5	<5	<5	<5	-		0	0	<5	0	6
N05AD	Butyrophenone derivatives	3 966	4 030	3 877	3 998	3 835	0.7		<5	274	1 391	2 167	1 314
N05AD01	haloperidol	3 959	4 023	3 870	3 987	3 822	0.7		<5	270	1 387	2 162	1 296
N05AD03	melperone	7	6	7	11	11	0.0		0	<5	<5	<5	16
N05AD08	droperidol	<5	<5	<5	<5	<5	-		0	0	<5	<5	2
N05AE	Indole derivatives	902	870	963	1 013	1 006	0.2		0	501	440	65	8 393
N05AE03	sertindole	125	100	110	96	79	0.0		0	30	44	5	887
N05AE04	ziprasidone	778	766	677	639	586	0.1		0	224	313	49	4 233
N05AE05	lurasidone	0	5	189	291	347	0.1		0	250	86	11	3 273
N05AF	Thioxanthene derivatives	22 303	21 600	20 895	20 308	19 329	3.7		13	6 429	9 570	3 317	12 189
N05AF01	flupentixol	4 351	4 185	3 902	3 744	3 486	0.7		0	867	1 715	904	1 786
N05AF03	chlorprothixene	15 541	15 115	14 813	14 499	13 822	2.6		12	5 148	6 614	2 048	7 389
N05AF05	zuclopentixol	3 044	2 914	2 729	2 561	2 470	0.5		<5	573	1 490	406	3 014
N05AG	Diphenylbutylpiperidine derivatives	117	114	112	112	104	0.0		0	51	42	11	347
N05AG01	fluspirilene	0	0	<5	<5	<5	-		0	0	<5	0	4
N05AG02	pimozide	115	114	111	109	101	0.0		0	51	39	11	314
N05AG03	penfluridol	<5	0	0	<5	<5	-		0	0	<5	0	28
N05AH	Diazepines, oxazepines, thiaxepines and oxepines	44 837	50 380	56 867	64 650	72 723	13.8		126	32 686	31 341	8 570	144 639
N05AH01	loxpapine	0	0	<5	0	0	0.0		0	0	0	0	0
N05AH02	clozapine	2 533	2 571	2 576	2 610	2 651	0.5		0	1 101	1 426	124	9 778
N05AH03	olanzapine	16 385	16 701	16 920	16 990	17 421	3.3		40	6 546	8 087	2 748	52 947
N05AH04	quetiapine	28 125	33 528	39 942	47 818	55 638	10.5		90	26 568	23 031	5 949	81 576
N05AH05	asenapine	87	50	28	29	29	0.0		0	17	12	0	338
N05AL	Benzamides	569	600	657	608	629	0.1		0	292	315	22	4 156
N05AL01	sulpiride	0	0	0	0	<5	-		0	0	<5	0	1
N05AL03	tiapride	5	<5	7	<5	<5	-		0	<5	<5	0	27
N05AL05	amisulpride	564	597	650	604	624	0.1		0	289	313	22	4 128
N05AN	Lithium	7 682	7 559	7 579	7 570	7 628	1.5		<5	2 237	4 049	1 341	17 231
N05AN01	lithium	7 682	7 559	7 579	7 570	7 628	1.5		<5	2 237	4 049	1 341	17 231
N05AX	Other antipsychotics	13 752	14 019	14 344	14 612	14 943	2.8		924	6 559	5 299	2 161	109 633
N05AX07	prothipendyl	<5	<5	<5	<5	<5	-		0	<5	0	0	0
N05AX08	risperidone	8 392	8 329	8 263	8 305	8 141	1.5		793	2 709	2 810	1 829	28 006
N05AX12	aripiprazole	5 143	5 399	5 731	5 910	6 375	1.2		177	3 640	2 249	309	43 977

ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70						Sales in 1000 NOK	
N05AX13	paliperidone	782	832	860	887	936	0.2	0	510	391	35	37 649
N05B	ANXIOLYTICS	270 647	267 746	262 533	258 101	252 789	47.9	2 506	58 752	113 975	77 556	105 920
N05BA	Benzodiazepine derivatives	245 061	241 318	236 274	233 577	229 065	43.4	2 170	49 688	104 631	72 576	93 576
N05BA01	diazepam	120 562	116 561	109 997	105 594	100 854	19.1	1 863	22 204	46 405	30 382	40 562
N05BA02	chlordiazepoxide	<5	0	<5	<5	<5	-	0	<5	<5	0	3
N05BA04	oxazepam	134 612	134 599	135 729	137 340	136 950	26.0	79	29 731	62 306	44 834	47 107
N05BA06	lorazepam	48	54	70	98	142	0.0	6	50	64	22	398
N05BA08	bromazepam	8	6	7	7	<5	-	0	0	<5	<5	23
N05BA09	clobazam	710	752	779	836	896	0.2	313	403	170	10	2 449
N05BA12	alprazolam	3 851	3 535	3 206	2 895	2 587	0.5	<5	951	1 283	352	3 035
N05BB	Diphenylmethane derivatives	33 868	34 711	34 043	31 107	29 716	5.6	342	10 741	12 164	6 469	8 418
N05BB01	hydroxyzine	33 868	34 711	34 043	31 107	29 716	5.6	342	10 741	12 164	6 469	8 418
N05BC	Carbamates	<5	0	0	0	0	0.0	0	0	0	0	0
N05BC01	meprobamate	<5	0	0	0	0	0.0	0	0	0	0	0
N05BE	Azaspirodecanedione derivatives	2 403	2 230	2 273	2 248	2 119	0.4	<5	818	937	363	3 926
N05BE01	buspirone	2 403	2 230	2 273	2 248	2 119	0.4	<5	818	937	363	3 926
N05C	HYPNOTICS AND SEDATIVES	410 808	423 732	424 579	431 014	435 943	82.6	10 946	89 251	184 199	151 547	245 157
N05CA	Barbiturates, plain	0	<5	0	0	0	0.0	0	0	0	0	0
N05CA04	barbital	0	<5	0	0	0	0.0	0	0	0	0	0
N05CC	Aldehydes and derivatives	5	6	9	7	13	0.0	8	<5	<5	0	56
N05CC01	chloral hydrate	5	6	9	7	13	0.0	8	<5	<5	0	56
N05CD	Benzodiazepine derivatives	28 367	28 276	27 274	26 877	26 433	5.0	2 553	5 382	9 738	8 760	27 345
N05CD01	flurazepam	16	17	15	11	9	0.0	0	0	<5	7	36
N05CD02	nitrazepam	24 446	23 303	21 519	20 328	19 139	3.6	289	3 333	8 205	7 312	10 196
N05CD03	flunitrazepam	1 185	1 119	959	790	645	0.1	0	131	324	190	1 616
N05CD05	triazolam	91	74	67	62	49	0.0	0	8	18	23	97
N05CD08	midazolam	3 117	4 255	5 213	6 217	7 125	1.4	2 471	2 090	1 265	1 299	15 400
N05CF	Benzodiazepine related drugs	355 049	358 302	354 743	355 844	350 093	66.4	50	53 935	158 181	137 927	136 110
N05CF01	zopiclone	303 992	304 071	298 574	296 755	290 210	55.0	37	40 607	129 787	119 779	111 886
N05CF02	zolpidem	62 261	65 751	67 381	70 628	70 841	13.4	14	15 879	33 175	21 773	24 224
N05CH	Melatonin receptor agonists	56 177	68 793	75 769	82 748	94 753	18.0	8 770	39 235	32 754	13 994	78 745
N05CH01	melatonin	56 177	68 793	75 769	82 748	94 753	18.0	8 770	39 235	32 754	13 994	78 745
N05CM	Other hypnotics and sedatives	2 087	2 150	2 145	2 122	1 961	0.4	0	143	500	1 318	2 900
N05CM02	clomethiazole	1 986	1 939	1 971	1 945	1 835	0.4	0	118	445	1 272	2 742

ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
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N05CM05	scopolamine	65	110	61	65	41	0.0		0	0	8	33	70
N05CM06	propiomazine	38	100	108	105	77	0.0		0	24	44	9	86
N05CM09	Valerianae radix ¹⁾	<5	5	5	9	9	0.0		0	<5	<5	5	2
N06	PSYCHOANALEPTICS	353 980	359 882	367 494	376 408	382 158	72.4	12 105	131 655	155 473	82 925	710 549	
N06A	ANTIDEPRESSANTS	313 336	317 158	322 928	329 608	332 397	63.0	624	108 435	150 315	73 023	299 109	
N06AA	Non-selective monoamine reuptake inhibitors	65 888	67 286	68 349	69 403	70 267	13.3	83	18 473	36 859	14 852	29 232	
N06AA02	imipramine	21	16	16	16	13	0.0		<5	<5	6	<5	38
N06AA04	clomipramine	2 602	2 488	2 342	2 216	2 122	0.4		5	352	1 120	645	1 731
N06AA05	opipramol	5	9	7	8	7	0.0		0	<5	<5	<5	10
N06AA06	trimipramine	9 890	9 406	8 837	8 128	7 521	1.4		<5	1 333	3 565	2 622	5 358
N06AA07	lofepramine	9	6	6	5	5	0.0		0	<5	<5	<5	34
N06AA09	amitriptyline	49 857	51 933	53 890	55 869	57 811	11.0		71	16 319	31 087	10 334	19 723
N06AA10	nortriptyline	1 996	2 178	2 192	2 251	2 143	0.4		5	614	986	538	1 254
N06AA12	doxepin	2 280	2 016	1 846	1 641	1 454	0.3		<5	89	490	874	1 085
N06AA21	maprotiline	0	<5	0	0	0	0.0		0	0	0	0	0
N06AB	Selective serotonin reuptake inhibitors	185 672	185 867	186 016	186 321	183 597	34.8	511	66 975	78 415	37 696	127 612	
N06AB03	fluoxetine	10 750	11 117	12 141	12 232	12 055	2.3		150	7 097	4 046	762	16 929
N06AB04	citalopram	25 200	23 517	22 310	20 210	18 571	3.5		<5	3 769	9 345	5 456	10 530
N06AB05	paroxetine	14 828	14 246	13 797	13 122	12 510	2.4		0	2 328	6 660	3 522	11 103
N06AB06	sertraline	29 740	30 840	30 094	32 444	34 076	6.5		355	14 911	13 005	5 805	33 581
N06AB08	fluvoxamine	559	543	554	542	505	0.1		0	189	246	70	946
N06AB10	escitalopram	109 896	110 767	113 697	112 762	110 559	21.0		26	40 940	46 721	22 872	54 523
N06AF	Monoamine oxidase inhibitors, non-selective	97	89	88	89	93	0.0	0	21	47	25	1 121	
N06AF01	isocarboxazid	0	0	<5	<5	<5	-		0	0	<5	0	20
N06AF03	phenelzine	91	83	83	85	88	0.0		0	20	43	25	626
N06AF04	tranylcypromine	6	7	6	<5	8	0.0		0	5	<5	0	476
N06AG	Monoamine oxidase A inhibitors	738	707	721	668	634	0.1	0	165	304	165	1 517	
N06AG02	moclobemide	738	707	721	668	634	0.1		0	165	304	165	1 517
N06AX	Other antidepressants	101 299	103 291	107 774	112 616	115 819	22.0	40	34 714	51 824	29 241	139 627	
N06AX01	oxitriptan	276	280	203	95	90	0.0		<5	36	45	7	174
N06AX02	tryptophan	8	18	9	32	17	0.0		0	8	8	<5	20
N06AX03	mianserin	27 133	26 388	25 418	24 219	23 176	4.4		6	4 771	10 890	7 509	11 235
N06AX05	trazodone	12	17	19	18	24	0.0		<5	9	14	0	48
N06AX06	nefazodone	30	30	31	28	26	0.0		0	<5	23	<5	414

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ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70	<15	15–44	45–69	≥70			
N06AX11	mirtazapine	36 953	38 608	40 914	43 265	45 123	8.6	16	11 438	17 894	15 775	37 940
N06AX12	bupropion	11 330	11 691	12 121	12 100	11 958	2.3	<5	5 627	5 343	986	26 259
N06AX14	tianeptine	<5	0	7	6	9	0.0	0	7	<5	0	137
N06AX16	venlafaxine	31 108	31 307	32 625	32 903	32 906	6.2	11	11 044	15 953	5 898	28 017
N06AX18	reboxetine	383	338	329	286	263	0.1	0	105	140	18	570
N06AX21	duloxetine	3 503	3 958	4 663	5 361	6 119	1.2	0	1 882	3 299	938	14 542
N06AX22	agomelatine	18	17	12	19	16	0.0	0	5	9	<5	156
N06AX26	vortioxetine	0	25	1 381	5 041	7 126	1.4	<5	3 223	3 187	714	20 117
N06B	PSYCHOSTIMULANTS, AGENTS USED FOR ADHD AND NOOTROPICS	34 763	37 098	39 626	42 365	45 899	8.7	11 627	28 122	5 932	218	362 393
N06BA	Centrally acting sympathomimetics	34 369	36 710	39 231	41 988	45 520	8.6	11 620	27 948	5 796	156	353 324
N06BA01	amfetamine	402	419	378	315	348	0.1	<5	213	119	14	14 578
N06BA02	dexamfetamine	1 691	1 886	2 008	2 282	2 589	0.5	117	1 681	761	30	48 560
N06BA04	methylphenidate	30 397	32 335	34 062	35 618	37 698	7.1	10 202	23 045	4 367	84	194 804
N06BA07	modafinil	436	486	548	582	678	0.1	10	434	207	27	7 244
N06BA09	atomoxetine	3 282	3 635	3 630	3 669	3 707	0.7	1 301	2 119	285	<5	34 357
N06BA12	lisdexamfetamine	26	388	2 115	3 908	5 884	1.1	1 824	3 412	643	5	53 781
N06BC	Xanthine derivatives	309	311	320	304	300	0.1	<5	138	113	48	226
N06BC01	caffeine	309	311	320	304	300	0.1	<5	138	113	48	226
N06BX	Other psychostimulants and nootropics	95	89	93	92	98	0.0	6	50	28	14	8 843
N06BX03	piracetam	84	73	72	75	81	0.0	<5	39	27	14	299
N06BX13	idebenone	11	16	21	17	17	0.0	5	11	<5	0	8 544
N06C	PSYCHOLEPTICS AND PSYCHOANALEPTICS IN COMBINATION	0	0	0	<5	0	0.0	0	0	0	0	0
N06CA	Antidepressants in combination with psycholeptics	0	0	0	<5	0	0.0	0	0	0	0	0
N06CA02	melitracen and psycholeptics	0	0	0	<5	0	0.0	0	0	0	0	0
N06D	ANTI-DEMENTIA DRUGS	15 483	15 427	15 167	15 233	15 281	2.9	0	15	1 582	13 684	49 047
N06DA	Anticholinesterases	12 995	12 805	12 594	12 572	12 630	2.4	0	5	1 358	11 267	38 994
N06DA02	donepezil	7 960	7 701	7 476	7 360	7 449	1.4	0	<5	800	6 647	19 264
N06DA03	rivastigmine	5 146	5 212	5 239	5 344	5 380	1.0	0	<5	596	4 781	18 443
N06DA04	galantamine	301	257	224	193	172	0.0	0	0	19	153	1 287
N06DX	Other anti-dementia drugs	3 682	3 729	3 646	3 821	3 818	0.7	0	11	468	3 339	10 053
N06DX01	memantine	3 645	3 729	3 646	3 821	3 818	0.7	0	11	468	3 339	10 053
N06DX02	Ginkgo folium ¹⁾	37	0	0	0	0	0.0	0	0	0	0	0

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ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
N07	OTHER NERVOUS SYSTEM DRUGS	50 686	45 836	42 973	41 387	39 788	7.5	41	12 020	24 162	3 565	428 694
N07A	PARASYMPATHOMIMETICS	747	784	781	837	874	0.2	6	158	360	350	4 439
N07AA	Anticholinesterases	591	619	621	692	737	0.1	6	151	281	299	2 903
N07AA01	neostigmine	<5	0	0	0	<5	-	0	0	<5	0	10
N07AA02	pyridostigmine	588	617	620	688	733	0.1	6	149	281	297	2 878
N07AA30	ambenonium	<5	<5	<5	<5	<5	-	0	<5	<5	0	14
N07AA51	neostigmine, combinations	0	<5	0	<5	<5	-	0	0	0	<5	0
N07AB	Choline esters	29	32	21	9	0	0.0	0	0	0	0	0
N07AB01	carbachol	29	32	21	9	0	0.0	0	0	0	0	0
N07AX	Other parasympathomimetics	131	134	140	139	137	0.0	0	7	79	51	1 537
N07AX01	pilocarpine	131	134	140	135	130	0.0	0	7	74	49	952
N07AX03	cevimeline	0	0	0	<5	7	0.0	0	0	5	<5	585
N07B	DRUGS USED IN ADDICTIVE DISORDERS	47 793	41 853	38 600	36 830	35 133	6.7	15	10 891	21 622	2 605	216 468
N07BA	Drugs used in nicotine dependence	23 082	17 794	17 103	16 961	16 000	3.0	<5	3 774	10 643	1 582	27 069
N07BA01	nicotine ¹⁾	928	931	993	1 191	1 168	0.2	<5	118	730	319	814
N07BA03	varenicline	22 201	16 911	16 174	15 833	14 902	2.8	0	3 664	9 963	1 275	26 255
N07BB	Drugs used in alcohol dependence	17 479	16 397	13 683	12 143	11 498	2.2	14	3 573	6 969	942	12 898
N07BB01	disulfiram	4 315	4 233	4 226	4 247	4 146	0.8	0	1 256	2 578	312	2 826
N07BB03	acamprosate	580	469	465	472	435	0.1	0	118	294	23	727
N07BB04	naltrexone	11 314	10 488	8 189	6 840	6 483	1.2	14	2 054	3 845	570	8 562
N07BB05	nalmefene	1 722	1 615	1 162	921	695	0.1	0	234	413	48	783
N07BC	Drugs used in opioid dependence	7 736	8 017	8 115	8 010	7 933	1.5	0	3 627	4 219	87	176 501
N07BC01	buprenorphine	2 650	2 894	3 037	3 168	3 321	0.6	0	1 786	1 528	7	59 788
N07BC02	methadone	3 718	3 604	3 545	3 424	3 346	0.6	0	1 103	2 165	78	83 487
N07BC05	levomethadone	0	<5	6	14	16	0.0	0	9	6	<5	925
N07BC51	buprenorphine, combinations	2 012	2 265	2 198	2 018	1 774	0.3	0	1 070	702	<5	32 302
N07C	ANTIVERTIGO PREPARATIONS	555	682	708	732	719	0.1	<5	136	376	204	1 695
N07CA	Antivertigo preparations	555	682	708	732	719	0.1	<5	136	376	204	1 695
N07CA01	betahistine	535	649	674	698	673	0.1	0	114	355	204	1 624
N07CA03	flunarizine	20	33	34	34	44	0.0	<5	22	19	0	71
N07CA52	cinnarizine, combinations	0	0	0	0	<5	-	0	0	<5	0	1
N07X	OTHER NERVOUS SYSTEM DRUGS	2 114	3 055	3 338	3 377	3 389	0.6	18	879	2 049	443	206 092

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group N

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
N07XX	Other nervous system drugs	2 114	3 055	3 338	3 377	3 389	0.6		18	879	2 049	443	206 092
N07XX02	riluzole	285	290	301	336	353	0.1		0	18	200	135	4 221
N07XX04	sodium oxybate	84	96	103	116	142	0.0		14	95	29	<5	11 888
N07XX05	amifampridine	<5	7	11	14	8	0.0		<5	<5	5	0	2 619
N07XX06	tetrabenazine	43	52	48	41	44	0.0		<5	6	21	15	772
N07XX07	fampridine	1 692	1 631	1 690	1 703	1 751	0.3		0	181	1 287	283	47 802
N07XX09	dimethyl fumarate	8	1 054	1 273	1 235	1 158	0.2		0	590	561	7	137 998
N07XX11	pitolisant	0	0	0	0	6	0.0		<5	<5	<5	0	230
N07XX59	dextromethorphan, combinations	0	0	0	0	8	0.0		0	<5	6	0	563

¹⁾ The figures only include methadone dispensed according to prescription from the pharmacies. Patients may also receive this drug dispensed according to special arrangements in the health regions.

3.15 ATC group P – Antiparasitic products, insecticides and repellents

ATC level		2013	2014	2015	2016	2017	2017	2017				
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
P	ANTIPARASITIC PRODUCTS, INSECTICIDES AND REPELLENTS	96 547	97 581	94 698	93 310	93 329	17.7	4 347	40 992	35 652	12 338	28 124
P01	ANTIPROTOZOALS	92 720	92 914	89 211	87 278	86 800	16.5	2 528	37 585	34 650	12 037	24 019
P01A	AGENTS AGAINST AMOEIASIS AND OTHER PROTOZOAL DISEASES	58 337	59 261	57 466	55 655	53 658	10.2	634	21 468	22 212	9 344	6 327
P01AB	Nitroimidazole derivatives	58 335	59 259	57 466	55 655	53 655	10.2	634	21 467	22 211	9 343	6 287
P01AB01	metronidazole	58 227	59 238	57 450	55 641	53 649	10.2	634	21 466	22 206	9 343	6 251
P01AB02	tinidazole	149	27	22	26	16	0.0	<5	8	7	0	9
P01AB03	ornidazole	0	0	<5	<5	<5	-	0	0	<5	0	1
P01AB06	nimorazole	<5	<5	0	<5	<5	-	0	0	<5	0	26
P01AC	Dichloroacetamide derivatives	9	5	0	0	0	0.0	0	0	0	0	0
P01AC01	diloxanide	9	5	0	0	0	0.0	0	0	0	0	0
P01AX	Other agents against amoebiasis and other protozoal diseases	0	0	0	0	<5	-	0	<5	<5	<5	41
P01AX05	mepacrine	0	0	0	0	<5	-	0	<5	<5	0	28
P01AX06	atoquione	0	0	0	0	<5	-	0	0	0	<5	13
P01B	ANTIMALARIALS	35 069	34 230	32 307	32 165	33 624	6.4	1 898	16 335	12 648	2 743	17 659
P01BA	Aminoquinolines	6 131	6 041	6 216	6 288	6 280	1.2	35	1 685	3 325	1 235	4 052
P01BA01	chloroquine	14	13	12	11	11	0.0	0	<5	6	<5	17
P01BA02	hydroxychloroquine	6 112	6 020	6 199	6 258	6 260	1.2	34	1 677	3 316	1 233	4 011
P01BA03	primaquine	6	9	11	22	10	0.0	<5	6	<5	0	24
P01BB	Biguanides	24 803	25 262	23 468	23 563	25 145	4.8	1 592	13 712	8 577	1 264	12 543
P01BB01	proguanil	<5	<5	<5	0	<5	-	<5	0	0	0	0
P01BB51	proguanil, combinations	24 799	25 260	23 466	23 563	25 144	4.8	1 591	13 712	8 577	1 264	12 542
P01BC	Methanolquinolines	4 312	3 086	2 769	2 436	2 323	0.4	278	1 008	783	254	1 041
P01BC01	quinine	396	350	368	331	286	0.1	0	15	106	165	240
P01BC02	mefloquine	3 917	2 737	2 401	2 105	2 037	0.4	278	993	677	89	801
P01BD	Diaminopyrimidines	0	0	<5	<5	<5	-	0	<5	<5	0	7
P01BD01	pyrimethamine	0	0	<5	<5	<5	-	0	<5	<5	0	7
P01BE	Artemisinin and derivatives, plain	<5	0	<5	0	0	0.0	0	0	0	0	0
P01BE03	artesunate	<5	0	<5	0	0	0.0	0	0	0	0	0
P01BF	Artemisinin and derivatives, combinations	<5	5	<5	6	13	0.0	0	9	<5	0	16
P01BF01	artemether and lumefantrine	<5	5	<5	6	13	0.0	0	9	<5	0	16

ATC group P

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK				
			Number of individuals per age group								
			<15	15–44	45–69	≥70					
P01C AGENTS AGAINST LEISHMANIASIS AND TRYPARASITICIDES	<5	<5	<5	0	<5	-	0	0	<5	0	32
P01CX Other agents against leishmaniasis and trypanosomiasis	<5	<5	<5	0	<5	-	0	0	<5	0	32
P01CX01 pentamidine isethionate	<5	<5	<5	0	<5	-	0	0	<5	0	32
P02 ANTHELMINTICS	2 388	2 775	2 957	3 066	3 231	0.6	1 463	1 189	462	117	1 634
P02B ANTITREMATODALS	55	52	66	65	56	0.0	<5	37	13	<5	130
P02BA Quinoline derivatives and related substances	55	52	66	65	56	0.0	<5	37	13	<5	130
P02BA01 praziquantel	55	52	66	65	56	0.0	<5	37	13	<5	130
P02C ANTINEMATODAL AGENTS	2 330	2 713	2 891	2 991	3 167	0.6	1 458	1 145	449	115	1 492
P02CA Benzimidazole derivatives	2 127	2 432	2 610	2 626	2 696	0.5	1 376	873	356	91	929
P02CA01 mebendazole ¹⁾	1 993	2 272	2 276	2 261	2 294	0.4	1 189	718	304	83	519
P02CA03 albendazole	140	172	343	376	415	0.1	192	158	57	8	410
P02CF Avermectines	86	125	123	217	324	0.1	15	203	87	19	532
P02CF01 ivermectin	86	125	123	217	324	0.1	15	203	87	19	532
P02CX Other antinematodals	139	176	186	174	177	0.0	70	82	17	8	32
P02CX01 pyrvinium ¹⁾	139	176	186	174	177	0.0	70	82	17	8	32
P02D ANTICESTODALS	16	20	10	22	22	0.0	<5	14	5	0	12
P02DA Salicylic acid derivatives	16	20	10	22	22	0.0	<5	14	5	0	12
P02DA01 niclosamide	16	20	10	22	22	0.0	<5	14	5	0	12
P03 ECTOPARASITICIDES, INCL. SCABICIDES, INSECTICIDES AND REPELLENTS	1 688	2 157	2 779	3 211	3 561	0.7	377	2 387	603	194	2 471
P03A ECTOPARASITICIDES, INCL. SCABICIDES	1 688	2 157	2 779	3 211	3 561	0.7	377	2 387	603	194	2 471
P03AC Pyrethrines, incl. synthetic compounds	1 618	2 092	2 706	3 148	3 507	0.7	370	2 356	590	191	2 439
P03AC04 permethrin ¹⁾	1 618	2 092	2 706	3 148	3 507	0.7	370	2 356	590	191	2 439
P03AX Other ectoparasiticides, incl. scabicides	80	72	87	69	71	0.0	10	42	15	<5	32
P03AX01 benzyl benzoate ¹⁾	34	32	36	37	44	0.0	6	31	5	<5	24
P03AX03 malathion ¹⁾	47	41	51	32	27	0.0	<5	11	10	<5	8

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

3.16 ATC group R – Respiratory system

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
R	RESPIRATORY SYSTEM	1 220 112	1 259 843	1 296 928	1 330 147	1 374 981	260.6	162 413	500 922	498 654	212 992	1 718 210
R01	NASAL PREPARATIONS	376 766	405 387	416 908	428 436	460 559	87.3	37 162	210 293	167 730	45 374	148 477
R01A	DECONGESTANTS AND OTHER NASAL PREPARATIONS FOR TOPICAL USE	316 889	349 590	357 036	366 599	395 123	74.9	35 770	176 160	141 864	41 329	133 732
R01AA	Sympathomimetics, plain	3 520	3 606	3 691	3 702	3 300	0.6	914	1 267	778	341	304
R01AA05	oxymetazoline ¹⁾	1 824	2 000	2 101	2 047	1 563	0.3	607	562	284	110	153
R01AA07	xylometazoline ¹⁾	1 700	1 618	1 596	1 671	1 745	0.3	310	706	497	232	151
R01AB	Sympathomimetics, combinations excl. corticosteroids	387	427	495	480	435	0.1	12	190	145	88	38
R01AB06	xylometazoline ¹⁾	387	427	495	480	435	0.1	12	190	145	88	38
R01AC	Antiallergic agents, excl. corticosteroids	38 277	47 317	42 319	42 169	46 164	8.8	12 481	20 738	10 707	2 238	12 530
R01AC01	cromoglicic acid ¹⁾	7 646	8 651	7 724	7 457	7 607	1.4	1 813	3 132	2 202	460	1 988
R01AC02	levocabastine ¹⁾	30 702	38 754	34 707	34 878	38 774	7.4	10 761	17 688	8 539	1 786	10 542
R01AC03	azelastine	132	214	101	0	0	0.0	0	0	0	0	0
R01AD	Corticosteroids	279 941	305 163	316 591	325 942	351 612	66.6	23 718	157 088	132 001	38 805	119 747
R01AD04	flunisolide	10	12	12	12	12	0.0	0	0	8	<5	18
R01AD05	budesonide	28 699	28 577	26 320	25 023	25 004	4.7	1 005	8 450	11 715	3 834	8 976
R01AD08	fluticasone	21 129	21 841	21 422	21 199	21 209	4.0	1 012	6 986	9 959	3 252	11 039
R01AD09	mometasone ¹⁾	152 995	160 714	160 158	161 114	171 090	32.4	10 734	72 855	66 696	20 805	41 228
R01AD11	triamcinolone ¹⁾	6 924	6 975	6 357	6 023	5 719	1.1	170	2 009	2 690	850	2 423
R01AD12	fluticasone furoate	79 316	92 012	88 457	87 374	92 014	17.4	8 924	45 175	30 254	7 661	17 951
R01AD58	fluticasone, combinations	1 551	7 848	31 101	42 588	55 895	10.6	2 723	30 637	18 164	4 371	38 110
R01AX	Other nasal preparations	1 000	1 224	1 312	1 482	1 923	0.4	158	738	543	484	1 114
R01AX03	ipratropium bromide	534	615	590	585	791	0.2	<5	121	272	396	705
R01AX06	mupirocin	466	609	722	899	1 134	0.2	156	617	273	88	409
R01B	NASAL DECONGESTANTS FOR SYSTEMIC USE	89 209	84 739	92 553	97 245	105 358	20.0	1 984	55 018	41 846	6 510	14 746
R01BA	Sympathomimetics	89 209	84 739	92 553	97 245	105 358	20.0	1 984	55 018	41 846	6 510	14 746
R01BA01	phenylpropanolamine	89 207	84 735	92 551	97 241	105 358	20.0	1 984	55 018	41 846	6 510	14 746
R01BA51	phenylpropanolamine, combinations	0	0	<5	<5	0	0.0	0	0	0	0	0
R01BA52	pseudoephedrine, combinations	<5	<5	<5	0	0	0.0	0	0	0	0	0
R02	THROAT PREPARATIONS	0	231	601	860	959	0.2	59	538	245	117	94
R02A	THROAT PREPARATIONS	0	231	601	860	959	0.2	59	538	245	117	94
R02AA	Antiseptics	0	0	0	113	242	0.1	17	139	63	23	22
R02AA03	dichlorobenzyl alcohol	0	0	0	113	242	0.1	17	139	63	23	22

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group R

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
									<15	15–44	45–69	≥70
R02AX	Other throat preparations	0	231	601	748	721	0.1	42	400	185	94	72
R02AX01	flurbiprofen ¹⁾	0	0	0	14	90	0.0	6	54	19	11	11
R02AX03	benzydamine ¹⁾	0	231	601	735	639	0.1	36	350	170	83	61
R03	DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES	418 306	430 210	437 217	448 102	457 872	86.8	70 871	115 358	171 948	99 695	1 180 526
R03A	ADRENERGICS, INHALANTS	357 307	370 805	379 571	395 846	410 441	77.8	59 419	105 660	156 235	89 127	733 286
R03AA	Alpha- and beta-adrenoreceptor agonists	201	157	122	68	52	0.0	35	13	<5	0	81
R03AA01	epinephrine	201	157	122	68	52	0.0	35	13	<5	0	81
R03AC	Selective beta-2-adrenoreceptor agonists	266 976	278 642	283 524	297 047	308 927	58.5	57 346	84 358	109 693	57 530	144 821
R03AC02	salbutamol	219 571	231 841	239 799	255 957	270 499	51.3	56 621	74 567	92 434	46 877	89 282
R03AC03	terbutaline	29 979	29 663	28 384	27 455	25 686	4.9	720	8 676	11 512	4 778	9 415
R03AC04	fenoterol	14	17	16	11	11	0.0	0	<5	10	0	34
R03AC12	salmeterol	8 885	8 614	8 426	8 185	8 238	1.6	243	1 059	3 588	3 348	13 245
R03AC13	formoterol	13 601	12 919	12 162	11 282	10 731	2.0	150	1 921	5 059	3 601	17 147
R03AC18	indacaterol	9 343	9 391	7 525	6 114	5 163	1.0	0	67	2 267	2 829	13 713
R03AC19	olodaterol	0	131	817	927	1 029	0.2	0	29	498	502	1 985
R03AK	Adrenergics in combination with corticosteroids or other drugs, excl. anticholinergics	180 135	183 306	187 955	192 942	196 252	37.2	7 999	47 844	88 079	52 330	492 871
R03AK06	salmeterol and fluticasone	94 551	92 173	88 212	83 967	78 843	14.9	6 194	17 957	32 447	22 245	178 848
R03AK07	formoterol and budesonide	83 758	83 643	82 837	80 791	78 736	14.9	864	19 457	37 647	20 768	187 997
R03AK08	formoterol and beclometasone	4 443	5 526	8 761	13 249	17 061	3.2	121	4 343	8 255	4 342	43 209
R03AK10	vilanterol and fluticasone furoate	0	5 049	12 815	20 372	26 166	5.0	879	6 603	11 945	6 739	71 438
R03AK11	formoterol and fluticasone	2 239	3 733	3 673	4 045	4 482	0.9	160	1 441	2 020	861	11 379
R03AL	Adrenergics in combinations with anticholinergics incl. triple combinations with corticosteroids	0	4 849	10 887	17 031	22 168	4.2	<5	270	9 935	11 962	95 514
R03AL02	salbutamol and ipratropium bromide	0	0	0	0	<5	-	0	<5	0	0	1
R03AL03	vilanterol and umeclidinium bromide	0	137	2 442	4 546	6 634	1.3	0	79	3 017	3 538	28 160
R03AL04	indacaterol and glycopyrronium bromide	0	4 720	7 447	7 618	7 435	1.4	0	65	3 230	4 140	33 769
R03AL05	formoterol and aclidinium bromide	0	0	919	2 538	2 823	0.5	0	38	1 334	1 451	10 828
R03AL06	olodaterol and tiotropium bromide	0	0	440	3 086	5 969	1.1	<5	83	2 625	3 260	22 064

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group R

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
R03AL09	formoterol, glycopyrronium bromide and beclometasone	0	0	0	0	337	0.1		0	9	168	160	692
R03B	OTHER DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES, INHALANTS	153 128	159 015	159 601	162 051	165 633	31.4	42 570	25 865	53 546	43 652	278 914	
R03BA	Glucocorticoids	91 993	96 580	97 203	99 473	103 028	19.5	42 122	21 961	26 782	12 163	88 708	
R03BA01	beclometasone	3 713	3 822	3 692	3 652	3 817	0.7		777	951	1 359	730	2 836
R03BA02	budesonide	19 625	18 785	17 790	17 063	16 579	3.1		1 858	3 985	6 875	3 861	22 661
R03BA05	fluticasone	61 703	64 166	63 633	64 979	67 460	12.8		39 599	11 978	11 178	4 705	38 916
R03BA07	mometasone	703	578	431	392	348	0.1		10	115	157	66	502
R03BA08	ciclesonide	8 080	11 093	13 598	15 260	16 702	3.2		735	5 329	7 658	2 980	23 794
R03BB	Anticholinergics	66 894	68 515	68 640	69 233	69 975	13.3	1 026	5 313	29 799	33 837	190 174	
R03BB01	ipratropium bromide	28 751	28 642	29 165	30 118	30 696	5.8		1 018	4 436	12 565	12 677	26 708
R03BB04	tiotropium bromide	41 458	40 771	40 057	38 667	37 851	7.2		21	950	16 201	20 679	140 040
R03BB05	aclidinium bromide	1 518	2 631	2 976	3 048	2 929	0.6		0	45	1 341	1 543	8 352
R03BB06	glycopyrronium bromide	1 899	2 874	2 251	1 905	1 705	0.3		0	25	815	865	5 508
R03BB07	umeclidinium bromide	0	0	214	1 854	3 072	0.6		0	55	1 491	1 526	9 567
R03BC	Antiallergic agents, excl. corticosteroids	345	364	326	210	10	0.0		<5	<5	5	<5	32
R03BC01	cromoglicic acid	345	364	326	210	10	0.0		<5	<5	5	<5	32
R03C	ADRENERGICS FOR SYSTEMIC USE	27 069	23 347	20 579	13 869	4 772	0.9	2 469	754	1 074	475	1 584	
R03CA	Alpha- and beta-adrenoreceptor agonists	12 615	8 918	7 536	4 389	3 636	0.7	2 039	632	729	236	1 029	
R03CA02	ephedrine	12 615	8 918	7 536	4 389	3 636	0.7		2 039	632	729	236	1 029
R03CC	Selective beta-2-adrenoreceptor agonists	14 953	14 831	13 286	9 634	1 161	0.2	445	127	350	239	555	
R03CC02	salbutamol	3 497	3 141	2 693	3 741	483	0.1		391	33	36	23	138
R03CC03	terbutaline	11 371	11 582	10 520	6 105	536	0.1		54	80	248	154	250
R03CC12	bambuterol	206	218	172	145	150	0.0		<5	16	71	62	161
R03CC13	clenbuterol	0	0	<5	<5	<5	-		0	<5	0	0	6
R03D	OTHER SYSTEMIC DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES	41 450	40 854	39 980	39 686	39 924	7.6	5 908	9 834	16 574	7 608	166 742	
R03DA	Xanthines	3 431	3 049	2 677	2 316	2 017	0.4		<5	97	933	985	2 700
R03DA02	choline theophyllinate	7	6	5	0	0	0.0		0	0	0	0	0
R03DA04	theophylline	3 417	3 039	2 667	2 305	2 006	0.4		<5	94	925	985	2 617
R03DA05	aminophylline	17	12	13	15	16	0.0		0	<5	11	<5	83
R03DC	Leukotriene receptor antagonists	37 874	37 473	36 608	36 321	36 373	6.9	5 872	9 155	15 120	6 226	29 372	
R03DC01	zafirlukast	19	20	17	15	16	0.0		0	0	8	8	185

ATC group R

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
								<15	15–44	45–69	≥70	
R03DC03	montelukast	37 857	37 454	36 591	36 306	36 357	6.9	5 872	9 155	15 112	6 218	29 187
R03DX	Other systemic drugs for obstructive airway diseases	1 303	1 452	1 764	2 147	2 691	0.5	58	796	1 157	680	134 671
R03DX05	omalizumab	256	413	752	1 122	1 519	0.3	58	761	612	88	108 361
R03DX07	roflumilast	1 049	1 039	1 012	977	997	0.2	0	6	426	565	4 453
R03DX08	reslizumab	0	0	0	0	<5	-	0	0	<5	0	18
R03DX09	mepolizumab	0	0	0	61	197	0.0	0	34	136	27	21 838
R05	COUGH AND COLD PREPARATIONS	375 140	356 030	387 309	390 932	389 149	73.8	26 079	123 767	158 311	80 992	97 994
R05C	EXPECTORANTS, EXCL. COMBINATIONS WITH COUGH SUPPRESSANTS	113 563	104 508	106 875	103 679	101 730	19.3	5 674	18 996	39 893	37 167	45 894
R05CA	Expectorants	3 977	5 185	5 302	6 010	5 064	1.0	1 774	1 218	1 289	783	445
R05CA03	guaifenesin	0	0	0	<5	0	0.0	0	0	0	0	0
R05CA10	combinations ¹⁾	3 977	5 185	5 302	6 007	5 064	1.0	1 774	1 218	1 289	783	445
R05CB	Mucolytics	110 174	100 034	102 333	98 519	97 444	18.5	3 977	17 933	38 898	36 636	45 449
R05CB01	acetylcysteine ¹⁾	106 696	96 331	98 792	94 871	93 303	17.7	1 747	17 271	38 180	36 105	36 489
R05CB02	bromhexine ¹⁾	4 134	4 351	4 157	4 300	4 689	0.9	2 204	734	959	792	799
R05CB13	dornase alfa (desoxyribonuclease)	129	145	155	156	165	0.0	54	94	14	<5	8 161
R05D	COUGH SUPPRESSANTS, EXCL. COMBINATIONS WITH EXPECTORANTS	259 319	246 923	271 827	275 066	273 933	51.9	18 237	95 756	114 361	45 579	43 065
R05DA	Opium alkaloids and derivatives	259 319	246 923	271 827	275 066	273 933	51.9	18 237	95 756	114 361	45 579	43 065
R05DA01	ethylmorphine	250 796	238 540	262 841	266 227	265 341	50.3	17 723	93 173	110 622	43 823	39 703
R05DA03	hydrocodone	514	441	493	395	364	0.1	<5	72	185	106	191
R05DA04	codeine	6 904	6 709	7 207	7 015	6 853	1.3	44	2 223	3 234	1 352	2 167
R05DA07	noscapine ¹⁾	1 636	1 771	1 818	2 177	2 270	0.4	496	695	715	364	260
R05DA09	dextromethorphan	<5	0	0	0	0	0.0	0	0	0	0	0
R05DA20	combinations	2 631	2 619	2 746	2 532	2 369	0.5	35	626	1 183	525	745
R05F	COUGH SUPPRESSANTS AND EXPECTORANTS, COMBINATIONS	46 193	44 505	51 619	55 023	55 933	10.6	3 175	19 888	23 226	9 644	9 034
R05FA	Opium derivatives and expectorants	46 193	44 505	51 619	55 023	55 933	10.6	3 175	19 888	23 226	9 644	9 034
R05FA02	opium derivatives and expectorants	46 193	44 505	51 619	55 023	55 933	10.6	3 175	19 888	23 226	9 644	9 034
R06	ANTIHISTAMINES FOR SYSTEMIC USE	555 485	615 581	618 356	642 752	683 165	129.5	84 659	280 533	241 279	76 694	228 904
R06A	ANTIHISTAMINES FOR SYSTEMIC USE	555 485	615 581	618 356	642 752	683 165	129.5	84 659	280 533	241 279	76 694	228 904
R06AA	Aminoalkyl ethers	29	44	50	2 581	8 784	1.7	8	3 885	3 764	1 127	3 375

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group R

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
R06AA02	diphenhydramine	11	5	8	11	10	0.0		0	7	<5	<5	6
R06AA04	clemastine	18	20	13	20	13	0.0		0	6	<5	<5	26
R06AA09	doxylamine	0	0	0	2 535	8 741	1.7		8	3 871	3 746	1 116	3 190
R06AA52	diphenhydramine, combinations	0	19	29	17	20	0.0		0	<5	13	6	154
R06AB	Substituted alkylamines	19 417	18 231	11 520	5 868	5 347	1.0		1 245	1 640	1 647	815	5 211
R06AB02	dexchlorpheniramine	19 417	18 231	11 520	5 868	5 347	1.0		1 245	1 640	1 647	815	5 211
R06AD	Phenothiazine derivatives	66 678	69 771	71 384	72 539	72 702	13.8		3 450	27 104	31 071	11 077	50 140
R06AD01	alimemazine	60 961	63 783	65 267	66 312	66 923	12.7		3 411	24 485	28 802	10 225	47 592
R06AD02	promethazine	6 242	6 509	6 681	6 799	6 324	1.2		42	2 888	2 495	899	2 547
R06AD03	thiethylperazine	6	5	6	<5	0	0.0		0	0	0	0	0
R06AE	Piperazine derivatives	277 991	297 671	285 600	285 951	291 357	55.2		34 273	110 443	107 420	39 221	65 708
R06AE03	cyclizine ¹⁾	774	837	947	1 076	1 098	0.2		36	258	515	289	964
R06AE05	meclozine ¹⁾	2 613	2 983	3 202	3 378	3 838	0.7		120	3 047	437	234	511
R06AE07	cetirizine ¹⁾	274 382	293 687	281 322	281 412	286 302	54.3		34 106	107 135	106 364	38 697	63 667
R06AE09	levocetirizine	572	619	597	600	612	0.1		22	251	271	68	566
R06AX	Other antihistamines for systemic use	223 948	268 418	285 906	311 620	343 951	65.2		49 689	153 960	111 651	28 651	104 470
R06AX02	cyproheptadine	31	32	35	29	25	0.0		<5	6	10	6	58
R06AX13	loratadine ¹⁾	61 729	62 810	57 892	55 508	54 389	10.3		1 551	22 965	22 420	7 453	15 851
R06AX17	ketotifen	10	7	7	11	11	0.0		0	<5	<5	<5	21
R06AX22	ebastine ¹⁾	9 205	9 554	11 024	11 836	12 808	2.4		240	5 440	5 711	1 417	7 914
R06AX26	fexofenadine ¹⁾	29 771	34 434	36 382	39 227	42 308	8.0		769	21 303	16 123	4 113	15 522
R06AX27	desloratadine	129 266	169 031	188 287	212 900	243 334	46.1		47 479	109 167	70 307	16 381	65 034
R06AX28	rupatadine	0	0	38	130	122	0.0		21	63	33	5	65
R06AX29	bilastine	0	<5	10	12	23	0.0		0	13	7	<5	6
R07	OTHER RESPIRATORY SYSTEM PRODUCTS	12	15	18	39	49	0.0		11	32	<5	<5	62 214
R07A	OTHER RESPIRATORY SYSTEM PRODUCTS	12	15	18	39	49	0.0		11	32	<5	<5	62 214
R07AX	Other respiratory system products	9	8	10	26	41	0.0		6	32	<5	0	62 117
R07AX02	ivacaftor	9	8	10	11	13	0.0		<5	6	<5	0	26 718
R07AX30	ivacaftor and lumacaftor	0	0	0	15	28	0.0		<5	26	0	0	35 400

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

3.17 ATC group S – Sensory organs

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70	<15	15–44	45–69	≥70			
S	SENSORY ORGANS	612 715	653 581	643 474	646 492	668 750	126.7	107 039	192 919	213 636	155 156	401 363
S01	OPHTHALMOLOGICALS	540 362	578 242	569 991	572 678	596 365	113.0	93 301	169 350	187 981	145 733	385 563
S01A	ANTIINFECTIVES	249 591	252 458	246 266	240 135	243 440	46.1	59 538	71 690	74 256	37 956	49 766
S01AA	Antibiotics	246 579	249 383	243 182	236 834	239 976	45.5	59 405	70 533	72 855	37 183	48 138
S01AA01	chloramphenicol	185 720	193 008	190 237	187 623	193 942	36.8	42 466	59 466	61 566	30 444	42 488
S01AA02	chlortetracycline	0	6	<5	<5	<5	-	0	0	<5	<5	1
S01AA10	natamycin	0	0	0	<5	<5	-	0	0	<5	<5	3
S01AA11	gentamicin	111	42	37	31	17	0.0	0	8	6	<5	3
S01AA12	tobramycin	1 783	1 629	1 431	1 413	1 293	0.3	173	391	444	285	126
S01AA13	fusidic acid	64 306	60 942	55 790	51 375	48 485	9.2	18 951	11 721	11 328	6 485	3 945
S01AA26	azithromycin	8 981	6 944	6 268	5 796	5 330	1.0	1 552	1 520	1 419	839	620
S01AA27	cefuroxime	0	0	<5	0	0	0.0	0	0	0	0	0
S01AA30	combinations of different antibiotics	4 797	5 579	5 758	6 263	6 446	1.2	284	1 298	2 564	2 300	951
S01AD	Antivirals	3 230	3 287	2 908	3 300	3 375	0.6	115	898	1 358	1 004	842
S01AD02	trifluridine	0	0	0	0	<5	-	0	<5	0	0	6
S01AD03	aciclovir	3 230	3 287	2 908	3 300	3 374	0.6	115	897	1 358	1 004	836
S01AE	Fluoroquinolones	2 613	2 669	2 844	2 926	3 082	0.6	120	1 130	1 274	558	750
S01AE03	ciprofloxacin	2 613	2 669	2 844	2 926	3 082	0.6	120	1 130	1 274	558	750
S01AX	Other antiinfectives	<5	8	8	<5	5	0.0	0	<5	<5	<5	36
S01AX09	chlorhexidine	<5	<5	<5	<5	<5	-	0	<5	<5	<5	33
S01AX15	propamidine	<5	<5	<5	<5	<5	-	0	<5	0	<5	2
S01AX18	povidone-iodine	0	<5	<5	<5	<5	-	0	0	<5	0	1
S01B	ANTIINFLAMMATORY AGENTS	51 179	53 602	59 747	62 824	67 149	12.7	2 436	11 329	23 152	30 232	24 711
S01BA	Corticosteroids, plain	33 532	35 407	37 696	42 473	48 920	9.3	2 393	10 328	17 929	18 270	13 752
S01BA01	dexamethasone	20 553	21 838	23 154	29 392	36 013	6.8	790	6 168	13 648	15 407	10 742
S01BA02	hydrocortisone	0	0	0	0	60	0.0	<5	18	26	15	13
S01BA04	prednisolone	13 742	14 636	15 448	16 479	17 943	3.4	1 721	5 800	6 635	3 787	2 823
S01BA07	fluorometholone	7	9	9	25	17	0.0	0	<5	6	7	20
S01BA09	clobetasone	15	13	12	12	14	0.0	0	<5	7	<5	33
S01BA13	rimexolone	4 162	4 105	4 322	2 440	83	0.0	<5	19	40	21	121
S01BB	Corticosteroids and mydriatics in combination	<5	0	0	0	0	0.0	0	0	0	0	0
S01BB03	fluorometholone and mydriatics	<5	0	0	0	0	0.0	0	0	0	0	0
S01BC	Antiinflammatory agents, non-steroids	20 187	21 212	26 341	27 895	28 399	5.4	59	1 377	8 250	18 713	10 959
S01BC03	diclofenac	6 137	6 025	7 513	7 688	7 732	1.5	43	787	2 554	4 348	1 789

ATC group S

ATC level		2013	2014	2015	2016	2017	2017	2017				2017	
		Number of individuals						Prevalence per 1 000	Number of individuals per age group				
									<15	15–44	45–69	≥70	
S01BC10	nepafenac	9 113	9 786	12 824	15 204	17 423	3.3		10	361	4 877	12 175	8 379
S01BC11	bromfenac	5 325	5 715	6 465	5 400	3 545	0.7		6	239	928	2 372	790
S01C	ANTIINFLAMMATORY AGENTS AND ANTIINFECTIVES IN COMBINATION	57 314	58 553	55 152	49 893	43 762	8.3		937	7 315	15 543	19 967	8 080
S01CA	Corticosteroids and antiinfectives in combination	57 314	58 553	55 152	49 893	43 762	8.3		937	7 315	15 543	19 967	8 080
S01CA01	dexamethasone and antiinfectives	57 314	58 553	55 152	49 893	43 762	8.3		937	7 315	15 543	19 967	8 080
S01E	ANTIGLAUCOMA PREPARATIONS AND MIOTICS	72 192	72 872	73 674	74 978	76 099	14.4		290	2 407	21 434	51 968	150 401
S01EA	Sympathomimetics in glaucoma therapy	4 920	5 140	5 385	4 901	4 787	0.9		10	189	1 238	3 350	4 395
S01EA01	epinephrine	<5	0	0	0	0	0.0		0	0	0	0	0
S01EA03	apraclonidine	155	193	238	169	205	0.0		<5	25	80	99	89
S01EA05	brimonidine	4 805	4 998	5 195	4 772	4 633	0.9		9	167	1 173	3 284	4 306
S01EB	Parasympathomimetics	1 012	955	907	917	910	0.2		5	50	269	586	1 197
S01EB01	pilocarpine	1 012	955	907	917	910	0.2		5	50	269	586	1 197
S01EB02	carbachol	<5	0	0	0	0	0.0		0	0	0	0	0
S01EC	Carbonic anhydrase inhibitors	10 892	11 093	11 510	12 539	13 374	2.5		165	833	3 301	9 075	18 732
S01EC01	acetazolamide	1 840	1 822	1 611	1 687	2 065	0.4		54	584	741	686	1 165
S01EC03	dorzolamide	2 357	2 430	2 567	2 840	3 152	0.6		19	100	778	2 255	4 775
S01EC04	brinzolamide	7 109	7 266	7 478	7 486	7 290	1.4		97	142	1 569	5 482	8 977
S01EC05	methazolamide	0	<5	0	0	0	0.0		0	0	0	0	0
S01EC54	brinzolamide, combinations	0	0	614	1 554	2 062	0.4		<5	44	530	1 487	3 815
S01ED	Beta blocking agents	49 878	50 197	50 545	51 182	51 703	9.8		199	1 320	14 523	35 661	74 258
S01ED01	timolol	21 606	21 495	21 520	21 391	21 098	4.0		145	555	6 557	13 841	22 037
S01ED02	betaxolol	1 247	1 150	960	834	723	0.1		6	10	139	568	427
S01ED51	timolol, combinations	29 164	29 552	30 224	31 281	32 044	6.1		62	855	8 527	22 600	51 794
S01EE	Prostaglandin analogues	37 446	37 948	38 604	38 866	38 665	7.3		47	748	10 174	27 696	51 820
S01EE01	latanoprost	23 338	23 693	24 167	24 533	24 257	4.6		32	441	6 189	17 595	24 020
S01EE03	bimatoprost	2 247	2 344	2 584	2 380	2 444	0.5		0	89	636	1 719	4 265
S01EE04	travoprost	7 095	6 454	5 844	5 206	4 520	0.9		<5	57	979	3 483	7 485
S01EE05	tafluprost	5 994	6 577	7 157	7 675	8 197	1.6		14	174	2 576	5 433	16 050
S01F	MYDRIATICS AND CYCLOPLEGICS	5 318	5 397	5 201	5 556	4 995	1.0		352	1 340	2 168	1 135	1 028
S01FA	Anticholinergics	5 311	5 384	5 194	5 540	4 976	0.9		352	1 336	2 154	1 134	1 018
S01FA01	atropine	2 185	2 033	1 850	1 553	1 336	0.3		267	311	490	268	282

ATC group S

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK	
			Number of individuals per age group					
			<15	15–44	45–69	≥70		
S01FA02 scopolamine	0	<5	<5	<5	<5	-	65	
S01FA04 cyclopentolate	3 177	3 401	3 365	4 059	3 749	0.7	636	
S01FA06 tropicamide	139	168	162	128	86	0.0	34	
S01FA54 cyclopentolate, combinations	<5	0	<5	<5	<5	-	1	
S01FB Sympathomimetics excl. antiglaucoma preparations	28	46	39	46	51	0.0	10	
S01FB01 phenylephrine	28	46	39	46	51	0.0	10	
S01G DECONGESTANTS AND ANTIALLERGICS	163 518	195 587	184 818	185 939	201 407	38.2	64 406	
S01GA Sympathomimetics used as decongestants	19 136	21 906	20 453	19 535	20 161	3.8	5 990	
S01GA01 naphazoline ¹⁾	0	0	0	5	12	0.0	2	
S01GA52 tetrazoline, combinations ¹⁾	19 136	21 906	20 453	19 530	20 152	3.8	5 988	
S01GX Other antiallergics	147 512	177 610	167 905	169 762	185 118	35.1	58 416	
S01GX01 cromoglicic acid ¹⁾	21 636	25 240	23 575	23 034	23 718	4.5	8 593	
S01GX02 levocabastine ¹⁾	75 061	91 780	86 161	87 921	97 537	18.5	24 960	
S01GX04 nedocromil	1 395	1 168	0	0	0	0.0	0	
S01GX06 emedastine	345	384	380	398	413	0.1	138	
S01GX07 azelastine	508	615	118	0	0	0.0	0	
S01GX08 ketotifen ¹⁾	17 238	21 010	20 747	21 391	23 557	4.5	9 397	
S01GX09 olopatadine	35 267	43 210	41 899	41 694	45 550	8.6	15 328	
S01X OTHER OPHTHALMOLOGICALS	45 774	52 953	61 068	69 031	79 804	15.1	86 882	
S01XA Other ophthalmologicals	45 774	52 953	61 068	69 031	79 804	15.1	86 882	
S01XA03 sodium chloride, hypertonic	15	21	22	29	35	0.0	50	
S01XA08 acetylcysteine	0	0	0	0	<5	-	10	
S01XA18 ciclosporin	474	601	784	1 823	2 697	0.5	19 791	
S01XA20 artificial tears and other indifferent preparations ¹⁾	45 650	52 768	60 851	68 604	79 216	15.0	65 976	
S01XA21 mercaptamine	0	0	0	0	6	0.0	815	
S02 OTOLOGICALS	20 091	23 042	24 528	22 510	20 226	3.8	3 726	
S02A ANTIINFECTIVES	8 282	7 549	6 437	5 536	5 224	1.0	906	
S02AA Antiinfectives	8 282	7 549	6 437	5 536	5 224	1.0	906	
S02AA01 chloramphenicol	11	11	13	11	0	0.0	0	
S02AA03 boric acid	7	<5	<5	8	20	0.0	11	
S02AA15 ciprofloxacin	8 264	7 537	6 423	5 520	5 204	1.0	895	
S02B CORTICOSTEROIDS	10 784	10 853	12 168	7 855	1 355	0.3	250	
S02BA Corticosteroids	10 784	10 853	12 168	7 855	1 355	0.3	250	

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group S

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70							Sales in 1000 NOK
S02BA07	betamethasone	10 784	10 853	12 168	7 855	1 355	0.3	16	284	679	376	250
S02C	CORTICOSTEROIDS AND ANTIINFECTIVES IN COMBINATION	1 764	5 664	7 031	10 163	14 369	2.7	2 644	4 587	5 015	2 123	2 570
S02CA	Corticosteroids and antiinfectives in combination	1 764	5 664	7 031	10 163	14 369	2.7	2 644	4 587	5 015	2 123	2 570
S02CA02	flumetasone and antiinfectives	64	101	74	62	59	0.0	<5	9	34	13	24
S02CA05	fluocinolone acetonide and antiinfectives	1 702	5 565	6 965	10 104	14 314	2.7	2 641	4 578	4 984	2 111	2 547
S03	OPHTHALMOLOGICAL AND OTOLOGICAL PREPARATIONS	73 853	75 987	72 119	74 436	74 488	14.1	13 272	22 825	26 810	11 581	12 074
S03C	CORTICOSTEROIDS AND ANTIINFECTIVES IN COMBINATION	73 853	75 987	72 119	74 436	74 488	14.1	13 272	22 825	26 810	11 581	12 074
S03CA	Corticosteroids and antiinfectives in combination	73 853	75 987	72 119	74 436	74 488	14.1	13 272	22 825	26 810	11 581	12 074
S03CA01	dexamethasone and antiinfectives	12 789	12 881	10 738	10 956	10 854	2.1	856	2 868	4 800	2 330	1 439
S03CA04	hydrocortisone and antiinfectives	63 093	65 069	63 014	65 134	65 319	12.4	12 552	20 469	22 737	9 561	10 635

3.18 ATC-group V – Various

ATC level	Number of individuals	Prevalence per 1 000	2017				Sales in 1000 NOK					
			Number of individuals per age group									
			<15	15–44	45–69	≥70						
V	VARIOUS	23 985	27 789	30 050	32 701	35 380	6.7	4 807	11 601	11 429	7 543	193 097
V01	ALLERGENS	9 462	10 346	11 619	12 876	14 582	2.8	2 606	9 304	2 581	91	104 542
V01A	ALLERGENS	9 462	10 346	11 619	12 876	14 582	2.8	2 606	9 304	2 581	91	104 542
V01AA	Allergen extracts	9 462	10 346	11 619	12 876	14 582	2.8	2 606	9 304	2 581	91	104 542
V01AA02	grass pollen	6 829	7 480	8 644	9 845	11 002	2.1	1 870	7 334	1 761	37	67 830
V01AA03	house dust mites	539	552	556	514	933	0.2	117	630	176	10	6 157
V01AA05	tree pollen	4 896	5 287	5 535	5 791	6 259	1.2	1 204	3 751	1 263	41	25 369
V01AA07	insects	160	148	165	149	144	0.0	17	39	74	14	962
V01AA10	flowers	149	120	96	43	<5	-	0	0	<5	<5	9
V01AA11	animals	494	526	569	555	513	0.1	89	316	104	<5	4 215
V03	ALL OTHER THERAPEUTIC PRODUCTS	2 655	3 018	3 300	3 537	3 876	0.7	86	455	1 567	1 768	78 947
V03A	ALL OTHER THERAPEUTIC PRODUCTS	2 655	3 018	3 300	3 537	3 876	0.7	86	455	1 567	1 768	78 947
V03AB	Antidotes	105	108	100	120	82	0.0	<5	32	46	<5	326
V03AB01	ipecacuanha	7	8	<5	<5	8	0.0	<5	6	0	<5	2
V03AB03	edetates	0	0	0	<5	0	0.0	0	0	0	0	0
V03AB06	thiosulfate	<5	<5	<5	<5	0	0.0	0	0	0	0	0
V03AB09	dimercaprol	9	8	12	6	6	0.0	0	<5	<5	0	61
V03AB14	protamine	0	0	0	<5	0	0.0	0	0	0	0	0
V03AB15	naloxone	14	14	12	20	11	0.0	0	5	6	0	6
V03AB16	ethanol	<5	<5	<5	0	<5	-	0	0	<5	0	21
V03AB17	methylthioninium chloride	0	0	0	<5	<5	-	0	<5	0	0	2
V03AB19	physostigmine	0	<5	0	0	<5	-	0	0	<5	0	1
V03AB21	potassium iodide	<5	<5	<5	<5	11	0.0	0	<5	8	0	9
V03AB22	amyl nitrite	0	0	0	<5	<5	-	0	0	<5	0	1
V03AB25	flumazenil	<5	<5	<5	5	<5	-	0	<5	0	0	2
V03AB32	glutathione	67	61	63	72	34	0.0	0	10	22	<5	129
V03AB33	hydroxocobalamin	0	0	<5	0	0	0.0	0	0	0	0	0
V03AC	Iron chelating agents	112	127	122	139	144	0.0	30	38	36	40	16 945
V03AC01	deferoxamine	38	36	31	30	31	0.0	15	11	<5	<5	737
V03AC02	deferiprone	19	26	23	22	21	0.0	<5	5	7	5	920
V03AC03	deferasirox	73	83	82	105	109	0.0	18	29	26	36	15 288
V03AE	Drugs for treatment of hyperkalemia and hyperphosphatemia	2 241	2 486	2 699	2 813	2 965	0.6	<5	263	1 214	1 484	29 471
V03AE01	polystyrene sulfonate ¹⁾	600	727	846	881	951	0.2	<5	77	385	486	2 043
V03AE02	sevelamer	1 551	1 746	1 790	1 862	1 987	0.4	<5	192	850	944	17 251

¹⁾ The ATC level comprises OTC medicinal products. The number of individuals is registered for prescription sales only.

ATC group V

ATC level		2013	2014	2015	2016	2017	2017	2017				2017
		Number of individuals						Prevalence per 1 000	Number of individuals per age group			
		<15	15–44	45–69	≥70							Sales in 1000 NOK
V03AE03	lanthanum carbonate	401	473	603	644	562	0.1	0	53	258	251	8 999
V03AE04	calcium acetate and magnesium carbonate	98	96	95	19	12	0.0	0	<5	5	6	65
V03AE05	sucroferric oxyhydroxide	0	0	0	63	122	0.0	0	14	63	45	1 101
V03AE07	calcium acetate	18	0	0	0	0	0.0	0	0	0	0	0
V03AE09	patiromer calcium	0	0	0	0	<5	-	0	0	<5	0	12
V03AF	Detoxifying agents for antineoplastic treatment	70	66	57	61	61	0.0	11	16	21	13	463
V03AF01	mesna	8	7	<5	9	10	0.0	0	<5	8	0	8
V03AF03	calcium folinate	52	59	55	52	51	0.0	11	14	13	13	454
V03AG	Drugs for treatment of hypercalcemia	99	163	279	371	579	0.1	29	99	228	223	666
V03AH	Drugs for treatment of hypoglycemia	17	20	28	24	28	0.0	10	<5	10	<5	2 167
V03AH01	diazoxide	17	20	28	24	28	0.0	10	<5	10	<5	2 167
V03AX	Other therapeutic products	<5	7	22	13	24	0.0	<5	<5	14	5	28 904

Noen forkortelser og definisjoner

AB	Antibiotika
ARB	Angiotensin II-reseptorblokkere
ATC	Anatomisk Terapeutisk Kjemisk (klassifikasjonssystem for legemidler)
ASA	Acetylsalisylsyre
DDD	Definert døgndose
DOAK	Direkteinvirkende perorale antikoagulantia
FHI	Folkehelseinstituttet
HELFO	Helseøkonomiforvaltningen
ICD -10	Internasjonal klassifikasjon av sykdommer versjon 10
ICPC	Internasjonal klassifikasjon av sykdommer for primærhelsetjenesten
IPLOS	IPLOS-registeret: Helseregister for kommunale helse- og omsorgstjenester
LVI	Luftveisinfeksjon
MA	Markedsføringstillatelse
NOK	Norske kroner
NorPD	Reseptregisteret
NSAID	Ikke-steroid antiinflammatorisk legemiddel
OTC	Reseptfritt
SPC	Preparatomtale
SSB	Statistisk sentralbyrå
UVI	Urinveisinfeksjon
WHO	Verdens helseorganisasjon

Some abbreviations and definitions

AB	Antibiotics
ARB	Angiotensin II receptor blockers
ATC	Anatomical Therapeutic Chemical (classification system for medicines)
ASA	Acetylsalicylic acid
DDD	Defined Daily Doses
DOAC	Direct-acting oral anticoagulant
HELFO	The Norwegian Health Economics Administration
ICD -10	International Classification of Diseases version 10
ICPC	International Classification of Primary Care
IPLOS	
LVI	
MA	Marketing Authorisation
NIPH	Norwegian Institute of Public Health
NOK	Norwegian kroner
NorPD	Norwegian Prescription Database
NSAID	Non Steroidal Anti-Inflammatory Drug
OTC	Over The Counter, non prescription drugs
RTI	Respiratory tract infections
SPC	Summary of Product Characteristics
SSB	Statistics Norway
UTI	Urinary tract infections
WHO	World Health Organization

Definisjoner

Prevalens

Brukere (individer) defineres som personer som har hentet minst én resept på apotek i perioden. Prevalens er definert som antall brukere per 100 innbyggere (%) i det definerte befolkningsutvalget.

Insidens (nye brukere)

Insidens er antall brukere av et bestemt legemiddel eller en legemiddelgruppe i en definert tidsperiode som ikke var brukere i en tidligere, definert periode. Insidens kan også uttrykkes som andel (%) i forhold til antallet potensielle nye brukere i det definerte befolkningsutvalget.

Definitions

Prevalence

Users (individuals) are defined as persons who had at least one prescription dispensed at pharmacies in the period. Prevalence is defined as the number of users per 100 inhabitants (%) in the defined population sample.

Incidence (new users)

Incidence is the number of users of a particular drug or drug group in a defined time period who were not users in a previous, defined time period. Incidence can be expressed as a percentage relative to the number of potential users in the defined population sample.

Folkemengde i Norge 2013–2017 (per 1. juli) Population in Norway 2013–2017 (as of 1st July)

Year	2013	2014	2015	2016	2017
Population	5 080 148	5 137 321	5 189 984	5 236 624	5 276 847

Folkemengde etter alder i 2017 (per 1. juli) Population by age in 2017 (as of 1st July)

Age groups	<15	15–44	45–69	≥70
Population	907 264	2 091 398	1 637 207	640 979

Kilde: Statistisk sentralbyrå / Source: Statistics Norway

Liste over vitenskapelige publikasjoner basert på data fra Reseptregisteret per 31.12.2017

List of publications based on data from the Norwegian Prescription Database (NorPD) as of 31.12.2017

2017:

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