**Documentation of statistics for
Purchase of prescription drugs 2024**

1 Introduction

The aim of the statistics "Purchase of prescription medicine" is to elucidate the population's purchase of medicines via prescription. The statistics can be used to get insight into the distribution of redeemed prescriptions in relation to type of medicine, gender, age, geography and social conditions.

2 Statistical presentation

The statistics "Purchase of prescription medicine" contain information on all sales of human medicines in Denmark, which took place via prescription. The statistics also cover the sale of medicines that do not require a prescription but are sold on prescription. Sales are calculated in relation to the number of people who have redeemed a prescription, the number of prescriptions redeemed and number of redeemed prescriptions per citizen. The statistic covers the period from the 1st of January 2016 to the 31st of December 2024.

2.1 Data description

The statistics are compiled so that the number of individuals with redeemed prescriptions, the total number of redeemed prescriptions, and the number of prescriptions redeemed per person can be broken down by medication type, gender, age, residence, origin, education, and labor market affiliation.

2.2 Classification system

When publishing the statistics "Sales of prescription medicine (Experimental statistics)" the following classifications are used:

- Type of medicine: The medicines are grouped according to the ATC system (Anatomical Therapeutic Chemical Classification System). In the ATC system, human medicines are classified according to the active substances, as well as therapeutic and pharmacological properties. The ATC system is divided into five hierarchical levels. In the this statistics the medicines are divided according to the two upper levels of the ATC system. Under the 1st level, the medicine is divided into 14 groups according to the human organ system:

A: Alimentary tract and metabolism

B: Blood and blood forming organs

C: Cardiovascular system

D: Dermatologicals

G: Genito urinary system and sex hormones

H: Systemic hormonal preparations, excl. Sex hormones and insulins

J: Antiinfectives for systemic use

l: Antineoplastic and immunomodulating agents

M: Muscle relaxants

N: Nervous system

P: Antiparasitic products, insecticides and repellent

R: Respiratory system

S: Sensory organs

V: Various

Under the 2nd level, the medicines are further divided into therapeutic/pharmacological subgroups. In the tables, it has been necessary to combine several of the ATC2 groups because few individuals have redeemed prescriptions for drugs in these categories. The names indicate which groups have been combined.

An overview of [ATC](#)

- Highest Education Attained classified on [Classification of education (DDU)](#) and is divided into the following categories: Basic school; Upper secondary education; Vocational education; Short-cycle higher education; Medium-cycle higher education; Long-cycle higher education, PhD programme etc. and Unknow level of education.

- Ancestry is divided into the following categories; Persons of Danish origin; Immigrants; Descendants.

- Relatives is divided into the following categories: Lives with one parent; Lives with two parents; Has a partner and no other relatives; Has a partner and other relatives; Has no partner but has other relatives; Has neither a partner nor other relatives.

- Labour market affiliation is divided into the following categories: Students, persons under 15 years and others; Employed; Unemployed; Long-term sick leave, vocational rehabilitation, etc.; Disability pensioner; Oldage pensioner.

- Residence is divided into municipal and region.

2.3 Sector coverage

The pharmacy sector in Denmark.

2.4 Statistical concepts and definitions

Prescription: An instruction from a doctor for the administration of medicines.

Medicine: Agent used to treat diseases in humans, e.g. in the form of pills.

2.5 Statistical unit

Persons who have redeemed at least one prescription in the reference year.

Redeemed prescriptions.

2.6 Statistical population

Persons who have redeemed at least one prescription in the reference year.

2.7 Reference area

Denmark

2.8 Time coverage

The statistics cover the period 1st of January 2020 - 31st of December 2024.

2.9 Base period

Not relevant for this statistic

2.10 Unit of measure

Number, Proportion and Number of prescriptions per citizen

2.11 Reference period

The year of the date of sales

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

There is no EU regulation concerning the statistics.

2.14 Cost and burden

There is no response burden as the data are collected via administrative registers.

2.15 Comment

Other information can be found at the subject page Consultations with physicians.

3 Statistical processing

Source data comes from the Danish Health Data Agency, which once a month calculates all sales of human and veterinary medicines in Denmark, after they have validated and quality checked the data.

The sales are compiled on an annual basis and linked with selected personal information from Statistics Denmark's registers, including users' gender, age, geography, and education.

3.1 Source data

External sources: The Register of Pharmaceutical Sales, the Danish Health Data Agency.

Internal sources in Statistics Denmark:

- The register of population statistics (ancestry, date of birth and sex)
- The Employment Classification Module (SOCIO13) as of December 31st of the previous year
- Education (BUE): Highest completed level of education as of 30 September of the previous year
- The Relatives Register (relatives, partner)

3.2 Frequency of data collection

The pharmacies reports the information to the Danish Health Data Agency every month. Statistics Denmark receives data twice annually.

3.3 Data collection

The pharmacies reports electronically to the Danish Health Data Agency's FTP-server through Medicinnettet.

3.4 Data validation

The Danish Health Data Agency validates and quality checks the reported data from the pharmacies.

Totals and subtotals in statbank are, where possible, compared with numbers from medstat, the Danish Health Data Authority's public portal for pharmaceutical statistics.

3.5 Data compilation

Purchases are compiled on an annual basis, and the population is delimited to persons with a valid CPR number. Medicines are grouped by type of medication and linked with information on age, sex, place of residence, labour market attachment, relationships, and education

3.6 Adjustment

Not relevant to this statistic

4 Relevance

The statistics can be used by ministries and other public authorities for ongoing monitoring of the population's redemption of prescriptions. Researchers can use the statistics as a proxy for morbidity and developments over time, while the general public can use the statistics for general information on pharmaceutical consumption in Denmark.

4.1 User Needs

The statistics can be relevant to ministries, researchers and the general public.

4.2 User Satisfaction

The statistics are new, which is why user satisfaction cannot yet be described.

4.3 Data completeness rate

There are no EU-regulations or guidelines in this area.

5 Accuracy and reliability

Pharmacies are required by law to report data to The Danish Health Data Authority, but source data only cover sales of human medicines via prescription. This does not necessarily mean that the person who bought the medicine has taken the medicine. At the same time, the statistics do not contain information on the purchase of medicines without a prescription and it does not contain information about medicines used in hospitals or in medical practices.

5.1 Overall accuracy

Pharmacies are required by law to report the sale of prescription medicines. The pharmacies often reports through their own IT system, which reduces the risk of misreporting.

5.2 Sampling error

Not relevant for this statistic

5.3 Non-sampling error

The statistics cover the sale of medicines via prescription, it does not however guarantee that the medicines have actually been used.

The statistics only contain information on sales to persons, and no information on medicines sold to hospitals, the hospital sector or used in medical practices.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

Pharmacies are legally required to report data to the Danish Health Data Agency, but the underlying source data cover only sales of prescription-only medicines for human use. A recorded purchase therefore does not necessarily mean that the person who bought the medicine actually used it. In addition, the statistics do not include purchases of over-the-counter medicines, nor do they cover medicines administered in hospitals or used in general practice.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Statistics Denmark revises published figures in accordance with [the Revision Policy for Statistics Denmark](). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

6 Timeliness and punctuality

The statistics will be published in January 2025. Future releases are expected to be published in November.

6.1 Timeliness and time lag - final results

These statistics are published 12 months after the end of the reference period. Publications are released on time, as stated in the release calendar.

6.2 Punctuality

The statistics are new; therefore, the punctuality of the statistics cannot yet be described.

7 Comparability

Several comparable national and international statistics exist about the consumption of medicines. There are several factors that can influence the sales of prescription medicine. Regulations of witch medicines that require prescription and the amount of subsidies offered by the authorities, can vary from country to country and over time. Therefore it is important to be observant of these factors, if the statistics is used to evaluate the consumption of medicine over time or to compare consumption from country to country.

7.1 Comparability - geographical

Sweden, Finland, Norway and Iceland, all have registers of the purchases of prescription medicine. A Swedish statistic of sales of prescription medicine, is available via the Swedish [The social welfare agency](#).

7.2 Comparability over time

Several factors influence trends in medicine sales over time. Dispensing rules for medicines may change, or reimbursement/subsidy status may be adjusted, which can affect how much of a medicine is sold on prescription versus over the counter over time. In addition, practices may have changed regarding whether prescription medicines are supplied to users through a hospital/institution/drug treatment centre or similar (i.e., non–person-identifiable sales), or whether users obtain the medicine themselves at a pharmacy (i.e., person-identifiable sales).

7.3 Coherence - cross domain

The Danish Health Data Authority have several statistics, based on data from The Register of Pharmaceutical Sales. The Danish Health Data Authority have several statistics about medicine aimed at the treatment of certain diseases and the consumption of medicines in certain population groups.

7.4 Coherence - internal

To the extent possible, consistency is checked between the figures in the StatBank tables for "Purchases of prescription medicines" and the StatBank tables for the registers used to produce the figures for "Purchases of prescription medicines". For example, it is checked that the population figures used to calculate prescriptions per 100 inhabitants are consistent with the figures in FOLK1A. As pseudonymisation of the different registers takes place at different points in time, there may be very minor inconsistencies with regard to sex and age.

8 Accessibility and clarity

The statistics are published in [Nyt from Statictics Denmark](#). In StatBank Denmark, the statistics are published under the topic [Consultations of physicians](#).

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.4 News release

These statistics are published in a Danish press release.

8.5 Publications

The statistics are not published in a separate publication series.

8.6 On-line database

The statistics are published in the StatBank under the subject in the following tables:

8.7 Micro-data access

It is possible to gain access to de-identified data through Statistics Denmark's Research Services . You must obtain approval from the Danish Health Data Authority to use data in your project.

8.8 Other

You must obtain approval from the Danish Health Data Authority to use data in your project.

8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.

8.10 Confidentiality - data treatment

The statistics have been anonymised using Tau-Argus, with a suppression threshold of 5 individuals. Tau-Argus does not only suppress cells with fewer than 5 individuals, but also those from which such small numbers can be indirectly derived. This is referred to as secondary suppression.

8.11 Documentation on methodology

No additional methodological documentation has been published for this statistic.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of these statistics is in the division of Personal Finances and Welfare, Social Statistics. The contact person is Jonas Kirchheiner-Rasmussen, tel.: + 45 6150 2380, and e-mail: RAS@dst.dk.