



Overview of the Activities of Estonian Pharmacies

Number of Pharmacies

There are three types of pharmacies in Estonia: general pharmacies, veterinary pharmacies and hospital pharmacies. Pharmacies may have branch pharmacies and pharmacy-bus as structural units. The licensed general pharmacy can offer the e-pharmacy service. The changes in the total number of pharmacies from 2008-2018 are shown in following table, which gives the number of pharmacies and their branches at the beginning of the year.

Number of pharmacies (incl. branches) in Estonia 2008–2018

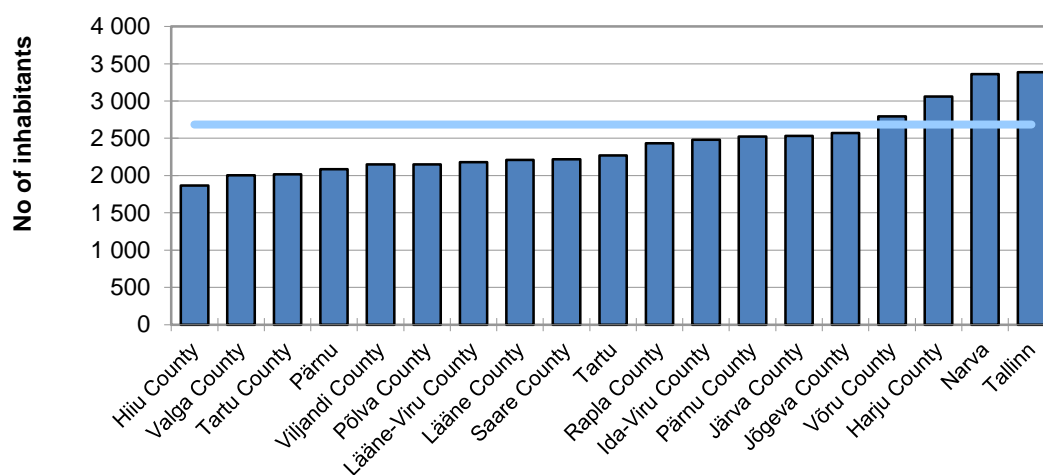
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|
| General pharmacies | 509 | 496 | 486 | 477 | 469 | 475 | 478 | 476 | 493 | 490 | 495 |
| Hospital pharmacies | 29 | 28 | 26 | 26 | 24 | 25 | 24 | 24 | 24 | 24 | 24 |
| Veterinary pharmacies | 8 | 7 | 7 | 7 | 5 | 4 | 4 | 4 | 4 | 4 | 4 |

*The number of pharmacies (inc. branch pharmacies) as of 1st of January

Activity licences had been issued to 343 general pharmacies which had 152 branch pharmacies at the beginning of 2018.

The average number of retail pharmacies in Estonia at 1st of January 2017 was one per every 2685 inhabitants. In most counties the number is below average. However, in Tallinn, Narva, Võru County and Harju County the number is above 3000 or more residents per pharmacy. The horizontal line illustrates the average in Estonia. The population figures used to calculate the number of people living in each county was obtained from the regional development database of Statistics Estonia.

Number of inhabitants per pharmacy in the beginning of 2017 in major cities and counties compared to the Estonian average



The number of hospital pharmacies remain the same during last years. There were 24 hospital pharmacies and one of them branch pharmacy in 2017. Nine of the hospital pharmacies were located in Harju County, seven of them in Tallinn, three in Ida-Viru County and two in Tartu County. As for other counties there was one hospital pharmacy in each. Valga County and Võru County are the only counties that have no hospital pharmacies.

In 2003–2012 the number of veterinary pharmacies has decreased, the last five years the number of veterinary pharmacies has remained the same. There were four veterinary pharmacies in Estonia in 2017: in Tallinn, Tartu, Põlva County and Saare County.

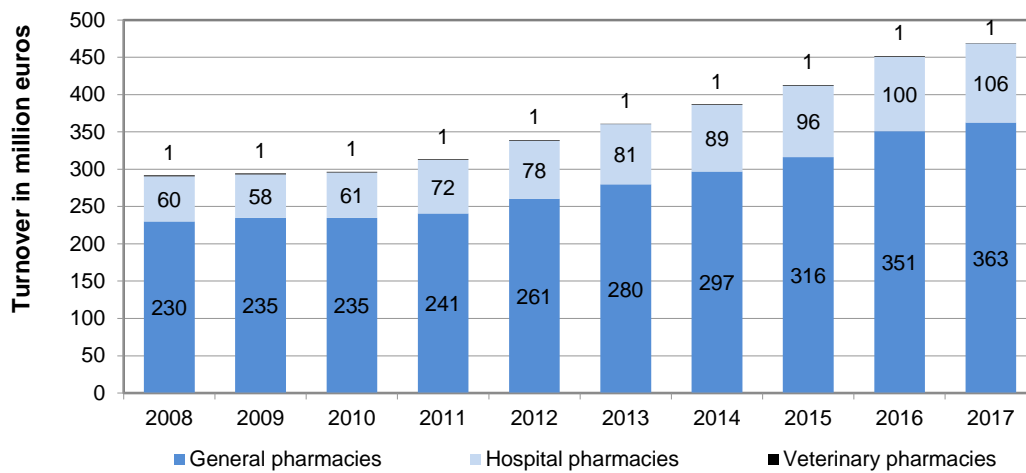


Turnover of Pharmacies

The statistics of pharmacies based on quarterly reports of pharmacies. Since 2015 the data are presented all of pharmacies, main and branch pharmacies. Only the turnover of general and veterinary pharmacies includes VAT (value added tax), the turnover of hospital pharmacies without VAT.

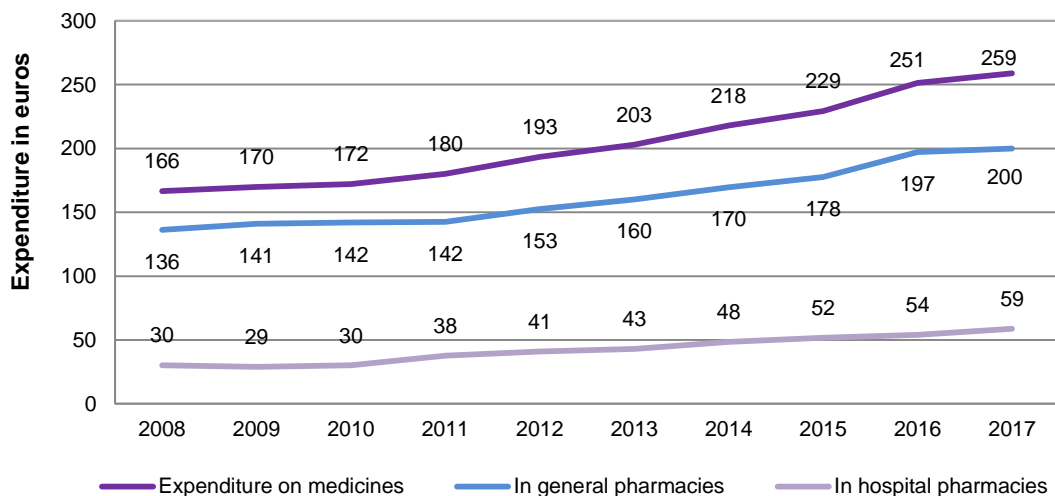
The total turnover of all pharmacies and their branch pharmacies was 469.3 million euros in 2017. The turnover of general pharmacies was 362.6 million euros (77% of total turnover), the turnover of hospital pharmacies was 105.9 million euros (23%) and the turnover of veterinary pharmacies was 0.77 million euros (0.2%) in 2017. The proportion of medicines of total turnover in general and hospital pharmacies was 73% and in veterinary pharmacies 47%.

Turnover of pharmacies in 2008-2017



The turnover of medicines in general and hospital pharmacies was 340.4 million euros in 2017. Dividing the amount by all inhabitants of Estonia the average expenditure on medicines per inhabitant in 2017 was 259 euros per year.

Expenditure on medicines per inhabitant per year 2008-2017

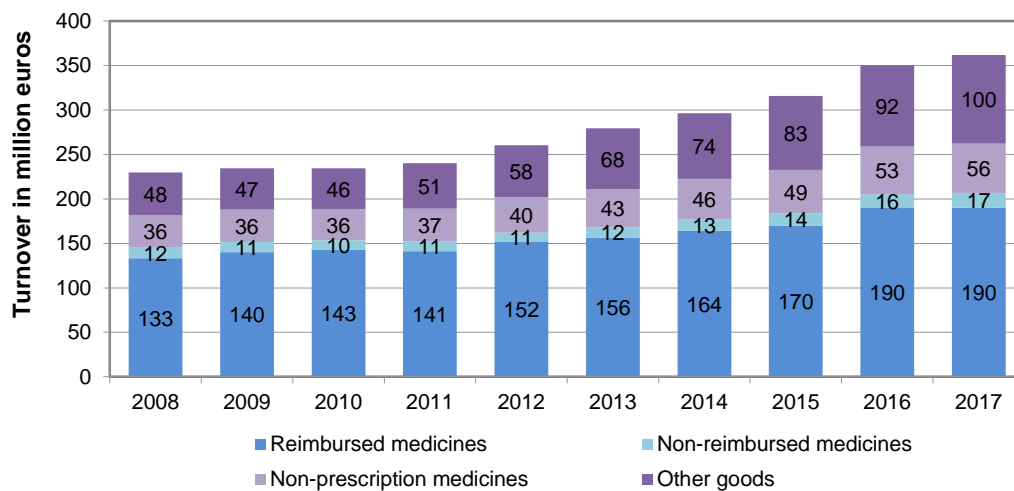




General Pharmacies

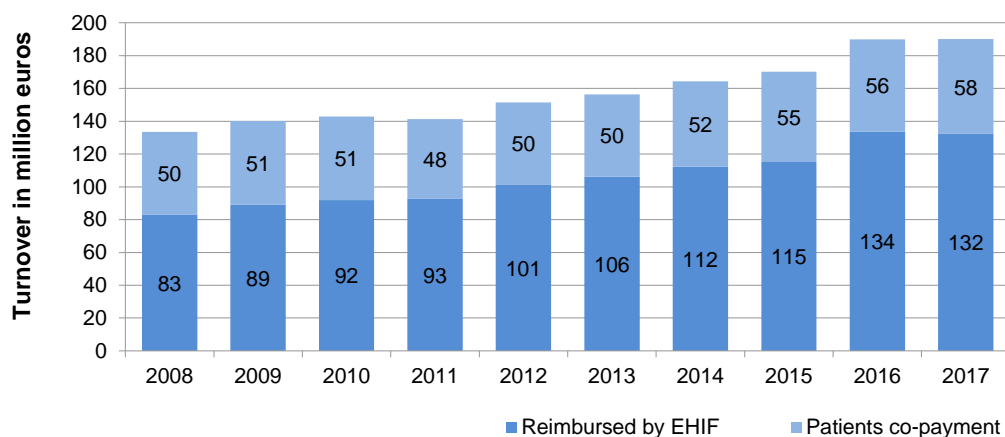
In 2017 the turnover of general pharmacies was 362.6 million euros, which increased 3.3% compared to previous year. The turnover of medicines of general pharmacies was 263 million euros in 2017. The turnover of medicines includes sales of non-prescription medicines, prescription medicines and veterinary medicines. The turnover of non-prescription medicines was 55.7 million euros. The turnover of prescription medicines can in turn be divided into turnover of medicines dispensed on the basis of prescriptions the Estonian Health Insurance Fund (EHIF) compensates for or not. The turnover of medicines dispensed on the basis of prescriptions with discounts is the highest (190 million euros) with approximately 92% of the total turnover from prescription medicines. The turnover of veterinary medicines in general pharmacies is relatively modest and remained in 0.78 million euros in 2017. The turnover of the other goods was 99.7 million euros which increased 8.8% in 2017 compared to the 2016.

Turnover of general pharmacies in 2008-2017



The cost of prescription medicines reimbursed by EHIF divided as follows in 2017: ca. 30% paid by the patient and ca. 70% paid by the EHIF. The average cost of a prescription reimbursed by EHIF is influenced by the quantity of reimbursed medicines dispensed as well as the choice of specific discounted medicines, i.e. whether the chosen medicinal product with the same active ingredient is the more expensive or a cheaper option. The average cost of a reimbursed medicine in 2017 was 22.4 euros.

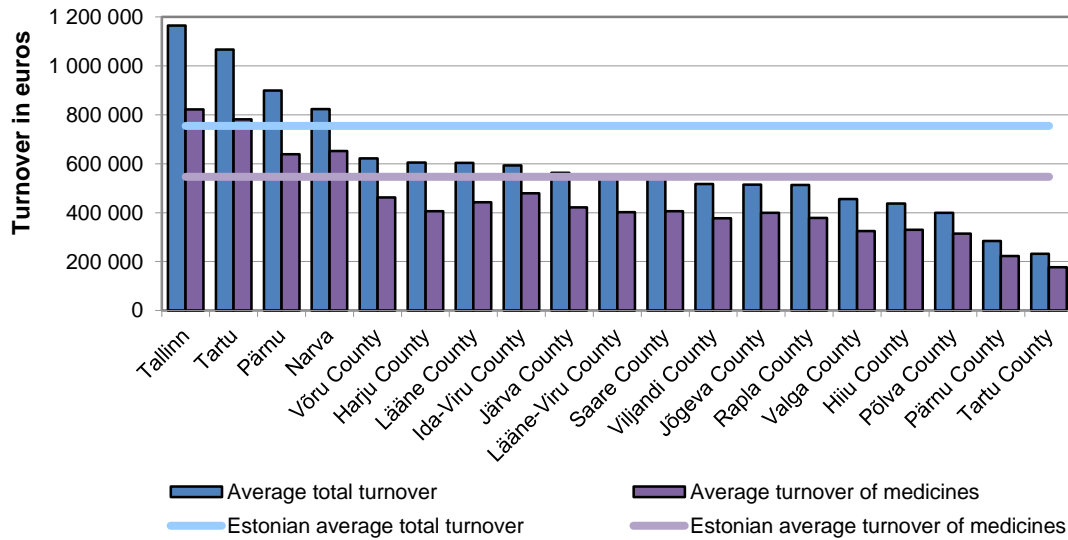
Turnover of reimbursed medicines in general pharmacies
2008-2017





The average turnover of general pharmacies was 0.75 million euros and the average turnover of medicines 0.55 million euros. When we look at the average turnover of general pharmacies in major cities and counties, shows that the average turnover is strongly affected by the sales of Tallinn, Tartu, Pärnu and Narva pharmacies.

Average turnover of general pharmacies in major cities and counties 2017



A quarter of all general pharmacies are located in Tallinn. Almost 73% of all general pharmacies and their branch pharmacies are located in towns and cities.

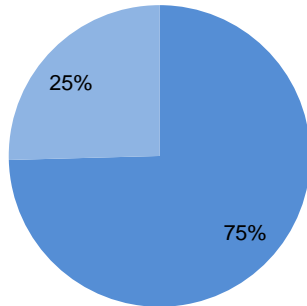
Pharmacies by counties 01.01.2018

| City/ County | Main pharmacy | Main pharmacy in the city | Main pharmacy in rural areas | Branch pharmacy | Branch pharmacy in the city | Branch pharmacy in rural areas |
|--------------------|---------------|---------------------------|------------------------------|-----------------|-----------------------------|--------------------------------|
| Harju County | 24 | 13 | 11 | 26 | 7 | 19 |
| Tallinn | 112 | 112 | | 18 | 18 | |
| Hiiu County | 3 | 2 | 1 | 2 | | 2 |
| Ida-Viru County | 19 | 18 | 1 | 13 | 13 | |
| Narva | 8 | 8 | | 9 | 9 | |
| Jõgeva County | 11 | 8 | 3 | 2 | 1 | 1 |
| Järva County | 11 | 8 | 3 | 2 | | 2 |
| Lääne County | 5 | 4 | 1 | 4 | 1 | 3 |
| Lääne-Viru County | 21 | 16 | 5 | 7 | 3 | 4 |
| Põlva County | 6 | 5 | 1 | 7 | 3 | 4 |
| Pärnu | 16 | 16 | | 4 | 4 | |
| Pärnu County | 10 | 2 | 8 | 8 | 1 | 7 |
| Rapla County | 8 | 2 | 6 | 5 | 2 | 3 |
| Saare County | 11 | 8 | 3 | 4 | 3 | 1 |
| Tartu | 31 | 31 | | 13 | 13 | |
| Tartu County | 13 | 4 | 9 | 14 | 1 | 13 |
| Valga County | 10 | 8 | 2 | 4 | 2 | 2 |
| Viljandi County | 13 | 13 | | 8 | 2 | 6 |
| Võru County | 11 | 7 | 4 | 2 | 1 | 1 |
| Total | 343 | 285 | 58 | 152 | 84 | 68 |
| Grand total | 495 | | | | | |



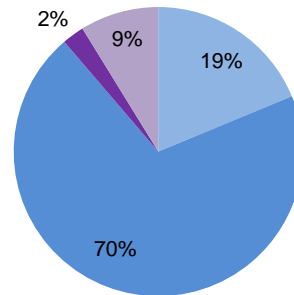
The most of general pharmacies located in towns and cities. The turnover of general pharmacies located in cities was 89% of total turnover of all general pharmacies. Only 11% of medicines has sold in general pharmacies in rural areas.

General pharmacies in 2017



- No of general pharmacies in the cities
- No of general pharmacies in rural areas

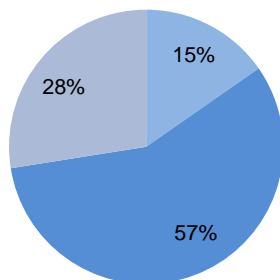
The turnover of medicines in the cities and rural areas in 2017



- Non-prescription medicines in the cities
- Prescription medicines in the cities
- Non-prescription medicines in rural areas
- Prescription medicines in rural areas

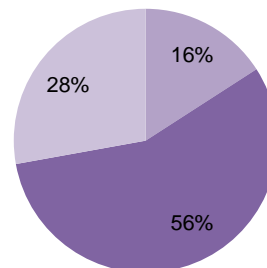
At the same time the distribution of turnover of general pharmacies in cities and general pharmacies in rural areas is similar. The turnover of prescription medicines was the highest, 57% in general pharmacies located in cities and 56% in general pharmacies located in rural areas. The turnover of non-prescription medicines was 15% and 16%. The turnover of the other goods was the same 28% in general pharmacies located in cities and in rural areas.

The turnover of general pharmacies in the cities



- Non-prescription medicines in the cities
- Prescription medicines in the cities
- Other goods in the cities

The turnover of general pharmacies in the rural areas

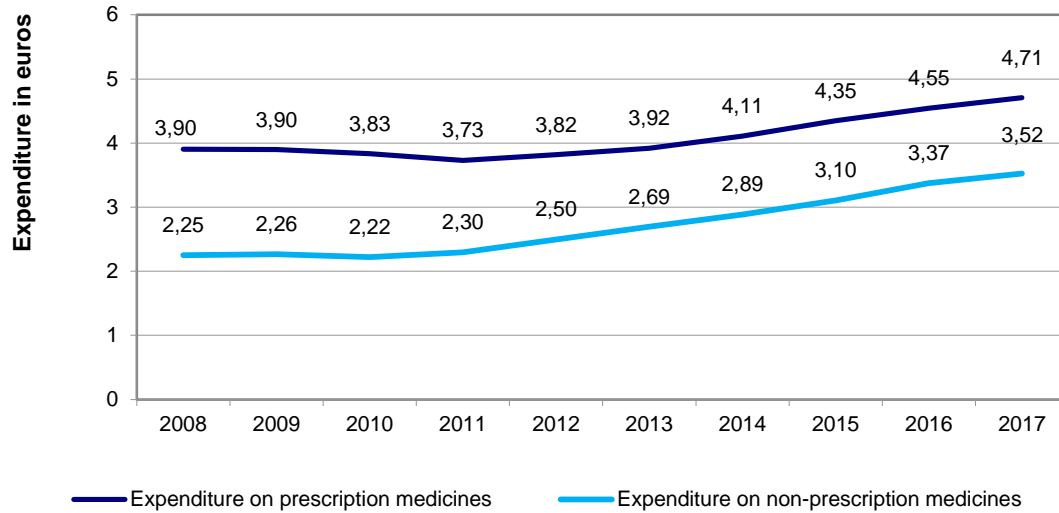


- Non-prescription medicines in rural areas
- Prescription medicines in rural areas
- Other goods in rural areas



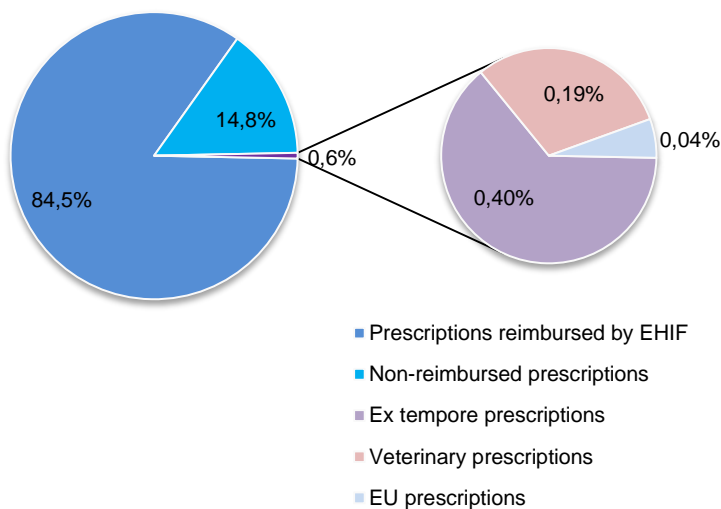
The average amount spent by an inhabitant of Estonia on medicines in 2017 was 8.2 euros per month, almost 99 euros per year. Compared to 2016 the expenditure on non-prescription medicines increased 4.5% and the expenditure on prescription medicines increased 3.5%.

Expenditure on medicines per inhabitant per month in 2008-2017



More than 10 million prescriptions were handled by general pharmacies in 2017. The largest proportion was medicines dispensed on the basis of prescriptions reimbursed by EHIF (8.5 million prescriptions). The number of prescriptions without discounts was ca. 1.5 million, while the number of EU prescriptions was slightly over three thousand and seven hundred and the number of prescriptions for medicines prepared *ex tempore* remained nearly 41 thousand. The number of prescriptions of medicines for veterinary purposes was nineteen thousand.

Prescriptions handled by general pharmacies in 2017

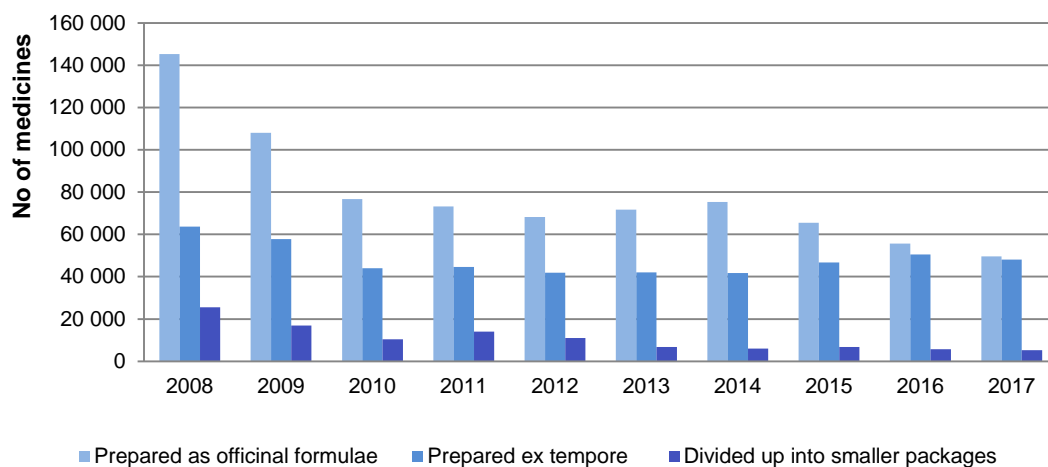




4% of main pharmacies (13 general pharmacies) prepared medicines *ex tempore* or official formulae or divided them up into smaller packages in 2017. 12% of main pharmacies prepared medicines as official formulae, 34% prepared medicines *ex tempore* and 10% of main pharmacies divided medicines up into smaller packages. 64% of main pharmacies did not prepare or divide up any medicines.

Almost 103 thousand medicine packages were prepared in general pharmacies in 2017, more than 48 thousand of which were prepared *ex tempore*. The number of medicines prepared *ex tempore* was highest in Tallinn and Tartu comprising 67% of all medicines prepared *ex tempore* in general pharmacies in 2017. The number of medicines prepared as official formulae was highest in Tartu comprising 42% of all medicines prepared as official formulae in general pharmacies in 2017. There were three counties (Rapla, Tartu and Viljandi County) where no one of pharmacies did not prepare medicines as official formulae. The number of medicines divided up into smaller packages was highest in Tallinn.

Medicines prepared in general pharmacies in 2008-2017



2-5 employees usually work in one main pharmacy or branch pharmacy. The number of general pharmacies with more than 10 employees is highest in Tallinn, while the number of general pharmacies with one employee is highest in Tartu County. 39% of all people working in general pharmacies are employed part-time. The proportion of pharmacists is highest and comprise 41% of all general pharmacy employees in Estonia, pharmacist assistants comprise 33% and other employees 26%.

General pharmacies divided by the number of employees in 2017

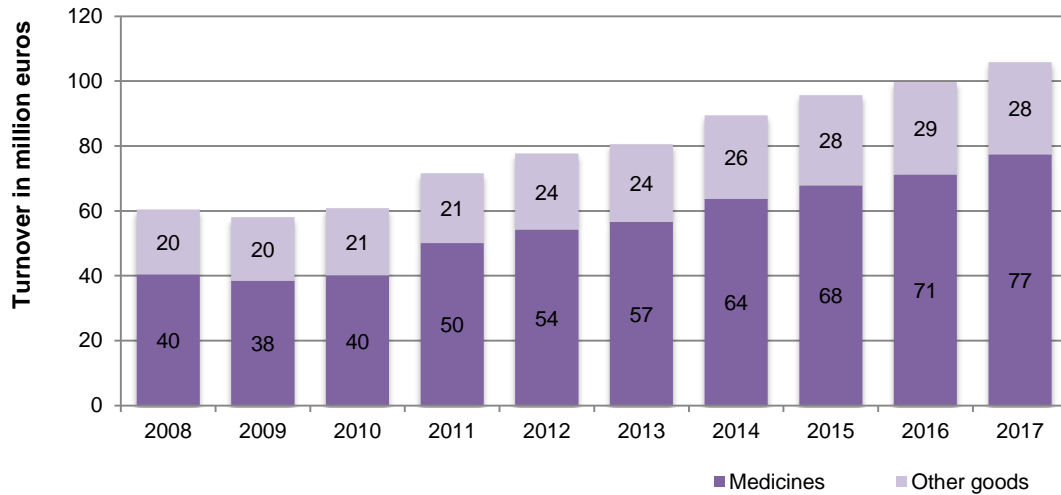




Hospital Pharmacies

The total turnover of hospital pharmacies in 2017 was 105.9 million euros, of this the turnover of medicines comprised 77.4 million euros (73%). The turnover of hospital pharmacies is calculated without VAT.

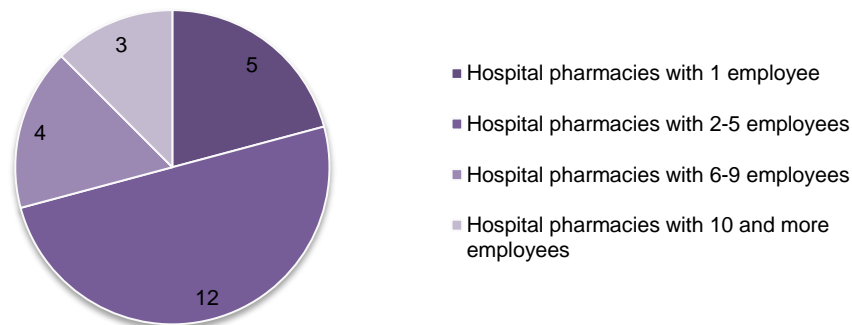
Turnover of hospital pharmacies in 2008-2017



The turnover of hospital pharmacies is very versatile. The annual turnover of fourteen hospital pharmacies was less than one million euros. There are six medium-sized hospital pharmacies whose turnover remained between one and five million euros, and there are also four large hospital pharmacies in Estonia whose turnover in 2017 exceeded five million euros. In total, the four largest pharmacies comprised 76% of the total turnover of hospital pharmacies. This means that the four largest pharmacies also have a very strong impact on the average annual turnover of hospital pharmacies, which in 2017 was 4.4 million euros. When we look at the remaining pharmacies separately from the four largest, we see that the average annual turnover is considerably smaller 1.2 million euros.

The employees in hospital pharmacies are mostly pharmacists. 73 pharmacists, 38 pharmacist assistants and 35 other employees worked in hospital pharmacies at the end of 2017. Up to five people work in medium-sized hospital pharmacies and only the largest ones employ more than five people.

Hospital pharmacies divided by the number of employees in 2017



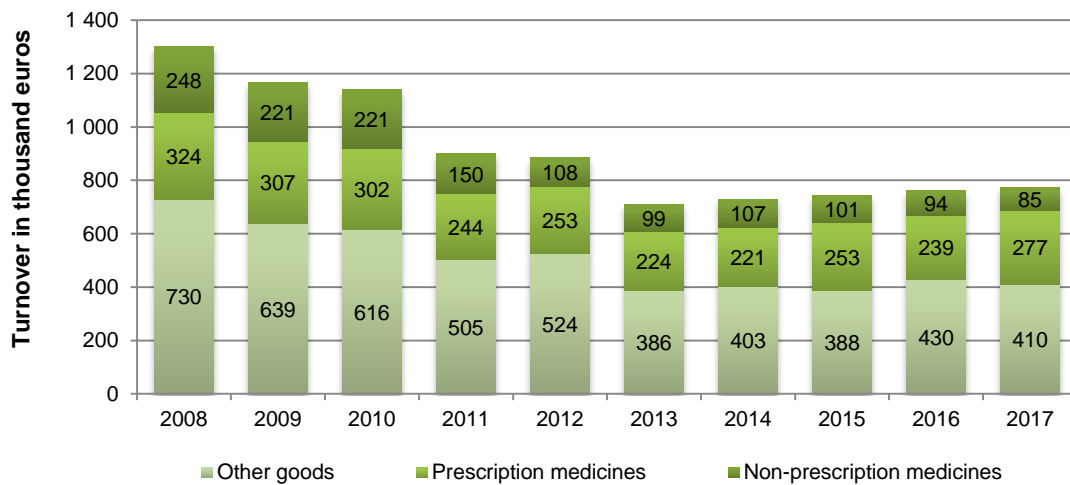


Veterinary Pharmacies

The number of veterinary pharmacies and the total turnover of veterinary pharmacies has decreased until 2013. The last five years the number of veterinary pharmacies has remained the same and the turnover has started to increase. There were four veterinary pharmacies operating in Estonia in 2017 and the total turnover was 0.77 million euros and the proportion of medicines was 47%.

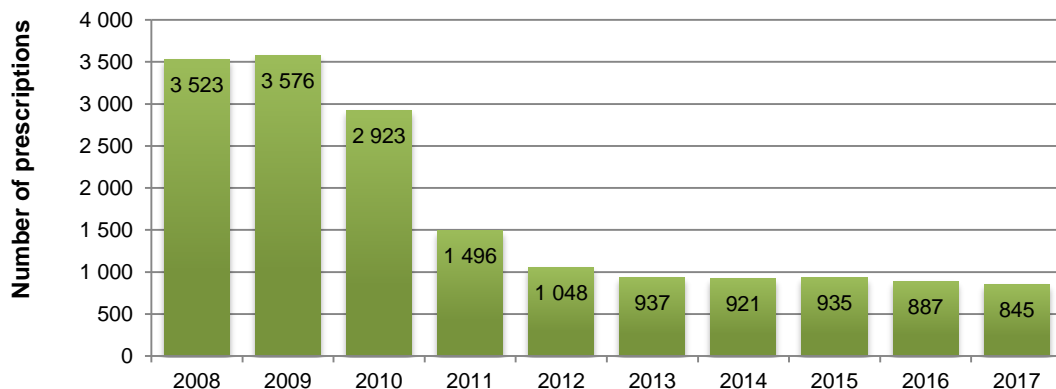
The veterinarians may purchase veterinary medicines directly from wholesalers. In 2017 wholesalers dispensed around 87% of veterinary medicines directly to operating veterinarians or veterinarians representing agricultural undertakings, 6% to veterinary pharmacies, 5% to general pharmacies and 2% to other institutions.

Turnover of veterinary pharmacies in 2008-2017



Veterinary pharmacies dispense prescription medicines on the basis of order forms and prescriptions. The number of prescriptions handled by veterinary pharmacies has decreased by 76% in the past ten years.

Number of prescriptions handled in veterinary pharmacies in 2008-2017



In 2017 seven veterinarians worked in four veterinary pharmacies.