



## 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 2006-2016 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 2006-2016

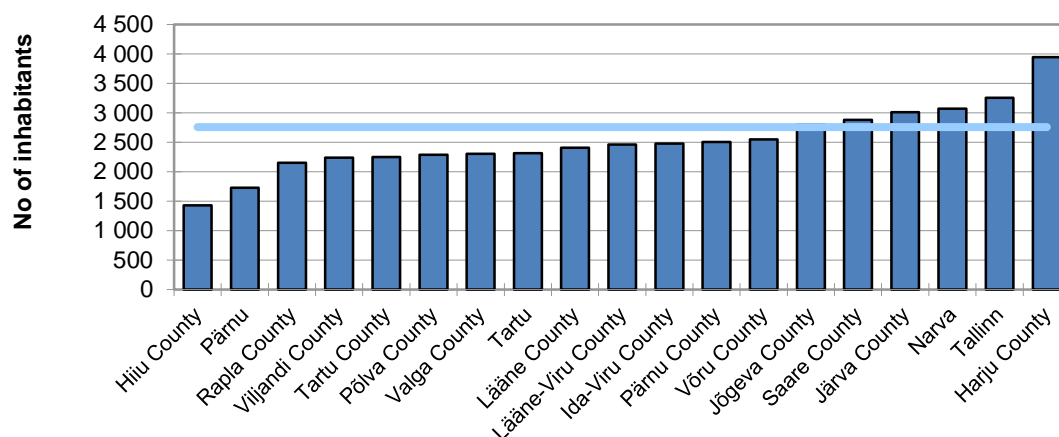
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
General pharmacies	532	523	509	496	486	477	469	475	478	476	493
Hospital pharmacies	29	29	29	28	26	26	24	25	24	24	24
Veterinary pharmacies	11	10	8	7	7	7	5	4	4	4	4

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

There were many changes in activity licenses of general pharmacies in 2015. Some general pharmacies were closed and some pharmacies were opened in 2015, the total number of general pharmacies increased by 17. Activity licences had been issued to 330 general pharmacies, which had 163 branch pharmacies, at the beginning of 2016

The average number of retail pharmacies in Estonia at 1<sup>st</sup> of January 2015 was one per every 2759 inhabitants. In most counties the number is below average. However, in Harju County, Tallinn, Narva and Järva 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 2015 in major cities and counties compared to the Estonian average



The number of hospital pharmacies remain the same during last three years. There were 24 hospital pharmacies, one of them branch pharmacy, at the start of 2016. Seven of the hospital pharmacies were located in Tallinn, three in Harju County, two in Ida-Viru and 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.

Since 2003 the number of veterinary pharmacies has decreased. There were four veterinary pharmacies in Estonia at the beginning of 2016: in Tallinn, Tartu, Põlva County and Saare County.

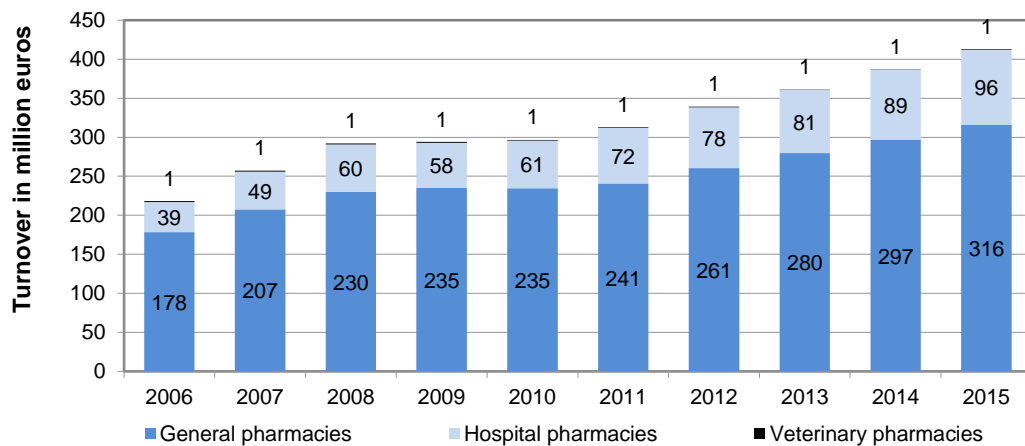


## Turnover of Pharmacies

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 413 million euros in 2015. The turnover of general pharmacies was 316 million euros (77% of total turnover), the turnover of hospital pharmacies was 96 million euros (23%) and the turnover of veterinary pharmacies was 0.7 million euros (0.2%) in 2015.

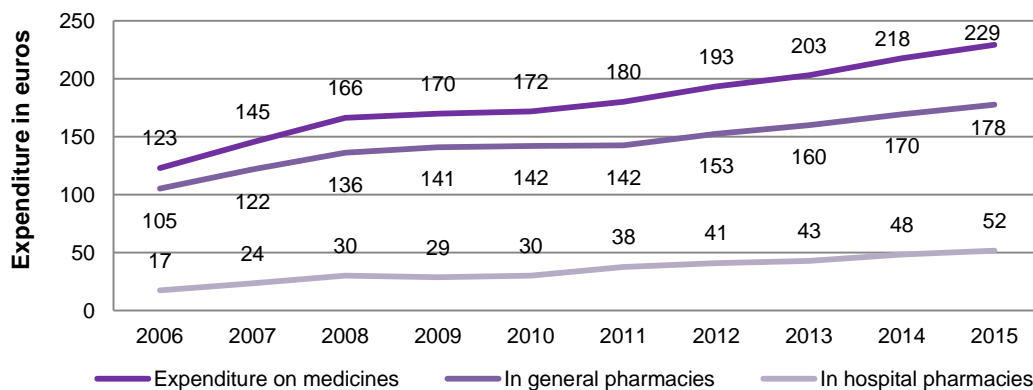
### Turnover of pharmacies in 2006-2015



Turnover of pharmacies includes turnover of medicines and turnover of other goods. The other goods sold in pharmacies include hygiene products, medical supplies, medical equipment, food additives, cosmetics, etc. The proportion of medicines of total turnover in general pharmacies is the largest (74%), while 71% in hospital pharmacies. The hygiene and nursing products the hospitals need not include to medicines. The share of medicines in veterinary pharmacies is 48%, mostly sold animal food etc.

The turnover of medicines in general and hospital pharmacies was 301 million euros in 2015. Dividing the amount by all inhabitants of Estonia, the average expenditure on medicines per inhabitant in 2015 was 229 euros per year.

### Expenditure on medicines per inhabitant per year in 2006-2015

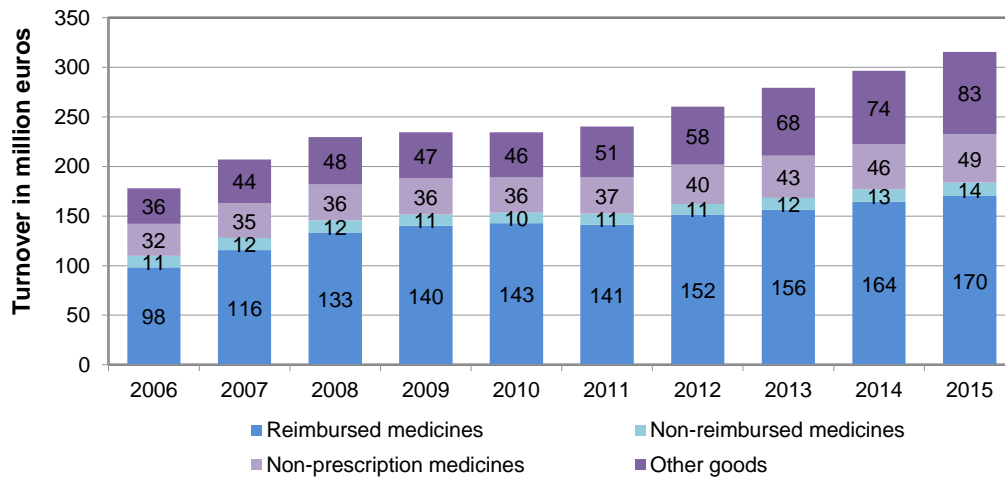




## General Pharmacies

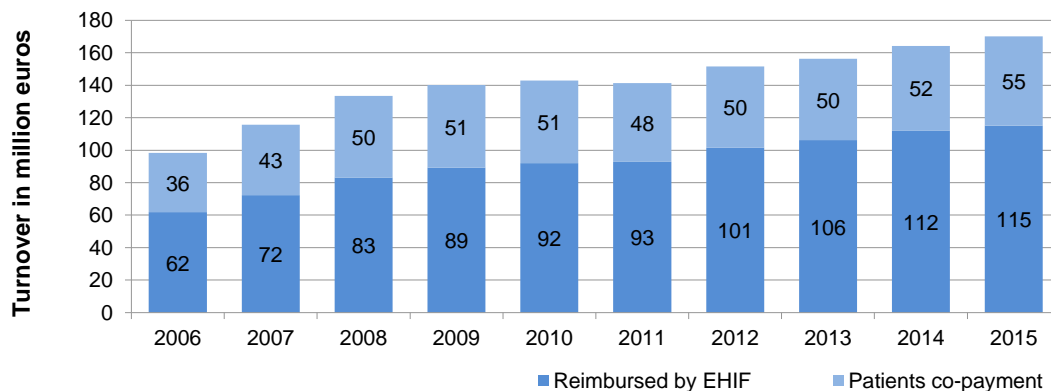
In 2015 the turnover of general pharmacies was 316 million euros, which increased 6.5% compared to previous year. The turnover of medicines of general pharmacies was 233 million euros in 2015. Turnover of medicines includes sales of non-prescription medicines, prescription medicines and veterinary medicines. 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 (170 million euros) with approximately 92% of the total turnover from prescription medicines. Turnover of reimbursed medicines has increased during last ten years, excluding in 2011. Turnover of non-reimbursed medicines has increased during last three years. Turnover of non-prescription medicines has increased 6-8% every year. Turnover of veterinary medicines in general pharmacies is relatively modest and remained in 0.6 million euros in 2015. The turnover of medicines of EU prescriptions was 180 thousand euros in 2015. The turnover of the other goods increased 12.5% in 2015 compared to the 2014.

Turnover of general pharmacies in 2006-2015



The cost of prescription medicines reimbursed by EHIF divided as follows in 2015: ca. 32% paid by the patient and ca. 68% paid by the EHIF. This ratio has remained quite stable in recent years. 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 2015 was 20.7 euros.

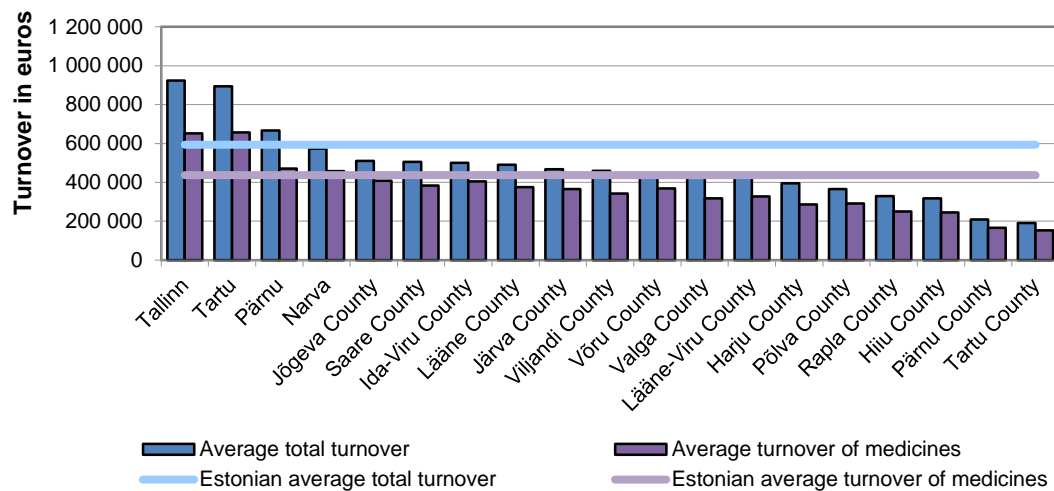
Turnover of reimbursed medicines in general pharmacies in 2006-2015





The average turnover of general pharmacies was 0.59 million euros and the average turnover of medicines 0.44 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 and Tartu pharmacies.

**Average turnover of general pharmacies in major cities and counties 2015**



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.

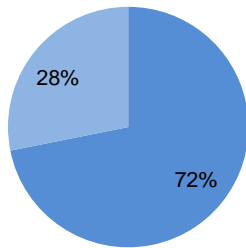
**Pharmacies by counties 01.01.2016**

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	11	13	26	7	19
Tallinn	102	102		23	23	
Hiiu County	3	2	1	2		2
Ida-Viru County	19	18	1	16	14	2
Narva	10	10		9	9	
Jõgeva County	11	7	4	2	1	1
Järva County	11	8	3	1		1
Lääne County	7	6	1	4	1	3
Lääne-Viru County	21	15	6	5	2	3
Põlva County	5	4	1	8	3	5
Pärnu	15	15		5	5	
Pärnu County	9	1	8	8	1	7
Rapla County	7	2	5	8	2	6
Saare County	11	8	3	4	3	1
Tartu	28	28		13	13	
Tartu County	13	4	9	12	1	11
Valga County	11	8	3	4	2	2
Viljandi County	13	13		9	2	7
Võru County	10	6	4	4	2	2
<b>Kokku</b>	<b>330</b>	<b>268</b>	<b>62</b>	<b>163</b>	<b>91</b>	<b>72</b>
<b>KÕIK KOKKU</b>				<b>493</b>		



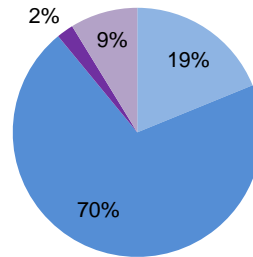
The most of general pharmacies located in towns and cities. The turnover of general pharmacies located in cities was 89% of total turnover of all general pharmacies. Only 11% of medicines has sold in general pharmacies in rural areas.

**General pharmacies in 2015**



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

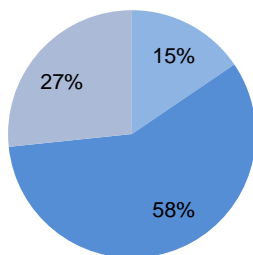
**The turnover of medicines in the cities and rural areas in 2015**



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

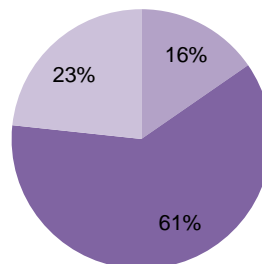
At the same time the distribution of turnover of general pharmacies in cities and general pharmacies in rural areas is similar. The turnover of prescription medicines was the highest, 58% in general pharmacies located in cities and 61% in general pharmacies located in rural areas. The turnover of non-prescription medicines was 15-16%. The turnover of other goods was 27% in general pharmacies located in cities and 23% in general pharmacies located 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**

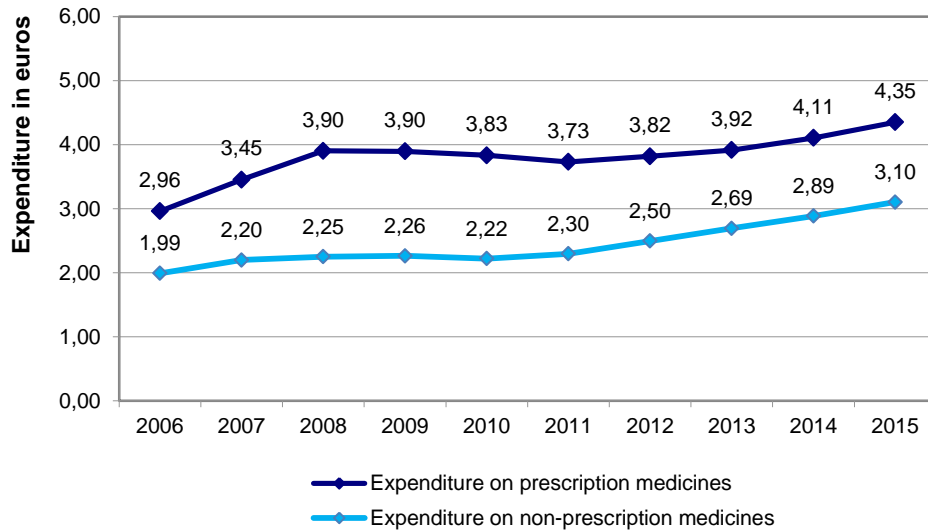


- Non-prescription medicines in rural areas
- Prescription medicines in rural areas
- Other goods in rural areas



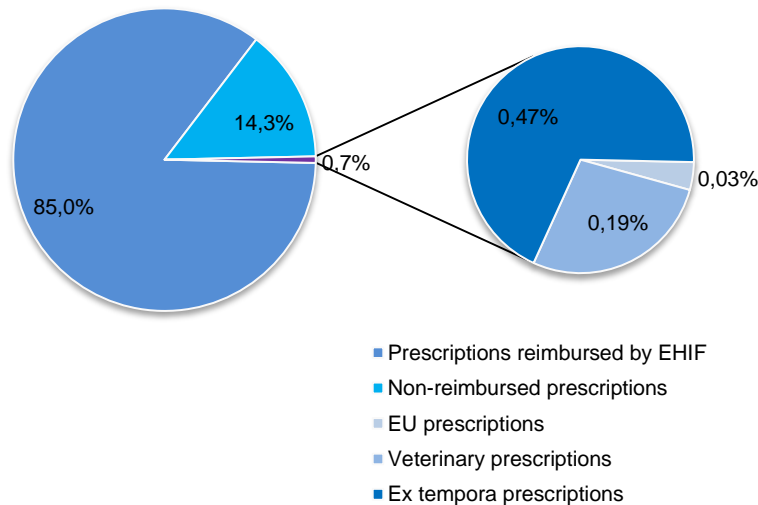
The average amount spent by an inhabitant of Estonia on medicines in 2015 was 7.5 euros per month, almost 90 euros per year. Compared to 2014, expenditure on non-prescription medicines has increased 7% and expenditure on prescription medicines has increased 6%.

**Expenditure on medicines per inhabitant per month  
in 2006-2015**



More than 9.6 million prescriptions were handled by general pharmacies in 2015. The largest proportion was medicines dispensed on the basis of prescriptions reimbursed by EHIF (8.2 million prescriptions). The number of prescriptions without discounts was ca. 1.4 million, while the number of EU prescriptions was slightly over 2 500 and the number of prescriptions for medicines prepared *ex tempore* remained nearly 46 thousand. The number of prescriptions of medicines for veterinary purposes was eighteen thousand.

**Prescriptions handled by general pharmacies in 2015**

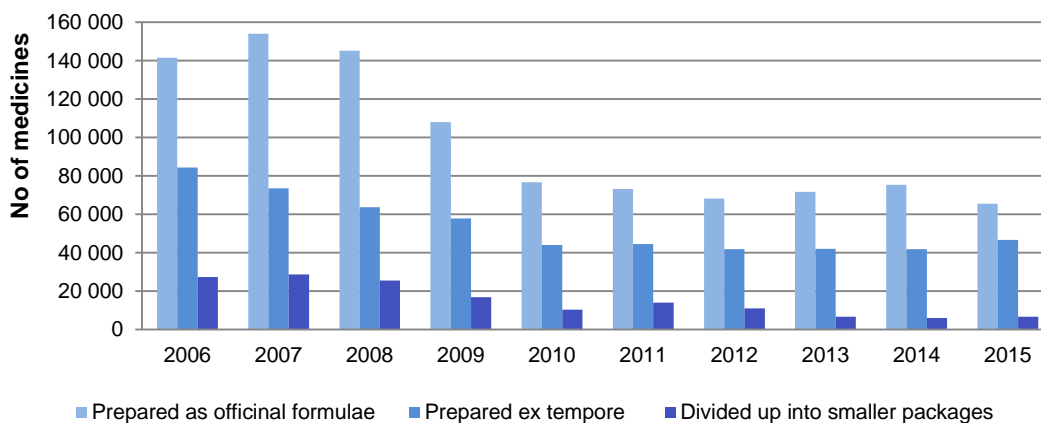




4% of main pharmacies (14 general pharmacies) prepared medicines *ex tempore* or official formulae or divided them up into smaller packages in 2015. 14% of main pharmacies prepared medicines as official formulae, 39% prepared medicines *ex tempore* and 10% of main pharmacies divided medicines up into smaller packages. 56% of main pharmacies did not prepare or divide up any medicines. The branch pharmacies did not prepare or divide up any medicines.

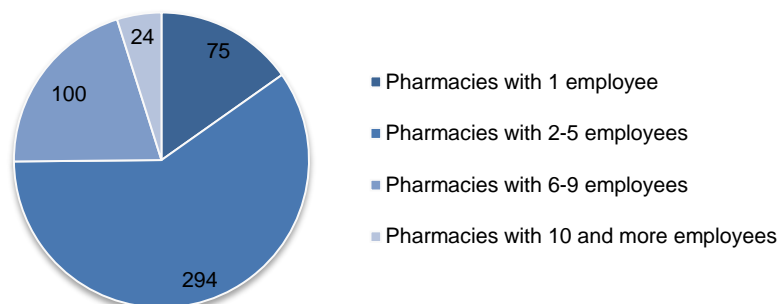
Almost 120 thousand medicine packages were prepared in general pharmacies in 2015, more than 46 thousand of which were prepared *ex tempore*. The number of medicines prepared *ex tempore* was highest in Tallinn, comprising 48% of all medicines prepared *ex tempore* in general pharmacies in 2015. The number of medicines prepared as official formulae was highest in Tartu, comprising 48% of all medicines prepared as official formulae in general pharmacies in 2015. There were four counties (Lääne, Rapla, Tartu and Viljandi County), where no one of pharmacies did not prepared medicines as official formulae. The number of medicines divided up into smaller packages was highest in Tallinn, no one of pharmacies did not divide up any medicines in Harju, Hiiu, Ida-Viru and Tartu County.

**Medicines prepared in general pharmacies in 2006-2015**



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. 33% of all people working in general pharmacies are employed part-time. Approximately 29% of all dispensing chemists and 45% of pharmacists employed in general pharmacies work in Tallinn. The proportion of dispensing chemists is highest in general pharmacies in Tartu, where it comprises 72% of all general pharmacy employees in the city. Dispensing chemists comprise 43%, pharmacists 33% and other employees 24% of all general pharmacy employees in Estonia as a whole.

**General pharmacies divided by the number of employees in 2015**

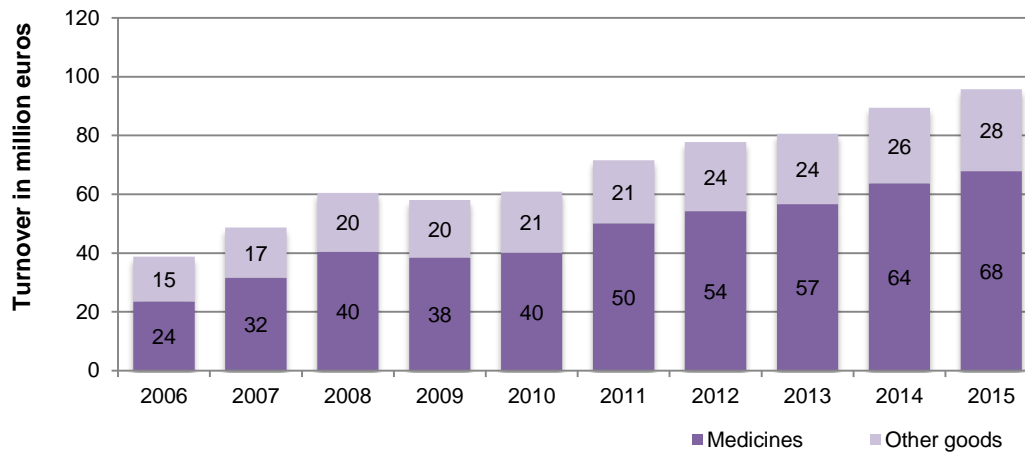




## Hospital Pharmacies

Within the past decade turnover of the hospital pharmacies has increased 2.5 times. The total turnover of hospital pharmacies in 2015 was 96 million euros. Turnover of medicines comprised 68 million euros (71%) of this. The turnover of hospital pharmacies is calculated without VAT.

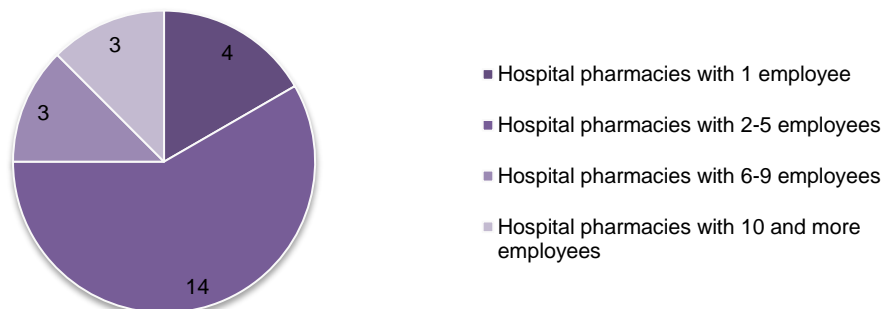
**Turnover of hospital pharmacies in 2006-2015**



The turnover of hospital pharmacies is very versatile. The annual turnover of sixteen hospital pharmacies or approximately two-thirds of hospital pharmacies was less than one million euros. There are four 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 2015 exceeded five million euros. In total, the four largest pharmacies comprised 77% 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 2015 was four million euros. When we look at the remaining pharmacies separately from the four largest, we see that the average annual turnover is considerably smaller: ~ one million euros.

The employees in hospital pharmacies are mostly dispensing chemists. 69 dispensing chemists, 39 pharmacists and 35 other employees worked in hospital pharmacies at the end of 2015. 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 2015**





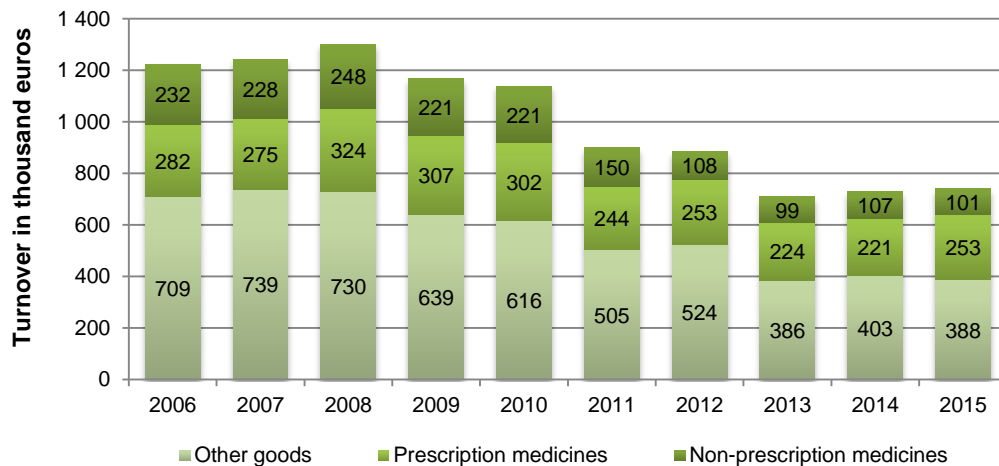


## Veterinary Pharmacies

There were four veterinary pharmacies operating in Estonia in 2015. The number of veterinary pharmacies has been decreasing since the end of 2005. One of the reasons for this is the requirement implemented in 2006 by which providers of veterinary services may not be holders of a veterinary pharmacy activity license at the same time. However, a veterinarian may purchase veterinary medicines directly from wholesalers. In 2015, wholesalers dispensed around 89% of veterinary medicines directly to operating veterinarians or veterinarians representing agricultural undertakings, 5% to general pharmacies, 4% to veterinary pharmacies and 2% to other institutions.

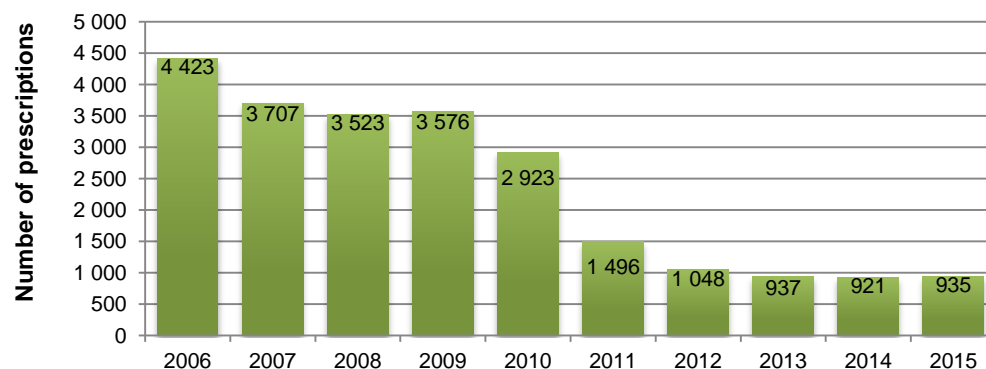
Similarly to general pharmacies, the turnover of veterinary pharmacies comprises turnover of medicines and turnover of other goods. However, unlike general pharmacies, sales of other goods comprise the largest proportion of veterinary pharmacy turnover, which was 52% in 2015. The turnover of veterinary pharmacies has decreased last years. The very little increase was in 2014 and 2015. The turnover of prescription medicines of veterinary pharmacies increased 15% compared to the previous year in 2015, but the turnover of non-prescription medicines and the turnover of other goods decreased.

**Turnover of veterinary pharmacies in 2006-2015**



Veterinary pharmacies dispense prescription medicines on the basis of order forms and prescriptions. The number of prescriptions handled by veterinary pharmacies has decreased by 79% in the past ten years.

**Number of prescriptions handled in veterinary pharmacies in 2006-2015**



In 2015 seven veterinarians worked in four veterinary pharmacies.