Growth in pharmaceutical spending slowed down or was negative in many European countries in recent years, due mainly to price reductions and a growing share of the generic market (see Indicator 6.4 "Pharmaceutical expenditure"). However, the overall quantities of pharmaceuticals consumed have often continued to increase, partly driven by growing demand for drugs to treat ageing-related and chronic diseases.

This section discusses the volume of consumption of four categories of pharmaceuticals: drugs against hypertension, cholesterol-lowering drugs, antidiabetics and antidepressants. Consumption of these drugs is measured through the defined daily dose (DDD) unit (see the box on "Definition and comparability").

Hypertension is an important public health problem. It has been estimated that one in three adults worldwide is affected by hypertension, and 13% of mortality is associated with high blood pressure (WHO, 2012). The consumption of antihypertensive medications has nearly doubled on average in EU countries between 2000 and 2012 (Figure 3.11.1). In 2012, consumption per capita was the highest in Germany, Hungary and the Czech Republic.

The use of cholesterol-lowering drugs has more than tripled across EU countries from fewer than 29 DDDs per 1 000 people per day in 2000 to nearly 100 DDDs in 2012 (Figure 3.11.2). Both the epidemiological context – for instance, growing obesity – and increased screening and treatment explain the very rapid growth in the consumption of cholesterol-lowering medications. The United Kingdom, the Slovak Republic and Belgium had the highest consumption per capita in 2012, with levels that were at least 30% higher than the EU average. While these crosscountry differences may partly reflect differences in the prevalence of cholesterol levels in the population, differences in clinical guidelines for the control of bad cholesterol also play a role.

The use of drugs against diabetes has nearly doubled on average across EU countries between 2000 and 2012 (Figure 3.11.3). This growth can be explained by a rising prevalence of diabetes, largely linked to increases in the prevalence of obesity. In 2012, the consumption of antidiabetics was highest in Finland, Germany and the United Kingdom. While the consumption of antidiabetics in Finland and Germany was about the same as in France in 2000, it has increased much more rapidly since then. In 2012, more than 20% of men aged 65 and over in Finland took at least one drug against diabetes, compared with 14% in Denmark and 15% in Sweden (NOMESCO, 2013).

The consumption of antidepressants has also nearly doubled in EU countries since 2000 (Figure 3.11.4). Guidelines for the pharmaceutical treatment of depression vary across countries, and there is also great variation in prescribing behaviors among general practitioners and psychiatrists across and within countries. Iceland had the highest level of consumption of antidepressants in 2012, almost two-times greater than in Norway. Nearly 30% of women aged 65 and over took at least one type of antidepressants in Iceland in 2012, compared with less than 15% in Norway (NOMESCO, 2013). Among EU countries, antidepressants consumption in 2012 was highest in Portugal, Denmark and Sweden.

Greater intensity and duration of treatments are some of the factors explaining the general increase in antidepressant consumption. In addition, rising consumption can also be explained by the extension of the indications of some antidepressants to milder forms of depression, generalised anxiety disorders or social phobia. These extensions have raised concerns about appropriateness. Changes in the social acceptability and willingness to seek treatment during episodes of depression have also contributed to increased consumption.

Some researchers have suggested that the growing use of antidepressants may also be linked to the insecurity created by the economic crisis. In Spain, the consumption of antidepressants per capita increased by 23% between 2007 and 2012, although this increase was lower than in the preceding five years (44% between 2002 and 2007). In Portugal, antidepressant consumption went up by 30% between 2007 and 2012, but this was also slower than the 60% growth rate between 2002 and 2007. The consumption of antidepressants in recent years rose even more quickly in countries such as Germany (a rise of over 50% between 2007 and 2012) which were less affected by the economic crisis.

#### **Definition and comparability**

Defined daily dose (DDD) is the assumed average maintenance dose per day for a drug used for its main indication in adults. DDDs are assigned to each active ingredient(s) in a given therapeutic class by international expert consensus. For instance, the DDD for oral aspirin equals 3 grams, which is the assumed maintenance daily dose to treat pain in adults. DDDs do not necessarily reflect the average daily dose actually used in a given country. DDDs can be aggregated within and across therapeutic classes of the Anatomic-Therapeutic Classification (ATC). For more detail, see www.whocc.no/atcddd.

The volume of hypertension drugs consumption presented in Figure 3.11.1 refers to the sum of five ATC2 categories which can all be prescribed against hypertension (antihypertensives, diuretics, beta-blocking agents, calcium channel blockers and agents acting on the renin-angiotensin system).

Data generally refer to outpatient consumption only, except for the Czech Republic, Estonia, Italy and Sweden where data also include hospital consumption. The data for Spain refer to outpatient consumption for prescribed drugs covered by the National Health System (public insurance).

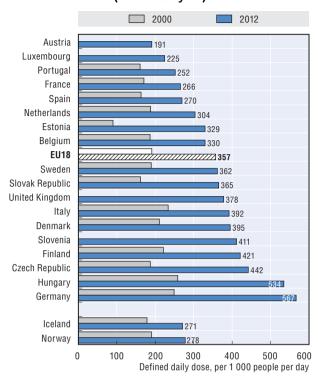
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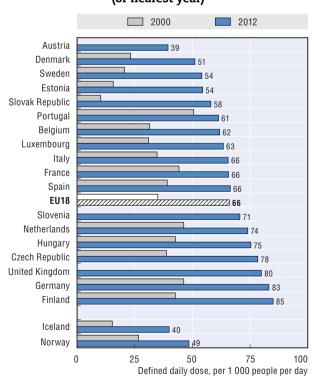
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### 3.11.1. Hypertension drugs consumption, 2000 and 2012 (or nearest year)



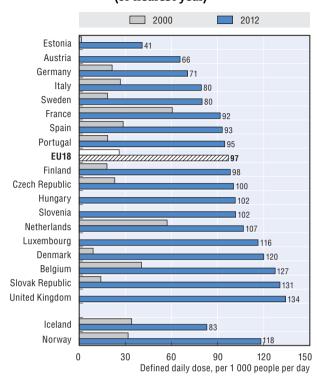
Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

# 3.11.3. Antidiabetics consumption, 2000 and 2012 (or nearest year)



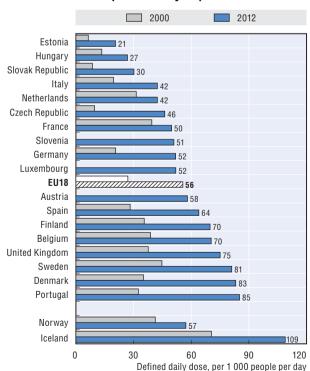
Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

## 3.11.2. Anticholesterols consumption, 2000 and 2012 (or nearest year)



 $Source: \ OECD \ Health \ Statistics \ 2014, \ http://dx.doi.org/10.1787/health-data-en.$ 

# 3.11.4. Antidepressants consumption, 2000 and 2012 (or nearest year)



Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

StatLink is http://dx.doi.org/10.1787/888933155650

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