



Summary of latest data on antibiotic consumption in the European Union

Highlights on antibiotic consumption

- Use of antibiotics is one of the main factors responsible for the development and spread of antibiotic resistance.
- The vast majority of human consumption of antibiotics occurs in the community; that is outside hospitals.
- Antibiotic consumption in Europe varies widely depending on the country. Countries in southern and eastern Europe usually report the highest consumption whereas consumption is much lower in northern Europe.
- A comprehensive trend analysis of representative national data showed that antibiotic consumption increased in most European countries from 1997 to 2009¹.
- However, total antibiotic consumption in the community continuously decreased in six countries (Estonia, Ireland, Latvia, Slovenia, Spain and Sweden) between 2007 and 2009.
- Recent data also show that six countries (Bulgaria, Estonia, Greece, Iceland, Ireland and Lithuania) have reported a decrease in total antibiotic consumption in the community expressed in Defined Daily Doses (DDD) per 1 000 inhabitants and per day of more than 5% of between 2008 and 2009 whereas during the same period, six other countries (Austria, Cyprus, Czech Republic, France, Hungary and Poland) showed an increase of more than 5%.
- In all countries, penicillins were the most frequently used antibiotics.
- National antibiotic consumption data are publicly available^{2,3} and thus provide a basis for healthcare professionals, authorities and the general public for monitoring progress towards a more prudent use of antibiotics.

¹ Adriaenssens N, *et al.* European Surveillance of Antimicrobial Consumption (ESAC): outpatient antibiotic use in Europe (1997-2009). J Antimicrob Chemother 2011; in press (supplement issue to be published on 18 November 2011).

² http://www.esac.ua.ac.be/main.aspx?c=*ESAC2&n=50026

³ http://ecdc.europa.eu/en/activities/surveillance/ESAC-Net/publications/Documents/ESAC_Yearbook_2009.pdf

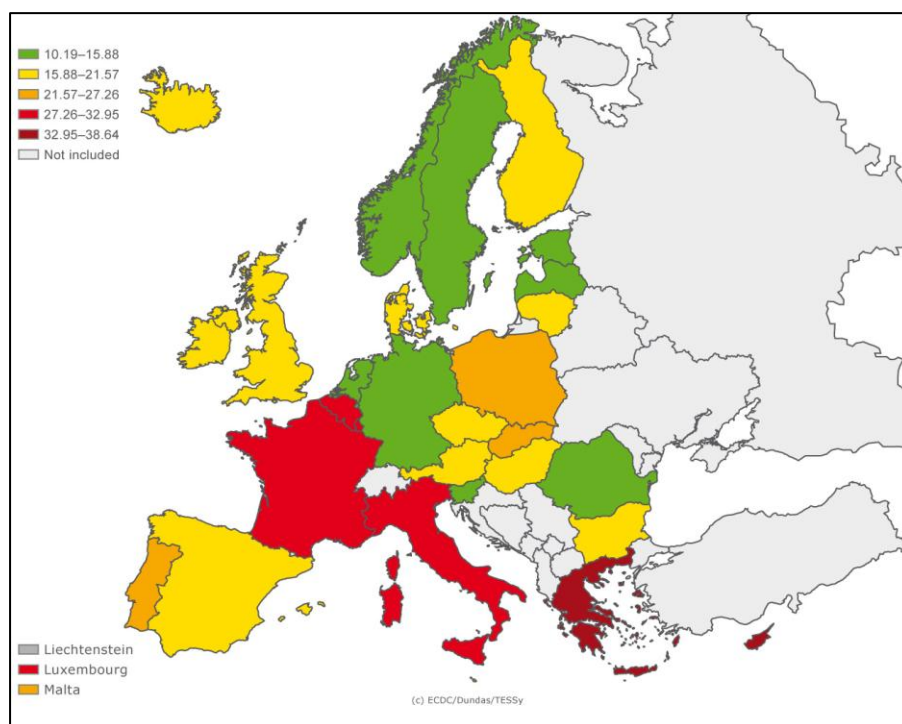
Antibiotic consumption in Europe

The data presented in this section were collected by the European Surveillance of Antimicrobial Consumption (ESAC), which was coordinated by the University of Antwerp and funded by the European Centre for Disease Prevention and Control (ECDC) until 30 June 2011.

From 1 July 2011 onwards, ECDC coordinates the European Surveillance of Antimicrobial Consumption Network (ESAC-Net). ESAC-Net collects and analyses data on antimicrobial consumption from EU and EEA/EFTA countries, both in the community and the hospital sector.

European data on the total consumption of antibiotics in patients in the community in 2009 are presented in Figure 1. These data represent antibiotic consumption outside hospitals and account for the largest proportion of human consumption of antibiotics. Data on antibiotic consumption are available from 28 EU and EEA/EFTA countries and are measured in Defined Daily Doses (DDD) per 1 000 inhabitants and per day according to the Anatomical Therapeutic Chemical (ATC)/DDD index. Antibiotic consumption expressed in DDD per 1000 inhabitants and per day is a potential indicator for healthcare professionals and policy makers to monitor national efforts towards a more prudent use of antibiotics in the community.

Figure 1: Total consumption of antibiotics for systemic use in the community expressed in DDD per 1 000 inhabitants and per day, 2009 (Data source: ESAC)



For Cyprus and Lithuania, total consumption (both community and hospital sector)

For Spain, reimbursement data that do not include over-the-counter sales without a prescription

Figure 2 shows the distribution into main antibiotic classes of community antibiotic consumption expressed in DDD per 1 000 inhabitants and per day. Each bar refers to a specific country while the colors indicate the recorded consumption of the different antibiotic classes in that country.

Total community antibiotic consumption ranged from 10.5 DDD per 1 000 inhabitants and per day in Latvia to 38.6 DDD per 1 000 inhabitants and per day in Greece. As in previous years, antibiotics of the penicillin class were the most frequently used antibiotics in all countries (Figure 2).

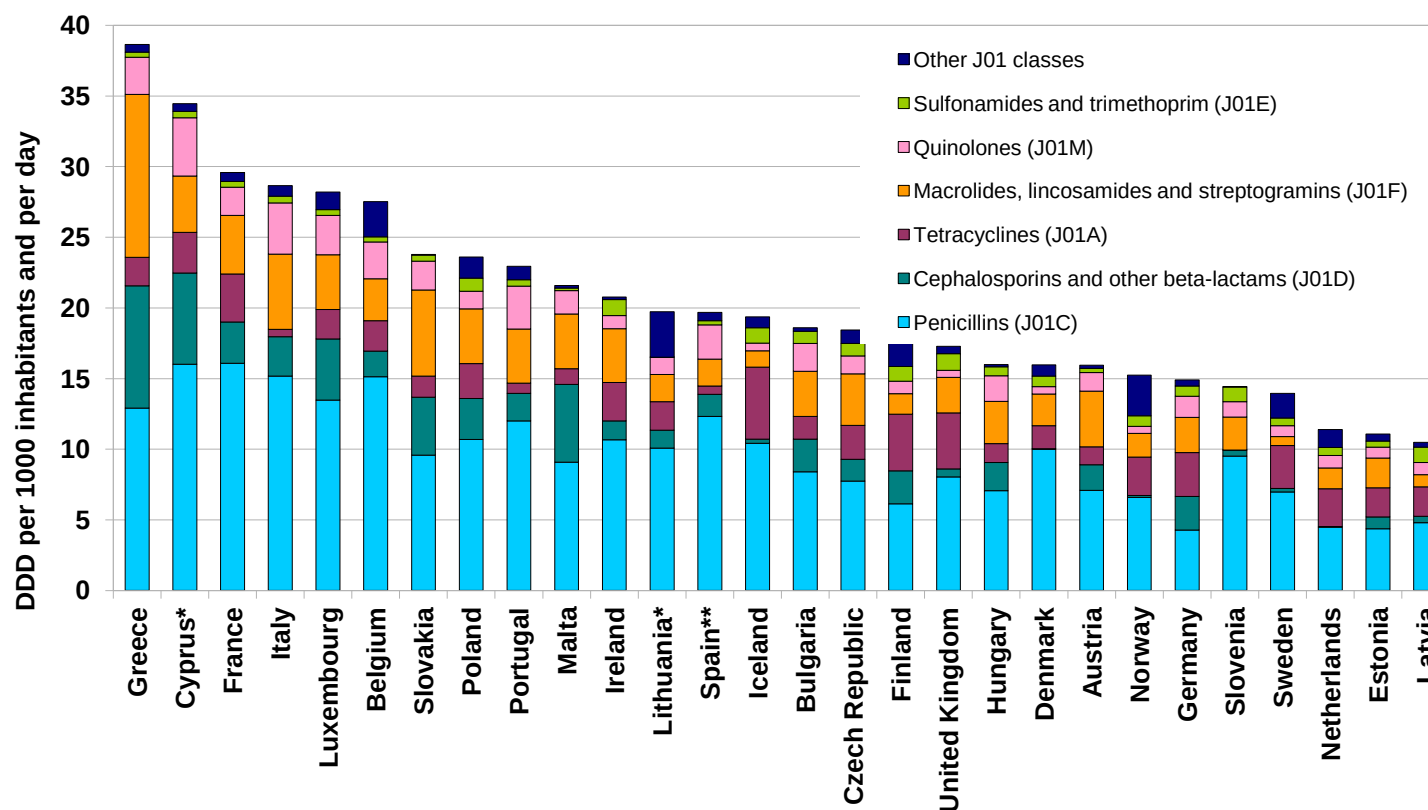


Figure 2: Distribution into main antibiotic classes of consumption of antibiotics for systemic use in the community, 28 EU and EEA/EFTA countries, 2009 (Data source: ESAC)

* For Cyprus and Lithuania, total consumption (both community and hospital sector)
 ** For Spain, reimbursement data that do not include over-the-counter sales without a prescription