

HEALTHCARE-ASSOCIATED INFECTIONS

The European Centre for Disease Control estimates that 3.8 million people acquire a healthcare-associated infection each year in acute care hospitals in EU countries and Norway and Iceland (Suetens et al., 2018), and an estimated 90 000 people in the EU die each year due to the six most common infections in health care settings (Cassini, 2016). At least 20% of healthcare-associated infections are considered to be avoidable through better infection prevention and control (Harbath, 2003).

Figure 6.28 shows the percentage of patients reported by selected hospitals in EU countries to have acquired a healthcare-associated infection in 2016-17, together with the predicted percentage of patients that would be expected to have acquired such an infection based on patient characteristics. On average across EU countries (weighted), 5.5% of patients acquired an infection during their hospital stay in 2016-17. The observed percentage was lowest in Lithuania, Bulgaria, Germany, Latvia, the Netherlands and Romania (less than 4%), and highest in Greece, Portugal, Italy, Finland and Cyprus (more than 8%).

Figure 6.29 shows the proportion of healthcare-associated infections by type of care (specialty). Across EU countries, patients in medical specialty areas (including general medicine, cardiology, oncology, neurology) accounted for 40% of all infection cases in 2016-17. Patients in surgical specialty areas represented another 33% of cases, while intensive care patients accounted for 13% of infections. Geriatrics, paediatrics and other specialty areas made up the remaining 14% of healthcare-associated infections.

As shown in Figure 6.30, the most common types of healthcare-associated infections were pneumonia (accounting for 26% of all cases), urinary tract infections (19%), surgical site infections (18%), bloodstream infections (11%) and gastrointestinal infections (9%).

Compounding the impact of healthcare-associated infections are infections due to antimicrobial resistant bacteria, which can lead to complications, longer hospital stays, or death. A single resistant infection has been estimated to cost about EUR 8 500 to 34 000 more than a non-resistant infection, due to additional hospital days and additional treatment costs (OECD, 2017). Inappropriate use of antibiotics contribute to antimicrobial-resistant bacteria in hospitals and in the community.

Healthcare-associated infections can be prevented by implementing a series of measures, as set out in the Council of the European Union's Recommendation on Patient Safety, including the Prevention and Control of Healthcare-Associated Infections (2009/C 151/01). At the hospital level, key components of effective infection prevention and control strategies include: the creation of a local infection control team; staff training; use of evidence-based guidelines; infection surveillance and feedback; and rigorous maintenance of environmental hygiene (WHO, 2016). Most European countries have established their own national guidelines for infection control programmes (ECDC, 2018).

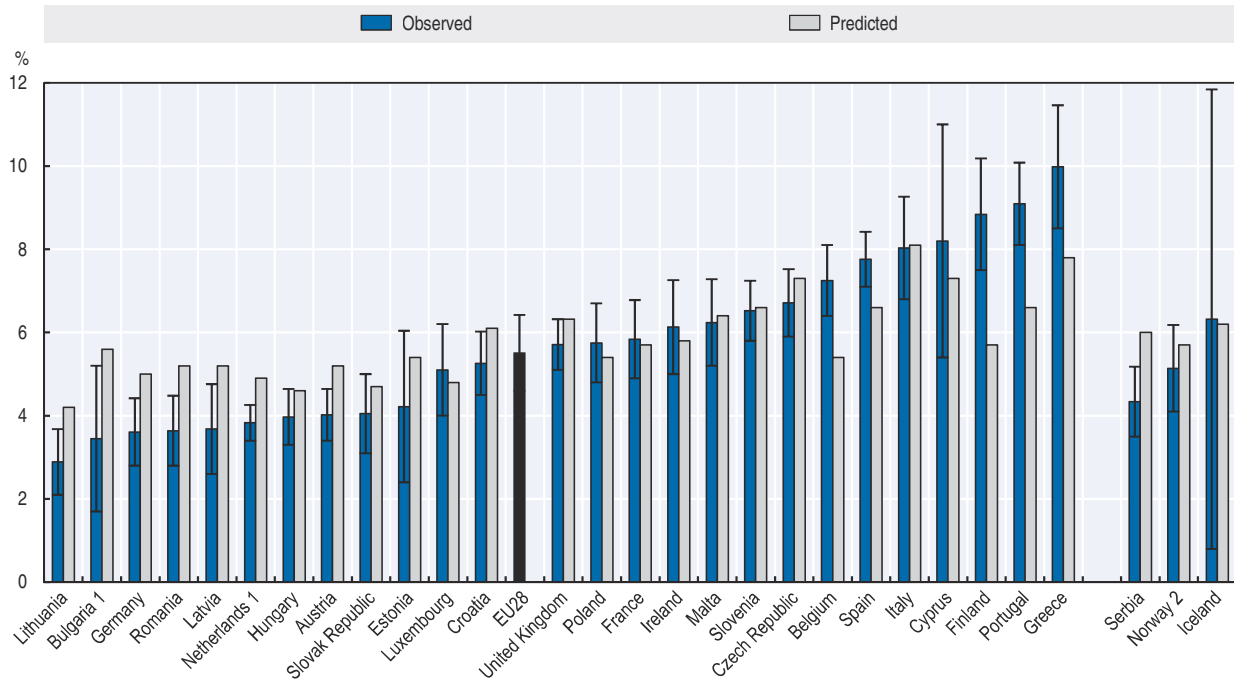
Definition and comparability

The data are based on a point prevalence survey (PPS) of healthcare-associated infections conducted in 2016-17 in 1 275 acute care hospitals covering all EU countries (except Denmark and Sweden), Norway, Iceland and Serbia (Suetens et al., 2018). Validation studies of national PPS data were carried out in a subgroup of hospitals and generally found an underestimation of the true prevalence, which allowed to make a more robust estimation of the burden of healthcare-associated infections. Different sensitivities and specificities of infections' detection may explain, in part, differences between the observed versus expected prevalence. Estimates were used for Denmark and Sweden to come up with a total burden for the EU, Norway and Iceland as a whole, using EU averages to the hospital discharge data for these two countries. Norway participated in this survey with a protocol that required the imputation of data for missing types of infections. In Bulgaria and the Netherlands, country representativeness is limited because of a low number of participating hospitals, resulting in potential selection bias.

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6.28. Observed and predicted percentage of hospitalised patients with at least one healthcare-associated infection, 2016-17



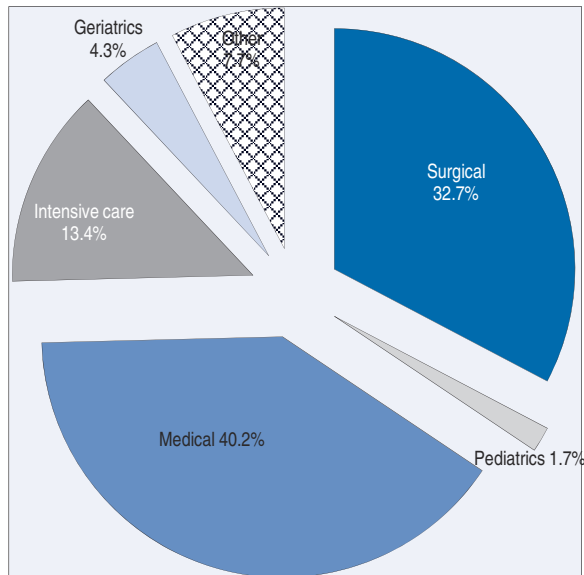
1. Country representativeness of data is limited in Bulgaria and the Netherlands.
2. Data from Norway includes partial imputation for missing types of infections.

Note: 95% confidence intervals represented by H. Data for Denmark and Sweden are not available. The EU average includes Iceland and Norway.

Source: ECDC 2016-17 Point prevalence survey.

StatLink <http://dx.doi.org/10.1787/888933836143>

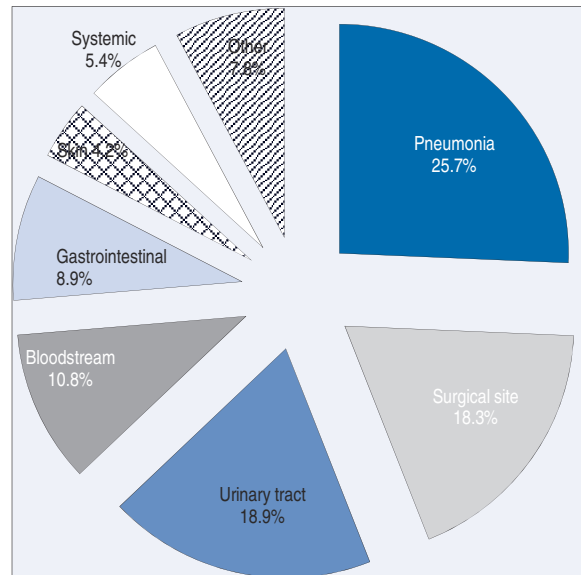
6.29. Healthcare-associated infections by type of care (specialty) across EU countries, 2016-17



Source: ECDC 2016-17 Point prevalence survey.

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6.30. Healthcare-associated infections by type of infection across EU countries, 2016-17



Source: ECDC 2016-17 Point prevalence survey.

StatLink <http://dx.doi.org/10.1787/888933836181>



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