



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Health and food audits and analysis



REFERENCES:

**ECDC, BELGIUM, COUNTRY VISIT AMR. STOCKHOLM: ECDC; 2017
DG(SANTE)/2017-6293**

**EXECUTIVE SUMMARY
OF A COUNTRY VISIT TO BELGIUM
FROM 16 TO 24 NOVEMBER 2017
TO DISCUSS POLICIES RELATING TO ANTIMICROBIAL RESISTANCE
IN A ONE HEALTH PERSPECTIVE**

NB: THIS IS AN EXECUTIVE SUMMARY BASED ON THE FOLLOWING ECDC AND COMMISSION REPORTS:

BELGIUM, COUNTRY VISIT AMR. STOCKHOLM: ECDC; 2017.

<https://ecdc.europa.eu/en/publications-data/ecdc-country-visit-belgium-discuss-antimicrobial-resistance-issues>

DG(SANTE)/2017-6293

[HTTP://EC.EUROPA.EU/FOOD/AUDITS-ANALYSIS/AUDIT_REPORTS/INDEX.CFM](http://ec.europa.eu/food/audits-analysis/audit_reports/index.cfm)

***IT HAS BEEN PROVIDED TO ASSIST VISITORS TO THIS SITE, BUT HAS NO OFFICIAL STATUS. REFERENCE SHOULD ALWAYS
BE MADE TO THE FULL TEXT OF THE ORIGINAL REPORTS.***

Introduction

The European Centre for Disease Prevention and Control (ECDC) and the European Commission's Directorate-General for Health and Food Safety, upon invitation by the Belgian authorities, jointly carried out a country visit from 16-24 November 2017 (for ECDC: 16 and 20-24 November). The overall aim of the visit was to assist them in the further development and implementation of their national policies and strategies for tackling antimicrobial resistance (AMR) based on a One Health perspective.

These joint country visits are one of the many initiatives set out in the Commission's One Health Action Plan against AMR published on 29 June 2017¹ and contribute in particular to its aim of making the European Union (EU) a best practice region in the fight against AMR. By carrying out the visits jointly, the ECDC and Commission reports, on which this executive summary is based, provide a comprehensive overview of the current efforts to tackle AMR and potential opportunities to enhance their effectiveness based on a One Health approach. This term recognises that human and animal health are interconnected, that diseases are transmitted from one to the other and the threat of AMR should be tackled in both. The One Health approach also encompasses the environment, another link between humans and animals and likewise a potential source of new resistant organisms.

During the visit, the competent authorities, stakeholders and the visit teams (including experts from other Member States) exchanged views and experiences on the work underway and planned in Belgium to address AMR, and shared examples of good practices which could potentially be useful in further actions on this topic. The Commission guidelines on the prudent use of human and veterinary medicines and other relevant international documentation, such as those jointly adopted by the World Health Organization (WHO), the Food and Agriculture Organisation (FAO) of the United Nations and the World Organisation for Animal Health (OIE), provided the basis for discussions.

One Health aspects of AMR

The ECDC and the Commission reports note that the long-established Belgian Antibiotic Coordination Commission (BAPCOC) provides an inter-sectoral coordinating mechanism for national AMR policies. Its structure and membership involves relevant representatives from the human and animal health sectors, academia, national agencies and experts in its activities. Its One Health activities include data collection, reports, awareness raising and issuing guidelines and recommendations for the human and animal sectors. More specific objectives and actions are set out in the BAPCOC policy paper for 2014 to 2019. The establishment of the non-profit organisation, Antimicrobial Consumption and Resistance in Animals (AMCRA) in 2012 has given a boost to efforts to tackle AMR in the veterinary sector, and its targets and various initiatives are reflected in the BAPCOC policy paper.

Many positive aspects of the work done by BAPCOC are highlighted in the two reports along with a number of issues which may limit its effectiveness as inter-sectoral coordinating

¹ https://ec.europa.eu/health/amr/sites/amr/files/amr_action_plan_2017_en.pdf

mechanism, now or in the future. As a result, the reports recommend reviewing and updating various aspects of its organisation, operation, membership and funding, so that it continues to be fit-for-purpose to help tackle current and future challenges relating to AMR in a One Health context.

The reports conclude that Belgium does not yet have a truly One Health AMR strategy or action plan, and relevant policies and actions to tackle AMR in the human and veterinary fields are generally set out separately. Little attention is given to the environmental aspects of AMR. Both reports recommend developing a comprehensive and multi-disciplinary national AMR action plan based on transforming and elaborating existing policies (especially the BAPCOC Policy Paper) and enhancing collaboration and cooperation between the relevant sectors.

Recommendations and points which could be usefully considered in further elaborating One Health policies and the roles of the inter-sectoral coordinating mechanism are set out in the ECDC and Commission reports. In addition to the points above, these also include the potential to have a more integrated analysis and reporting of AMR surveillance and antimicrobial sales and usage trends, between and within both the veterinary and human health sectors.

Human health aspects

Concerning human health aspects, the ECDC report concludes that although the percentage of meticillin-resistant *Staphylococcus aureus* (MRSA) isolates over all *S. aureus* tested has been declining since 2003, particularly within healthcare-associated infections, Belgium faces challenges in preventing and controlling infections with multidrug-resistant Gram-negative bacteria. For example, the percentages of extended spectrum beta-lactamase (ESBL) producing *Escherichia coli* and *Klebsiella pneumoniae* have been increasing since 2007. Moreover, the latest data from the European antimicrobial resistance surveillance network (EARS-Net) show a substantial increase in the percentage of carbapenem-resistant isolates among *K. pneumoniae* from bloodstream infections. Between 2012 and 2015, active surveillance of carbapenem-resistant *Enterobacteriaceae* (CRE) from the National Reference Centre (NRC) demonstrated a three-fold increase in the number of reported isolates. Of greater concern is the emergence of the New Delhi metallo-beta-lactamase (NDM)-producing CRE, which has increased from 0.5% to 8% of reported carbapenemase-producing CRE between 2012 and 2015. In 2015, CPE was added to the mandatory surveillance of multidrug-resistant gram-negative bacteria. Nevertheless, reporting of CPE is *de facto* optional, because not all hospital laboratories have the capacity to detect carbapenemase production. Reporting of CRE (without information on carbapenemase production) is compulsory for six months per year, whereas most hospitals provide data for the full year on a voluntary basis.

Despite all the activities carried out, human antibiotic use in Belgium remains above the EU/European Economic Area (EEA) average in the community if expressed in defined daily doses per 1 000 inhabitants, but falls below the EU/EEA average when expressed in packages per 1 000 inhabitants per day. In addition, a heavy emphasis is placed on prescription of

broad-spectrum antibiotics both in the community and in hospitals, bestowing a higher risk that AMR will develop and ultimately increase the costs of healthcare. In addition, a significant proportion of hospitals do not have a policy to restrict the use of last-resort antibiotics. Moreover, antibiotic susceptibility is not reported selectively on laboratory results, and often decisions on which antibiotics to prescribe are not supported by infectious disease specialist advice (which is particularly important in hospital settings).

National surveillance of healthcare-associated infections (HAIs), including those due to antimicrobial-resistant bacteria, performed by the Scientific Institute of Public Health (WIV-ISP), was considered to be one of the most extensive national systems seen during the ECDC country visits on AMR. This impressive surveillance system has contributed to documenting the successful reduction of MRSA in the country. However, surveillance is now highlighting an even bigger patient safety challenge - the increasing impact of CRE on healthcare. The ECDC report concludes that Belgium is at a cross-road; in the sense that the situation can still be controlled to ensure that the CRE epidemic does not reach the endemic situation. This would avoid a situation similar to that in a number of southern EU countries where deaths from untreatable CRE infections are, unfortunately, a daily reality.

Belgium will need to establish its own ranking priorities. Ultimately, however, the success of AMR control will depend on increasing the level of urgency for change among all prescribers, stakeholders and the general public. In turn, this will require strong leadership and a considerable top-down direction.

The ECDC report includes a range of recommendations intended to strengthen the efforts to tackle AMR (in addition to those concerning One Health aspects above), which cover the following subjects:

- Strengthening infection prevention and control policies, reinforcing the status and activity of infectious disease clinicians and increasing the input of clinical microbiologists to improve the management of infections.
- Promoting compliance with evidence-based prescription guidelines and strengthening the role of the coordinating physician in nursing homes, so each long-term care facility has and implements clear antibiotic guidance.
- Raising awareness on the prudent use of antimicrobials among the general public and healthcare professionals.
- Providing compulsory education on AMR and antibiotic stewardship in the undergraduate and postgraduate curricula.

Veterinary aspects

The Commission report concludes that various communication and awareness-raising activities have already taken place on issues such as biosecurity, as well as the reduced and prudent use of antibiotics, but issues related to companion animals have often not been included in these initiatives. Ambitious veterinary antibiotic use reduction targets have been

recently agreed with stakeholders, but not all of the expected tools and necessary support elements are in place to achieve these, such as benchmarking of prescribing and use of antibiotics, identification of critical success or failure factors and further dissemination of good practices.

The Commission report outlines various considerations which could usefully be taken into account as Belgium's national strategies and policies on AMR are further elaborated and implemented. These cover the following subjects:

- Considering more tailored, sector specific, targets for reducing antibiotic use and ensuring that ambitious targets do not jeopardise animal health, welfare and productivity.
- Exploring the potential mutually beneficial benefits of sharing experiences and treatment approaches specifically for Critically Important Antimicrobials.