







# Contents

Abbreviations .....	iv
Executive summary .....	1
Background .....	3
Rationale for country visits to discuss antimicrobial resistance (AMR) issues .....	3
Purpose .....	3
Overview of the situation in Latvia .....	4
Antimicrobial resistance (AMR) .....	4
Healthcare-associated infections .....	4
Antimicrobial consumption .....	4
Observations .....	5
Development of an Intersectoral Coordinating Mechanism (ICM) .....	5
Organised multidisciplinary and multisectoral collaboration on local level .....	5
Laboratory capacity .....	5
Monitoring of antibiotic resistance .....	5
Monitoring of antibiotic usage .....	6
Antibiotic utilisation and treatment guidance .....	6
Infection control .....	7
Educational programmes on AMR .....	7
Public information related to AMR .....	7
Marketing related issues .....	8
Conclusions .....	9
Recommendations .....	9
Annex 1. ECDC team and visit agenda .....	11
Annex 2. Assessment tool for ECDC country visits to discuss antimicrobial resistance (AMR) issues .....	14

## Abbreviations

AMR	Antimicrobial resistance
ARD	Acute respiratory disease
CRP	C-reactive protein
EARS-Net	European Antimicrobial Resistance Surveillance Network
ESAC-Net	European Surveillance of Antimicrobial Consumption Network
ESBL	Extended-spectrum beta-lactamase
HAI	Healthcare-associated infections
ICM	Intersectoral Coordination Mechanism
MRSA	Methicillin-resistant <i>Staphylococcus aureus</i>
TESSy	The European Surveillance System

# Executive summary

## Rationale and purpose of the country visit

The Council Recommendation of 15 November 2001 on the prudent use of antimicrobial agents in human medicine (2002/77/EC)<sup>i</sup> outlines the threat that antimicrobial resistance (AMR) poses to human health and advocates for a range of actions to be taken for its prevention and control. Council conclusions on AMR of 10 June 2008 reiterated this call for action.

To assist Member States in implementing the Council Recommendation, ECDC developed a process for and is carrying out, upon invitation from national authorities, country visits to specifically discuss and assess the situation of the country regarding prevention and control of AMR through prudent use of antibiotics and infection control. These country visits also help document how Member States have approached this implementation and deployed national activities, and support the European Commission in evaluating this implementation.

This report, provided to the inviting national authority is the main output of the visit from the ECDC team. To help the ECDC team ensure consistency of the visits and follow-up of progress of countries, an assessment tool has been developed (see Annex 2). The assessment tool includes ten topics. These topics are regarded as core areas for successful prevention and control of AMR and are based on Council Recommendation 2002/77/EC and on Council Conclusions of 10 June 2008. The assessment tool is used as a guide for discussions during the visit.

Following an invitation by the Ministry of Health and as part of an ECDC country visit to Latvia on 26–30 September 2011, an ECDC team conducted visits and meetings to discuss AMR issues in Latvia.

## Conclusions

Compared with many other EU countries, the present AMR situation of Latvia is favourable. In particular, Latvia has one of the lowest uses of antibiotics in the community (i.e. outside of hospitals) of all EU countries. There is an infection control legislation that is under implementation and the legislation is a good basis for improving infection control practices in Latvian healthcare.

However, looking at the trends of extended-spectrum beta-lactamase (ESBL)-producing *Enterobacteriaceae*, and of multidrug-resistant *Acinetobacter baumannii* in hospitals, as well as the high antibiotic use in hospitals, there should be a concern for more serious AMR problems in the future.

Latvia is now at a crossroads. If a good strategy to identify circulating AMR clones and a mechanism for their rapid containment is implemented, combined with reinforced infection control practices and a more prudent use of antibiotics in hospitals, Latvia could most probably postpone these problems.

Most of the knowledge of the Latvian situation on AMR derives from a few professionals and experts at Pauls Stradiņš University Hospital and is based on research projects and voluntary work. There are also dedicated professionals among the general practitioners that advocate for prudent use of antibiotics and proper treatment policies. These professionals and experts are valuable assets for Latvia. In Latvia, as observed in other EU Member States, dedicated professionals with a high level of expertise and experience are essential for surveillance, prevention and control in the specialised public health area of AMR.

The nature of AMR data as reported at EU level to The European Surveillance System/European Antimicrobial Resistance Surveillance Network (TESSy/EARS-Net) is different from that of other communicable diseases. Antimicrobial resistance data originate from routine clinical microbiology laboratories and include information on both antimicrobial-resistant and antimicrobial-susceptible isolates to determine the percentage of antimicrobial-resistant isolates for multiple antimicrobials and several bacterial species. While it is, in principle, possible to perform some type of AMR surveillance with VISUMS (the computerised system for national surveillance and monitoring of infectious diseases) (e.g. for MRSA), VISUMS is not the most suited tool for collection of the broad range of AMR data from clinical microbiology laboratories as required by TESSy/EARS-Net.

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<sup>i</sup>Council Recommendation of 15 November 2001 on the prudent use of antimicrobial agents in human medicine. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:034:0013:0016:en:pdf>

## Recommendations

The experience from other countries shows that the existence of an Intersectoral Coordination Mechanism (ICM) composed of representatives of all stakeholders is crucial for the success of combating AMR. Council Recommendation 2002/77/EC on the prudent use of antimicrobial agents in human medicine recommends that EU Member States implement such an ICM. Latvia should consider setting up an ICM supported by the Government.

A first task of the ICM in Latvia would be to agree on a national strategy on AMR and the prudent use of antimicrobial agents in the country.

Such a strategy could contain elements such as:

- A publicly funded, continuous surveillance system for collecting and typing strains of multidrug-resistant healthcare-associated bacteria such as but not limited to MRSA. Quality and representativeness of data are important for this type of surveillance, which requires laboratory expertise, specific expertise and an active network of hospital clinical microbiology laboratories. This type of surveillance may need to be subcontracted. A way to set up such a surveillance system would be to build on the present systems used in research projects and EARS-Net at Pauls Stradiņš University Hospital since these systems have been successful at providing data at EU level to the European Antimicrobial Resistance surveillance System (EARSS), and then TESSy/EARS-Net since 2004.
- A continuous mechanism for analysis of typing results with the intention to contain spread of resistant clones. Define the responsibility on national level for these tasks. All results from surveillance and investigations should be regularly fed back to laboratories and doctors. Experience shows that this is important to get compliance for data collection.
- Continued implementation and support of the infection control legislation which could include an educational programme for infection control nurses, as well as increase the number of infection control staff.
- Considering structure and process indicators for monitoring progress in the implementation of infection control programmes in hospitals and other healthcare settings.
- Initiating studies on antibiotic prescriptions in hospitals to explain the rationale for high antibiotic use in hospitals.
- Considering how incentives for prevention and control of healthcare-associated infections could be integrated as part of healthcare economy.

In addition to the ICM and the strategy, Latvia should consider developing and adopting a legal framework for AMR surveillance, both for a broad range of AMR data from clinical microbiology laboratories (compatible with the EARS-Net protocol) and for a limited subset of specific multidrug-resistant bacteria, which similar to the current status for MRSA, could become mandatory reportable diseases and be reported to VISUMS.

# Background

## Rationale for country visits to discuss antimicrobial resistance (AMR) issues

After the introduction of antibiotics in the 1940s, it soon became clear that antibiotic usage promotes the rise of antibiotic-resistant bacterial strains in common bacteria such *Staphylococcus aureus* and *Mycobacterium tuberculosis* (TB). During the following decades, the increasing number of antibiotic-resistant strains could be handled with the continuous availability of new antibiotics that provided new means of treating patients infected with resistant bacteria. However, from the 1990s, development of new antibiotics decreased and at the same time, the emergence of bacteria resistant to multiple antibiotics became an ever-increasing problem in clinical medicine. Treatment guidelines had to be rewritten and the need to take bacteriological samples for antibiotic susceptibility testing became essential. Today, bacteria that are totally (or almost totally) resistant to antibiotics, i.e. not treatable with antibiotics, are emerging in Europe and worldwide.

In 1998, the Chief Medical Officers of EU Member States recognised this evolving problem and took the initiative to the first major conference on AMR which resulted in the Copenhagen Recommendations<sup>1</sup>.

In November 2001, the EU Health Ministers adopted a Council Recommendation on the prudent use of antimicrobial agents in human medicine (2002/77/EC), which covers most topics of importance for prevention and control of AMR. In 2005, the Commission reported to the Council on progress in Member on the prudent use of antimicrobial agents in human medicine (COM (2005) 0684). In the report, it is stated that: 'The ECDC should be able to assist the Commission in the future preparation of implementation reports and of recommendation proposals.'

In June 2009, EU Health Ministers adopted a Council Recommendation on patient safety, including the prevention and control of healthcare associated infections (2009/C 151/01), which further stresses the importance of combating AMR as a patient safety issue.

ECDC has, upon invitations from governments, visited 16 countries (some member states more than once) to discuss issues related to AMR and to the Council Recommendations. The Ministry of Health of Latvia invited ECDC to perform a visit on 26–30 November 2011 as part of a general visit of ECDC to Latvia.

## Purpose

The Council Recommendation of 15 November 2001 on the prudent use of antimicrobial agents in human medicine (2002/77/EC) outlines the threat that AMR poses to human health and advocates for a range of actions to be taken for its prevention and control. Council Conclusions on AMR of 10 June 2008 reiterated this call for action.

To assist Member States, candidate and potential candidate countries in implementing the Council Recommendation, ECDC has developed a process for and is carrying out, upon invitation from national authorities, country visits to specifically discuss and assess the situation of the country regarding prevention and control of AMR through prudent use of antibiotics and infection control. These country visits also help document how Member States have approached this implementation and deployed national activities, and support the European Commission in evaluating this implementation.

The main output of the visit is a report from the ECDC Team provided to the inviting national authority. To help the ECDC Team ensure consistency of the visits and follow-up of progress of countries, an assessment tool has been developed (see Annex 2). The assessment tool includes ten topics. These topics are regarded as core areas for successful prevention and control of AMR and are based on Council Recommendation 2002/77/EC and on Council Conclusions of 10 June 2008. The assessment tool is used as a guide for discussions during the visit.

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<sup>1</sup> Rosdahl VT, Pedersen KB (editors). The Copenhagen Recommendations Report from the Invitational EU Conference on The Microbial Threat, Copenhagen Denmark, 9–10 September 1998. Copenhagen, Denmark: Danish Ministry of Health, and Danish Ministry of Food, Agriculture and Fisheries, 1998.

<http://www.reactgroup.org/uploads/resources/The%20Copenhagen%20Recommendations.en.504.pdf>

# Overview of the situation in Latvia

## Antimicrobial resistance (AMR)

Since 2004, data on AMR have been provided to EARSS (now EARS-Net) by the Clinical Microbiology Laboratory at Pauls Stradiņš University Hospital. In 2007–2009, about 10% of *Staphylococcus aureus* invasive isolates were resistant to meticillin (MRSA). In two of the reporting hospitals, there was a significantly higher percentage of MRSA. Still, in a European context, the level of MRSA in Latvia is fairly good and below average. On the other hand, resistance to third-generation cephalosporins in 2007–2009 was at around 10% in *Escherichia coli* isolates and over 50% in *Klebsiella pneumoniae* isolates which, for the latter, corresponds to a high percentage.

From 2004 to 2009, there was a significant decrease of MRSA from 26% to 9% of invasive *S. aureus* isolates. One explanation may be the small number of *S. aureus* isolates reported in 2004 at the start of the surveillance. Another explanation could be an increased awareness about MRSA and its control due to the introduction in 2006 of the 'Regulations Regarding the Basic Requirements for a Hygienic and Counter-Epidemic Regimen in a Medical Treatment Institution (574/2006)' in Latvia.

## Healthcare-associated infections

Published data from 2002 show rates of nosocomial infections in some departments of Pauls Stradiņš University Hospital comparable to the rates observed in similar departments at Huddinge University Hospital in Sweden<sup>1</sup>. We were not able to retrieve other published data on nosocomial infections/HAI in Latvia.

In the regulations, there are clear guidelines and procedures on how to handle patients with specified antimicrobial-resistant bacteria. These procedures cover MRSA and vancomycin-resistant *S. aureus* (VRSA), and also non-reportable strains of penicillin-non susceptible *Streptococcus pneumoniae*, vancomycin-resistant *Enterococcus* spp. (VRE), carbapenem-resistant *Acinetobacter baumannii*, and amikacin-resistant *Pseudomonas aeruginosa*.

## Antimicrobial consumption

Data on antibiotic usage has been provided to ESAC by the Medicines Agency through Pauls Stradiņš University Hospital on a regular basis since 2004.

In 2009, antibiotic consumption in the community (outside hospitals) in Latvia was 10.5 DDD (defined daily doses) per 1 000 inhabitants and per day, which is one of the lowest reported in the EU (ESAC data: average of 32 European countries: 19.9; country with the highest consumption: 38.6). In comparison, the average antibiotic consumption is 19.9 DDD per 1 000 inhabitants and per day and the highest consumption is 38.6 DDD per 1 000 inhabitants and per day. Similar low consumption of antibiotics is reported from nursing homes in Latvia.

In contrast, antibiotic consumption in the hospital sector tend to be on the higher level with 2.2 DDD per 1 000 inhabitants and per day (ESAC data: average of 23 European countries participating in ESAC: 1.8; country with the highest consumption: 3.3). Penicillins, cephalosporins and quinolones are the main classes of antibiotics used in Latvian hospitals.

<sup>1</sup>Struwe J, et al. Healthcare associated infections in university hospitals in Latvia, Lithuania and Sweden: A simple protocol for quality assessment. Eurosurveillance 2006 Jul;11(7): 167–71





In the intensive care units visited, all patients were receiving broad-spectrum antibiotics. There are some diseases that seem more prevalent in Latvia such as pancreatitis and other abdominal diseases, which would justify use of these broad-spectrum antibiotics. After discussions with medical staff, it seemed that broad-spectrum antibiotics are often continued even if the results of bacteriological samples show that it is possible to narrow down antimicrobial therapy. The discussions also indicated that peri-operative prophylaxis is often given much longer than recommended by scientific evidence.

The advice of infectious disease specialists is not always followed, particularly not by surgeons. The occurrence of multidrug-resistant *Acinetobacter baumannii* reported in the visited hospitals is the likely consequence of frequent and broad-spectrum antibiotic use in these hospitals. However, since the same strain seems to be recovered in many hospitals in Latvia, there must be a mechanism that allows this strain to be transmitted between hospitals.

## Infection control

There is a comprehensive legislation (Cabinet Regulation No 574, adopted on 11 July 2006) that covers most areas of infection control.

In most visited wards, alcohol hand rub for hand hygiene was available at locations close to the patients. In one hospital, compliance with hand hygiene increased from 6% to 74% (intensive care unit) following a hand hygiene campaign, but this percentage decreased after the end of the campaign.

In the visited intensive care units, there were rooms that could be used for isolating or cohorting patients with specific multidrug-resistant bacteria such as *Acinetobacter baumannii*.

There was a practice for screening patients for MRSA, but not necessarily other multidrug-resistant bacteria such as ESBL-producing *Enterobacteriaceae*. Patients positive for these resistant bacteria were isolated and precautions were introduced according to the regulations.

There is a lack of personnel specifically trained in infection control and a limited number of infection control staff in hospitals. There is a turnover of staff in hospital wards. New staff often cannot be trained appropriately, for infection control procedures.

At Pauls Stradiņš University Hospital, there are some wards that follow occurrence of healthcare-associated infections (HAI). We were not shown any data on surveillance of HAI.

## Educational programmes on AMR

Post-graduate courses on antibiotic prescribing for family physicians/general practitioners are regularly organised by the Association of Family Physicians of Latvia. Prof. Uga Dumpis participates as expert.

There are post-graduate courses on antibiotic prescribing organised by universities that are available for hospital doctors. These courses are independent from pharmaceutical industry, but the courses do not seem to attract much interest from hospital doctors.

## Public information related to AMR

Activities have been organised by some dedicated family physicians/general practitioners to raise awareness of the public about medicines, including antibiotics.

At national level, Latvia has participated each year since 2008 in European Antibiotic Awareness Day. There were a number of activities organised with no budget and very little human resources, mainly from Pauls Stradiņš University Hospital with involvement of the Ministry of Health. The Minister of Health participated in person.

These activities included scientific conferences, press conferences, press releases, interviews in media including women's magazines, scientific coffee with students, educational activities in hospitals (focused on hand hygiene) and scientific articles. The perception of the people that we met during the visit is that these activities contributed to increase the overall awareness about AMR and prudent use of antibiotics in Latvia.

## Marketing related issues

Pharmaceutical companies sometimes sponsor meetings of family physicians/general practitioners, but these companies do not take part in the organisation of these meetings.

Pharmaceutical representatives regularly visit family physicians/general practitioners to discuss a portfolio of medicines from the same company, including antibiotics. The family physicians/general practitioners that we met, however, did not feel that there was much pressure from pharmaceutical companies on their prescribing of antibiotics, probably because most of the antibiotics used in primary care are generics.

The team did not collect information on pharmaceutical industry involvement in hospitals.

# Conclusions and recommendations

## Conclusions

Compared with many other EU countries, the present AMR situation in Latvia is favourable. In particular, Latvia has one of the lowest uses of antibiotics in the community (i.e., outside of hospitals) of all EU countries. There is an infection control legislation that is under implementation and the legislation is a good basis for improving infection control practices in Latvian healthcare.

However, looking at the trends of extended-spectrum beta-lactamase (ESBL)-producing *Enterobacteriaceae* and of multidrug-resistant *Acinetobacter baumannii* in hospitals, as well as the high antibiotic use in hospitals, there should be a clear worry for more serious AMR problems in the future.

Latvia is now at a crossroads. If a good strategy to identify circulating AMR clones and a mechanism for their rapid containment is implemented, combined with reinforced infection control practices and a more prudent use of antibiotics in hospitals, Latvia could most probably postpone these problems.

Most of the knowledge of the Latvian situation on AMR derives from a few professionals and experts at Pauls Stradiņš University Hospital and is based on research projects and voluntary work. There are also dedicated professionals among the general practitioners that advocate for prudent use of antibiotics and proper treatment policies. These professionals and experts are valuable assets for Latvia. In Latvia, as observed in other EU Member States, dedicated professionals with a high level of expertise and experience are essential for surveillance, prevention and control in the specialised public health area of AMR.

The nature of AMR data as reported at EU level to TESSy/EARS-Net is different from that of other communicable diseases. AMR data originate from routine clinical microbiology laboratories and include information on both antimicrobial-resistant and antimicrobial-susceptible isolates to determine the percentage of antimicrobial-resistant isolates for multiple antimicrobials and several bacterial species. While it is, in principle, possible to perform some type of AMR surveillance with VISUMS (e.g. MRSA), VISUMS is not the most suited tool for collection of the broad range of AMR data from clinical microbiology laboratories as required by TESSy/EARS-Net.

## Recommendations

The experience from other countries shows that the existence of an Intersectoral Coordination Mechanism (ICM) composed of representatives of all stakeholders is crucial for the success of combating AMR. Council Recommendation 2002/77/EC on the prudent use of antimicrobial agents in human medicine recommends that EU Member States implement such an ICM. Latvia should consider setting up an ICM supported by the Government.

A first task of the ICM in Latvia would be to agree on a national strategy on AMR and the prudent use of antimicrobial agents in the country.

Such a strategy could contain elements such as:

- A publicly funded, continuous surveillance system for collecting and typing strains of multidrug-resistant healthcare-associated bacteria such as but not limited to MRSA. Quality and representativeness of data are important for this type of surveillance, which requires laboratory expertise, specific expertise and an active network of hospital clinical microbiology laboratories. This type of surveillance may need to be subcontracted. A way to set up such a surveillance system would be to build on the present systems used in research projects and EARS-Net at Pauls Stradiņš University Hospital since these systems have been successful at providing data at EU level to EARSS, and then TESSy/EARS-Net since 2004.
- A continuous mechanism for analysis of typing results with the intention to contain spread of resistant clones. Define the responsibility on national level for these tasks. All results from surveillance and investigations should be regularly fed back to laboratories and doctors. Experience shows that this is important to get compliance for data collection.
- Continued implementation and support of the infection control legislation which could include an educational programme for infection control nurses, as well as increase the number of infection control staff;
- Considering structure and process indicators for monitoring progress in the implementation of infection control programmes in hospitals and other healthcare settings;
- Initiating studies on antibiotic prescriptions in hospitals to explain the rationale for high antibiotic use in hospitals;
- Considering how incentives for prevention and control of healthcare-associated infections could be integrated as part of healthcare economy.

In addition to the ICM and the strategy, Latvia should consider developing and adopting a legal framework for AMR surveillance, both for a broad range of AMR data from clinical microbiology laboratories (compatible with the EARS-Net protocol) and for a limited subset of specific multidrug-resistant bacteria, which similar to the current status for MRSA, could become mandatory reportable diseases and be reported to VISUMS.

# Annex 1. ECDC team and visit agenda

## ECDC team

- Dominique Monnet, ECDC, Stockholm, Sweden
- Peet Tüll, External consultant, Visby, Sweden
- Rolanda Valinteliënė, External expert, National AMR Focal Point, Vilnius, Lithuania

## Visit agenda

### Monday 26 September 2011

#### Technical meeting (addendum to the visit), Ministry of Health, Riga:

#### National campaigns on the prudent use of antibiotics in Latvia and European Antibiotic Awareness Day

- Biruta Kleina, Deputy Head, Health Care Department, Ministry of Health
- Guna Jermacane, Senior Officer, Division of Treatment Quality, Ministry of Health
- Egita Pole, Head, Communication Department, Ministry of Health
- Uga Dumpis, Stradiņš University Hospital
- Ines Skrastina, Public Relation Specialist, Infectiology Centre of Latvia
- Sarah Earnshaw, ECDC
- Giovanni Mancarella, ECDC

#### Introduction to the country visit, Ministry of Health, Riga

- Juris Bārzdiņš, Minister of Health
- Rinalds Mucins, Secretary for Health, Ministry of Health
- Inga Šmate, Ministry of Health
- Baiba Rozentāle, Director, Infectiology Centre of Latvia
- Jurijs Perevoščikovs, Infectiology Centre of Latvia
- Aiga Rūrāne, WHO Country Office

#### Meeting with group of experts, Ministry of Health, Riga:

#### Discussion on the inter-sectoral mechanism (ICM) for the coordinated implementation of strategies targeted towards the prudent use of antimicrobial agents

- Biruta Kleina, Deputy Head, Health Care Department, Ministry of Health
- Antra Valdmāne, Head, Division of Treatment Quality, Ministry of Health
- Uga Dumpis, Stradiņš University Hospital
- Elina Dimiņa, representative, Infection Control and Sterilisation Association
- Valentina Berga, Health Inspectorate
- Arta Balode, Head, Microbiology Department, Stradiņš University Hospital
- Inta Krauja, Ministry of Agriculture
- Dace Kikute, Deputy Director, State Agency of Medicines of Latvia
- Andis Seilis, expert, State Agency of Medicines of Latvia
- Edgars Tirans, general practitioner, Latvian Association of Family Physicians

#### Meeting at the Latvian Association of Family Physicians, Riga

- Īlze Aizsilniece, general practitioner
- Jevgenijs Bondins, general practitioner
- Sarmite Veich, general practitioner
- Edgars Tirans, general practitioner

Also present: Uga Dumpis, Stradiņš University Hospital

## Tuesday 27 September 2011

### Meetings and visit of Infectiology Centre of Latvia, Riga

- Introductory meeting with the management of Latvian Infectiology Centre:  
Baiba Rozentāle, Director, Infectiology Centre of Latvia
- Short introduction to the public health capacity issues, including approaches to workforce/manpower planning, training and continuing professional development of public health staff (including laboratory staff):  
Anita Villeruša, Dean of Public Health Faculty, Riga Stradiņš University
- Short introduction to the National Reference Laboratory: Tatjana Kolupajeva

Also present: L. Vīksna, Jurijs Perevoščikovs, Irina Lucenko, Anita Brila, I. Janušķēviča, G. Stūre, Inga Upmace, Dace Viļuma, Gunta Grīse, Biruta Kleina, Elina Dimiņa, I. Cīrule, Eva A. Labant, Z. M. Vincze.

### Visit of laboratories (D. Monnet, R. Valinteliene)

- Solvita Selderina, Head, Bacteriology Laboratory, Infectiology Centre of Latvia
- Tatjana Kolupaeva, head of HIV lab
- Amanda Broduza

Also present: Biruta Kleina, Deputy Head, Health Care Department, Ministry of Health

### Visit of infectious disease department (P. Tüll)

- Velga Kūse, Deputy Director for Medicine, Infectiology Centre of Latvia

### Visit of Eastern Clinical University Hospital (Gailezers Hospital), Riga

- Maris Liepins, Head, Clinical Epidemiology Department
- Tatjana Nikonova, Epidemiologist
- Inna Bickova, Infection Control Nurse
- Silvija Bunovna, Infection Control Nurse
- Dace Rudzite, Microbiologist
- Viesturs Liguts, Head, Anaesthesiology and Reanimation Department

Also present: Elina Dimiņa, Infection Control and Sterilisation Association

### Meeting at Health Inspectorate, Riga

- Valentina Berga, Head, Control Unit
- Livija Langenfelde, Head, Division for Healthcare Service Supervision
- Konstantija Reinfelde, Head, Division for Control of Healthcare Institutions
- Daina Biseniece, Head, Division of Medical Products, Supervision Planning and Development Department
- Dina Lazdina, Head, Division of Healthcare
- Ainars Čivčs, Director, Healthcare Control and Service Supervision Department
- Ilona Liskova, Director, Supervision Planning and Development Department
- Alla Nogotkova, Head, Public Health Division, Supervision Planning and Development Department
- Linda Kalnina, Head, Division for Drug Control, Control Unit

Also present: Guna Jermacane, senior officer, Division of Treatment Quality, Ministry of Health; Elina Dimiņa, Infection Control and Sterilisation Association

## Wednesday 28 September 2011

### Visit of Liepāja Regional Hospital, Liepāja

- Edvins Strigs, Director
- Janis Ceika, Internist, Quality control
- Ivars Krastiņš, Anesthesiologist, Head of intensive care unit
- Marite Kūla, Epidemiologist

Also present:

- Antra Valdmāne, Ministry of Health
- I. Lanks, Ministry of Health
- Uga Dumpis, Stradiņš University Hospital;

### Visit of family doctor practice "Dakteris Imants", Aizupe

Imants Lanka, Family doctor (specialised in children)

Also present

- Antra Valdmāne, Ministry of Health;
- I. Lanks, Ministry of Health;
- Uga Dumpis, Stradiņš University Hospital;

## Thursday 29 September 2011

### Meeting and visit of Pauls Stradiņš University Hospital, Riga

- Modris Dzenītis, Director
- Raimonds Bricis, Department of Neurosurgery
- Uga Dumpis, Infectiology and infection control
- Arta Balode, Clinical Microbiology
- Girts Freijs, Head, Intensive care unit
- Valdis Pirags, Head, Internal Medicine Clinic

Also present: Antra Valdmāne, Ministry of Health; Elina Dimiņa, Infection Control and Sterilisation Association

### Meeting at Health Economics Center, Riga

- Maris Taube, Acting Director, Head of Public Health Department

Also present: Guna Jermacane, Ministry of Health; Uga Dumpis, Stradiņš University Hospital

## Friday 30 September 2011

### Preliminary report from the ECDC Team, Ministry of Health, Riga

- Juris Bārzdiņš, Minister of Health
- Rinalds Mucins, Secretary for Health, Ministry of Health
- Inga Šmate, Ministry of Health
- Baiba Rozentāle, Director, Infectiology Centre of Latvia
- Jurijs Perevoščikovs, Infectiology Centre of Latvia
- Aiga Rūrāne, WHO Country Office

## Annex 2. Assessment tool for ECDC country visits to discuss antimicrobial resistance (AMR) issues

The mechanisms behind emerging AMR are complex. However, two main issues that stand out offering opportunity for control efforts are: the use of antibiotics and the epidemiological spread of resistant microbes.

The complexity of the problem makes it difficult to grade which interventions are most successful. Where interventions have been introduced few of them have been evaluated. This may partly be because few systematic interventions have been used.

Council Recommendation on the prudent use of antimicrobial agents in human medicine (2002/77/EC) lists a number of areas that have an impact on controlling AMR. Most of the following tentative indicators are based on the Council Recommendations. Some are based on experience from different countries. These indicators are either structure- or process-related. Outcome indicators are collected by dedicated surveillance networks.

### 1. Development of an Intersectoral Coordinating Mechanism (ICM)

Due to the complexity of the issue there is a need for coordination to make an interventional strategy work. There is need for close cooperation from fields such as epidemiology, microbiology clinical medicine, infection control, veterinary medicine, pharmacology, behavioural sciences, practitioners from different medical specialities as well as government departments and health care providers.

In the Council Recommendation on the prudent use of antimicrobial agents in human medicine (2002/77/EC) and in the WHO Global Strategy for Containment of Antimicrobial Resistance (WHO/CDS/CSR/DRS/2001.2) the establishment of a coordinating group is regarded as essential.

Member States have different administrative organizations. There should be a group on the highest administrative level where representatives from regulatory bodies and professionals from the different sectors coordinate.

#### Tentative indicators for 1

##### Structures

- Multidisciplinary composition
- Regular meetings
- Minutes from meetings
- National strategy plan available
- Defined governmental mandate
- Financially supported by government

##### Functions

- Coordinates analysis of consumption and, plans and supports interventions
- Proposes national objectives and policies
- Proposes, plans and supports interventions
- Provides policymakers, media and public with continues updated and structured data
- Provides support to local working groups









