



Update on ECDC AMR & HAI activities and workplan 2012

Dominique L. Monnet (ECDC)

Radisson Blu Centrum Hotel
Warsaw, 23-25 November 2011

Network of National AMR Focal Points

(representing national Intersectoral Coordination Mechanisms, i.e. National committees)

- Budapest, 21-22 March 2011
(including meeting with CMOs and CNOs on carbapenemase-producing *Enterobacteriaceae*)
- Warsaw, 23-25 November 2011



- **Copenhagen, 13-15 March 2012** – Session with contact points for AMR surveillance in *Salmonella* and *Campylobacter* (followed by EU Conference by Danish EU Presidency)
- **ECDC workshop on AMR & HAI, candidate and potential candidate countries, May or June 2012** (tbc)
- Annual ARHAI Network Meeting, **early December 2012** (location tbc)



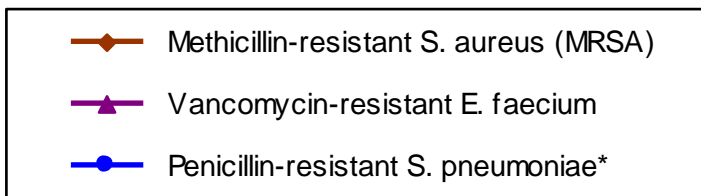
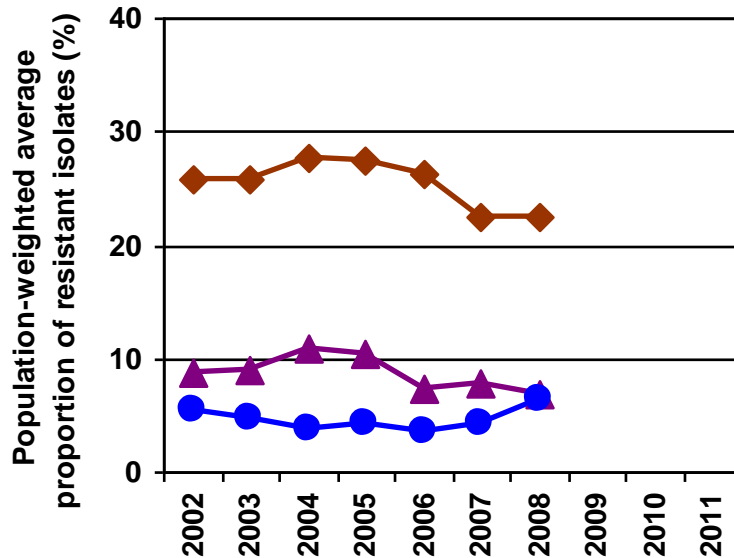
Surveillance activities

2011-**2012**

- EARS-Net
- ESAC-Net
- HAI-Net
 - Surgical site infections
 - HAI in intensive care units
 - Point prevalence survey of HAI and antimicrobial use
- HALT-2: HAI and antimicrobial use in long-term care facilities
- Surveillance of *Clostridium difficile* infection

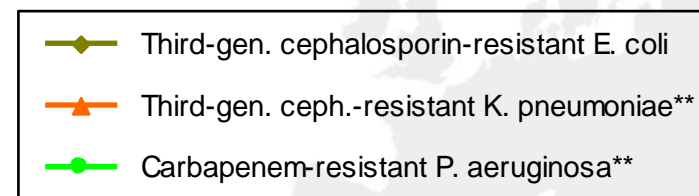
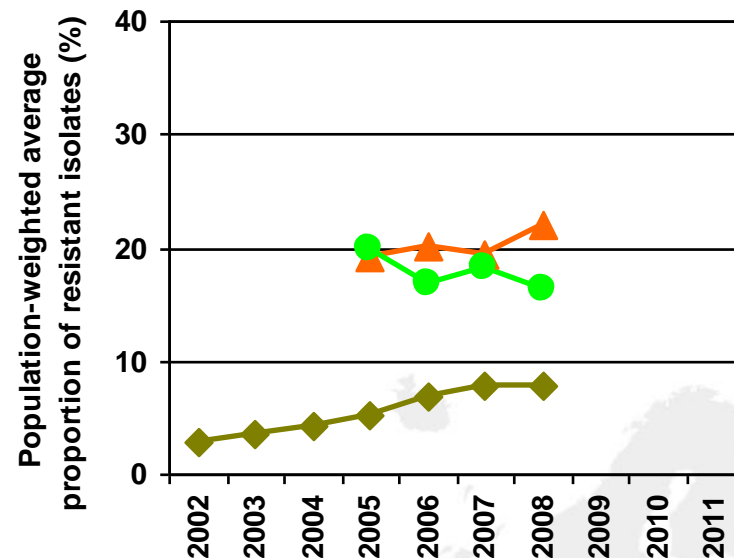
Population-weighted, average % resistant isolates among bacteria from bloodstream infections, EU, Iceland and Norway, 2002-2008

Gram-positive bacteria



*Excluding Greece, which did not report data.

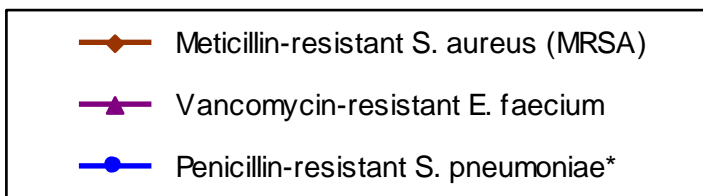
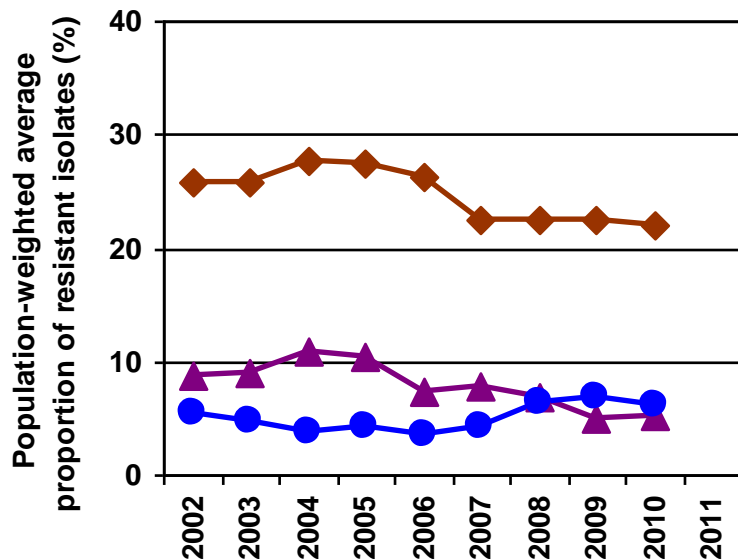
Gram-negative bacteria



**Excluding Belgium and Slovakia, which did not report data.

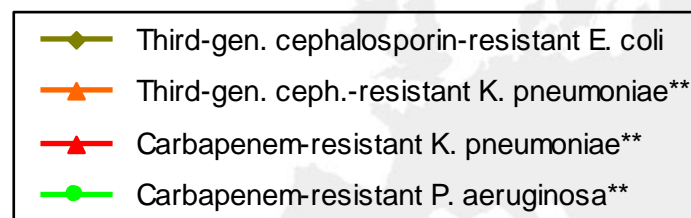
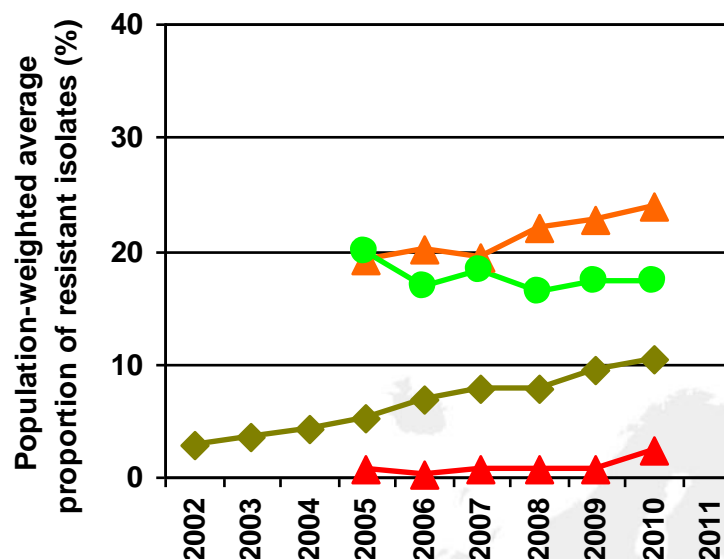
Population-weighted, average %resistant isolates among bacteria from bloodstream infections, EU, Iceland and Norway, 2002-2010

Gram-positive bacteria



*Excluding Greece, which did not report data.

Gram-negative bacteria

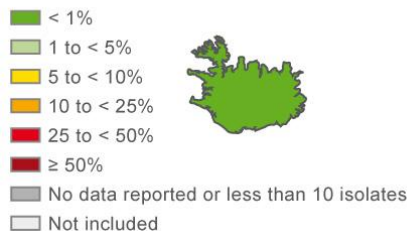


**Excluding Belgium (2005-2008) and Slovakia, which did not report data.

Klebsiella pneumoniae: proportion of multidrug-resistant* invasive isolates resistant; EU/EEA, 2010

* Resistant to
third-generation
cephalosporins,
fluoroquinolones
and aminoglycosides

Percentage resistance



2010

■ Liechtenstein
■ Luxembourg
■ Malta

(c) ECDC/Dundas/TESSy

Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance

A.-P. Magiorakos¹, A. Srinivasan², R. B. Carey², Y. Carmeli³, M. E. Falagas^{4,5}, C. G. Giske⁶, S. Harbarth⁷, J. F. Hindler⁸, G. Kahlmeter⁹, B. Olsson-Liljequist¹⁰, D. L. Paterson¹¹, L. B. Rice¹², J. Stelling¹³, M. J. Struelens¹, A. Vatopoulos¹⁴, J. T. Weber² and D. L. Monnet¹

6	■	■	■	■	■				MDR
7	■	■	■	■	NT	NT	NT	NT	MDR, possible XDR
8	■	■	■	■	■	NT	NT	NT	MDR, possible XDR
9	■	■	■	■	■	NT	NT	NT	MDR, possible XDR, possible PDR
10	■	■	■	■	■	■	NT	NT	MDR, possible XDR, possible PDR
11	■	■	■	■	■	■	■		XDR
12	■	■	■	■	■	■	■		XDR
13	■	■	■	■	■	■	■		XDR
14	■	■	■	■	■	■	■	■	XDR
15	■	■	■	■	■	■	■	■	XDR
16	■	■	■	■	■	■	■	■	XDR

Epidemic intelligence and response support activities



- Epidemic Intelligence Information System (EPIS) for AMR and HAI events
- Risk assessment (RA) on carbapenemase-producing *Enterobacteriaceae* (incl. guidance)
- Updated RA on New Delhi metallo-beta-lactamase (NDM)
- RA on triazole-resistant *Aspergillus* spp. (early 2012)

Systematic reviews and guidance for prevention and control of AMR & HAI



- MRSA (hospitals and community) – pending
- Organisation of hospital infection control programmes
 - 2011: systematic review of the effectiveness of hospital infection control programmes at local and national level
 - **2012**: guidance document
- Perioperative antibiotic prophylaxis
 - 2011: systematic review & expert group
 - **2012**: expert guidance on appropriate perioperative antibiotic prophylaxis (incl. quality indicators)
- Organisation of antimicrobial stewardship programmes – postponed

2011: none

- Letter to the Editor of Lancet Infect. Dis. together with SANCO/C3 on "Antibiotics obtained without a prescription in the EU " (submitted)

2012:

- Part 1 of European survey on carbapenemase-producing bacteria (incl. capacity building, risk factors, etc.)
- Review of the economic impact of infection control and antimicrobial stewardship interventions

Support to the Commission



2011:

Scientific support for developing country questionnaires on the implementation of Council Recommendation on patient safety, including the prevention and control of healthcare associated infections (2009/C 151/01)

2012:

Support on the finalisation of the report on the implementation of Council Rec. 2009/C 151/01

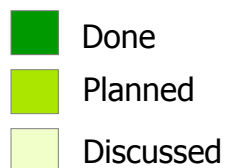
Support on the implementation of the Commission's 5-year strategic plan

Country visits to discuss AMR (and HAI) issues: questionnaire, April 2011



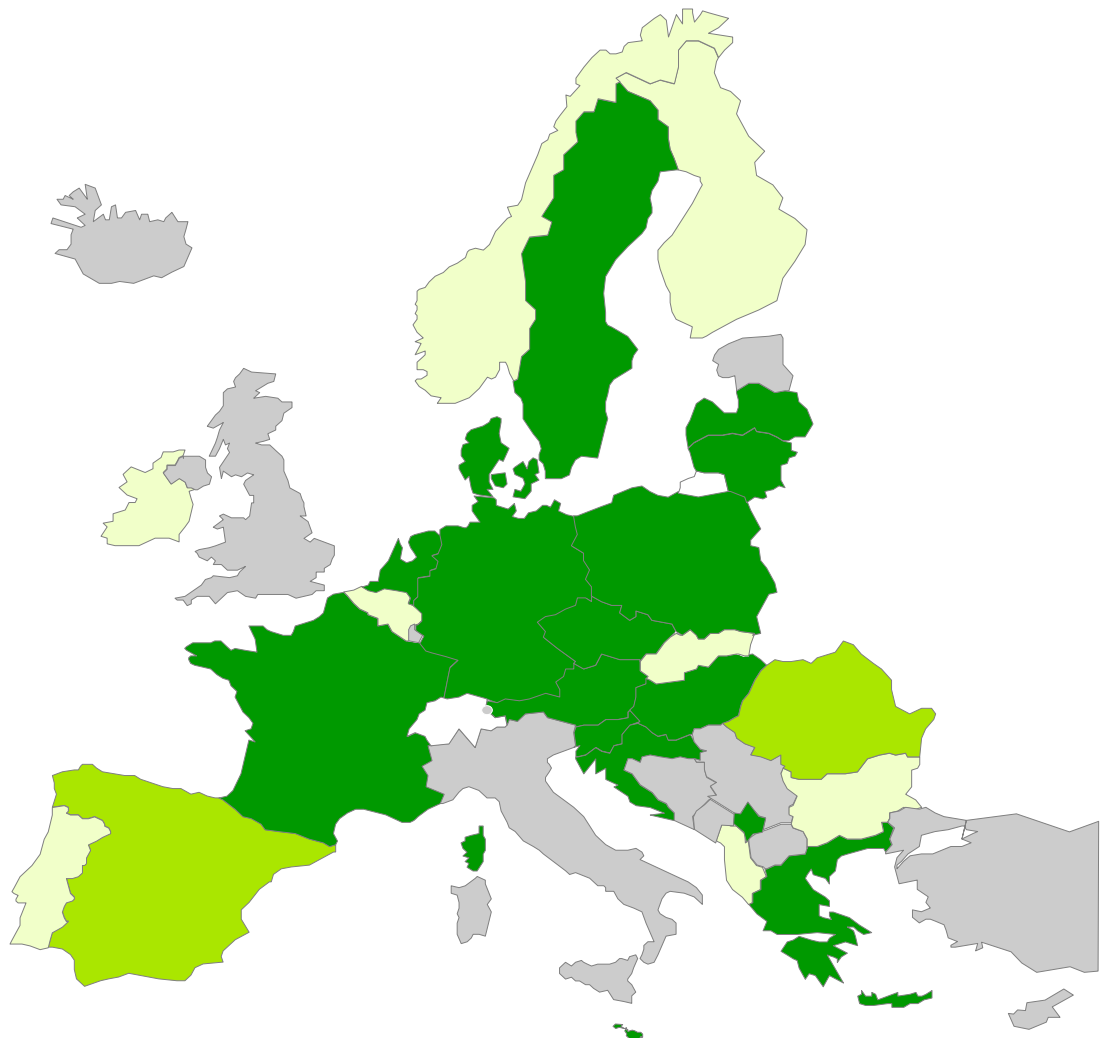
- **Has such a visit(s) already taken place in your country (since 2006)?** Yes: 15/38 (39%), No: 23/38 (61%)
- **If YES, how would you rate the value of this(these) visit(s) for your country?** Very useful: 9/15 (60%), Useful: 3/15 (20%), Only slightly useful: 3/15 (20%)
- **If YES, has there been any change in your country that you would consider as being a result of this(these) visit(s)?** Yes: 12/15 (80%), No: 2/15 (13%), Do not know: 1/15 (7%)
- **If YES, would you potentially be interested in a follow-up visit (provided that ECDC receives an official invitation from your country)?** Yes: 12/15 (80%), No: 2/15 (13%), No opinion: 0, No reply: 1/15 (7%)
- **If NO, would you potentially be interested in an initial visit (provided that ECDC receives an official invitation from your country)?** Yes: 19/23 (83%), No: 1/23 (4%), No opinion: 2/23 (9%), No reply: 1/23 (4%)

Country visits to discuss AMR (and HAI) issues, 2006-2012



Country visits
to discuss AMR (and HAI) issues
(as of November 2011)

- Based on Council Recommendation of 15 November 2001 on the prudent use of antimicrobial agents in human medicine (2002/77/EC)
- Reports (observations, conclusions, suggestions, examples of best practice)
- 16 initial visits (see map)
- 5 follow-up visits (Czech Rep., Greece x 2 and Hungary x 2)
- **3 visits budgeted for 2012**



Collaboration with other EU agencies



- European Food Safety Authority (EFSA): Scientific Opinion on the public health risks of bacterial strains producing extended-spectrum β -lactamases and/or AmpC β -lactamases in food and food-producing animals
<http://www.efsa.europa.eu/en/efsajournal/pub/2322.htm>
- EFSA & ECDC: European Union summary report on antimicrobial resistance in zoonotic and indicator bacteria from animals and food in the European Union in 2009
<http://www.efsa.europa.eu/en/efsajournal/pub/2154.htm>
- European Medicines Agency (EMA): European Surveillance of Veterinary Antimicrobial Consumption (ESVAC)
<http://www.ema.europa.eu> (Regulatory > Veterinary medicines > Antimicrobial resistance > European Surveillance of Veterinary Antimicrobial Consumption)
- **EU inter-agency report on antimicrobial resistance and antimicrobial consumption (2012-)**

2011: **WHO: World Health Day, 7 April 2011**

ECDC represented at:

- European Parliament, Strasbourg (Marc Sprenger)
- WHO Europe event, Moscow (Piotr Kramarz)
- Copenhagen (Ole Heuer)

2012:

Ongoing discussions on:

- Collaboration on surveillance of AMR
- Collaboration on European Antibiotic Awareness Day
- Collaboration on hand hygiene

Public health training activities

- Assessment of infection control training capacity and needs in Europe (TRICE project), incl. core curriculum
 - 2011: report, incl. core curriculum - pending
 - **2012**: implementation of strategy - start
- Courses for point prevalence study of HAI and antimicrobial use in acute care hospitals in Europe (“training the trainers”)
 - 2011: one course (London)
 - **2012**: one course
- European short course on control of multidrug-resistant microorganisms in healthcare settings
 - 2011: curriculum and training materials
 - **2012**: course - postponed

European Antibiotic Awareness Day: questionnaire, April 2011



- **How would you rate the value of European Antibiotic Awareness Day for your country?** Very useful: 21/38 (55%), Useful: 16/38 (42%), Only slightly useful: 1/38 (3%)
- **Has there been any change in your country that you would attribute to the momentum created by European Antibiotic Awareness Day (since 2008)?** Yes: 25/38 (66%), No: 4/38 (10%), Do not know: 9/38 (24%)
- **To your point of view, should European Antibiotic Awareness Day continue in 2012 and onwards?** Yes: 37/38 (97%), No: 0, No opinion: 1/38 (3%)

European Antibiotic Awareness Day



2011:

- 37 countries participated, events in Brussels
- Translation of all materials
- Patient stories and Euronews movie
- Curriculum for training on campaigns

2012:

- Meeting with National AMR Focal Points (and communication contact points)
- 30s TV spot
- Discussions on EAAD integrated in country visits
- Postponed: Training on communication and campaigns for EAAD contact points in Member States

Transatlantic Task Force on Antimicrobial Resistance (TATFAR): ECDC & CDC



Transatlantic Taskforce on
Antimicrobial Resistance

Recommendations for future collaboration
between the U.S. and EU

2011

2012

- Common indicators for hospital antimicrobial stewardship programmes
- Standards for measuring antimicrobial use in hospitals
- Assessment of the evidence for effectiveness of communication tools
- **Collaboration on point prevalence survey**
- **Process for transatlantic communic. of critical events – new AMR trends**
- Efforts to harmonise interpretive criteria for reporting of AST for surveillance
- **Consensus evaluation tools for hospital infection control programmes**
- Transatlantic strategy to facilitate vaccine development for HAI

“Hand hygiene and infection control initiative”, 2012(?) - 2013 onwards

- New initiative at ECDC, transversal project
- Connected to European Antibiotic Awareness Day
- Taking into account and building upon the work and materials from WHO's 1st Patient Safety Challenge "Clean Care Is Safer Care" and "SAVE LIVES: Clean Your Hands"
- Possible components:
 - Consensus indicators for infection control, incl. hand hygiene
 - Integrate the indicators in HAI-Net
 - HAI-Net module for hand hygiene compliance
 - Review on economic implications of infection control
 - Translation of key WHO materials in all EU languages
 - Support to hand hygiene national campaigns

Thank you!

