Swedish experiences in AMR containment and multisectoral stakeholders mobilization

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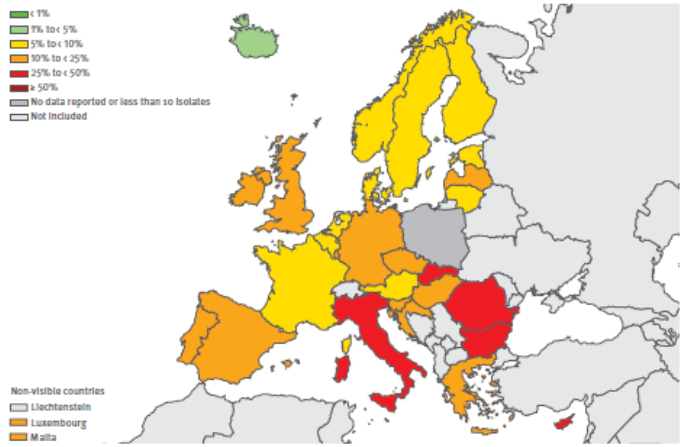
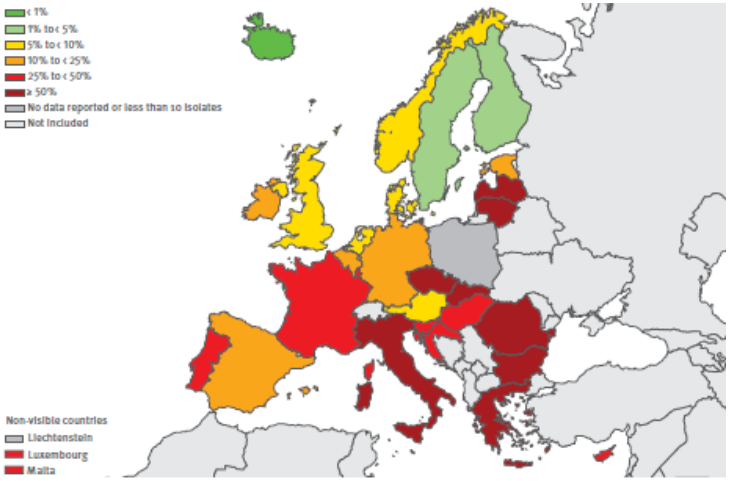
Sweden has a comparatively favourable situation of antibacterial resistance

Resistance (R+I) to 3rd gen. Cephalosporins,

E. coli

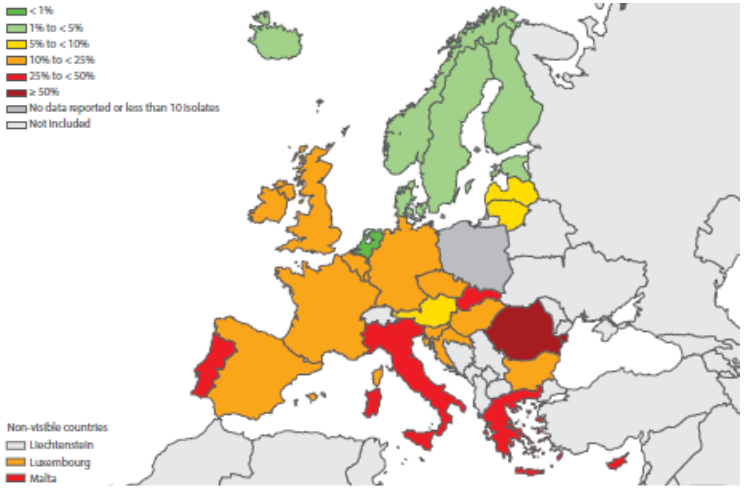


K. pneumoniae



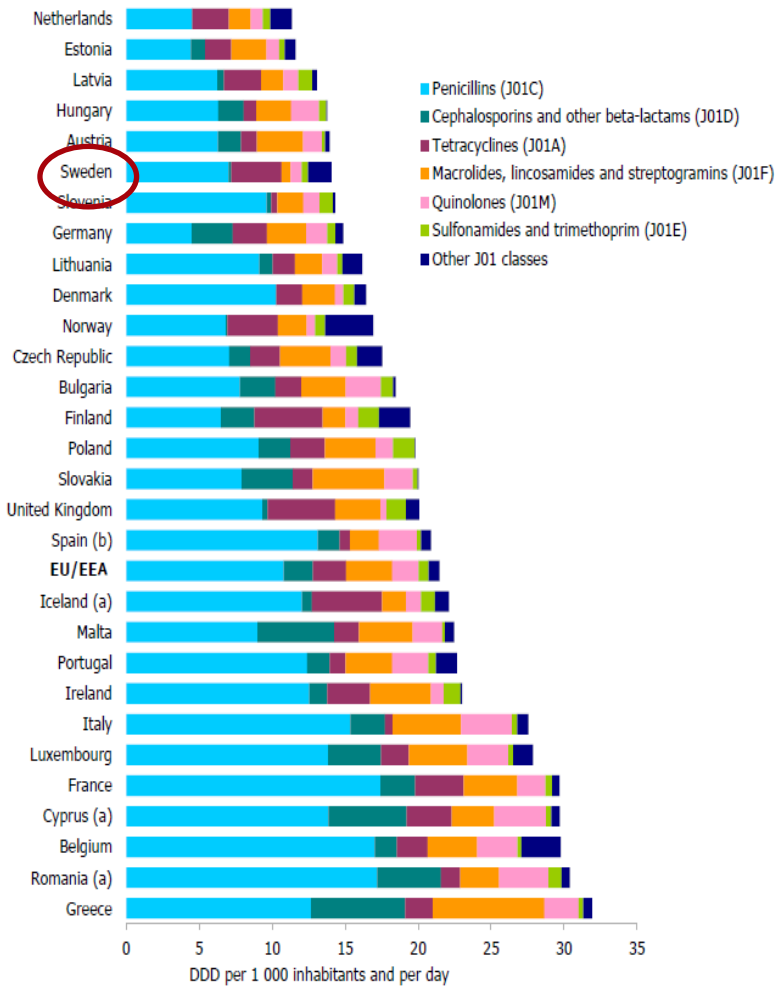
S. pneumoniae; non-susceptible to penicillin

S. aureus; resistance to meticillin (MRSA)

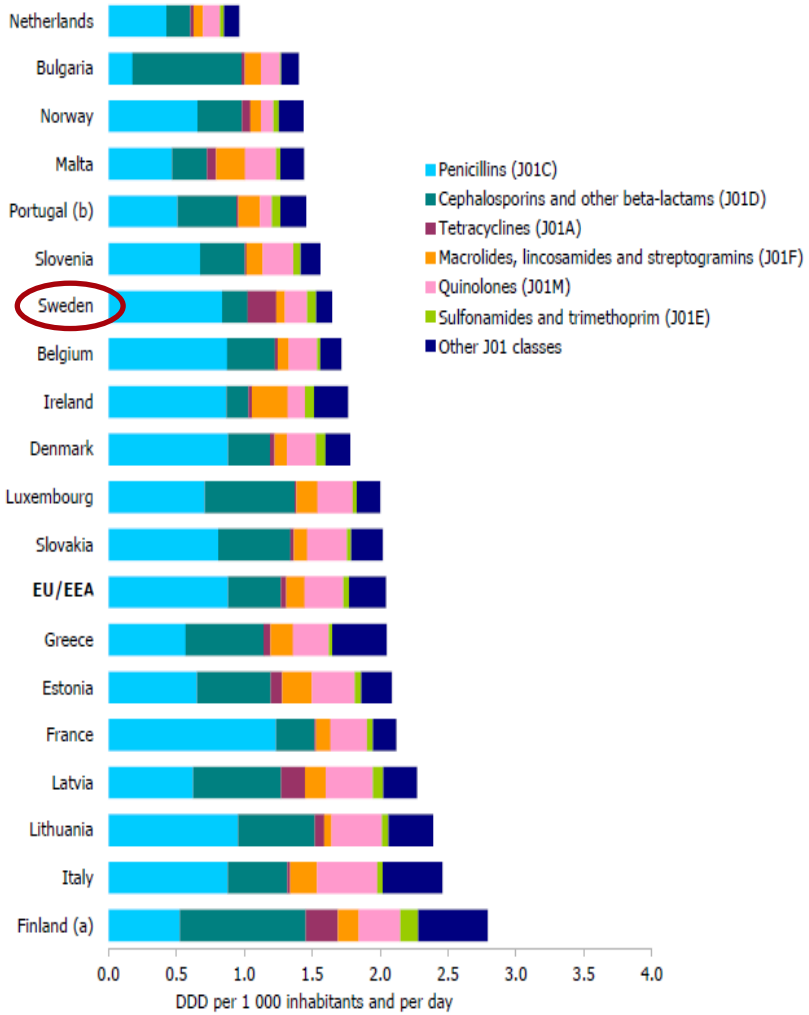


Source: ECDC Antimicrobial resistance surveillance in Europe 2014

Also: Antibiotic consumption is fairly low



Community



Hospitals

DDD/1000 inhabitants/day

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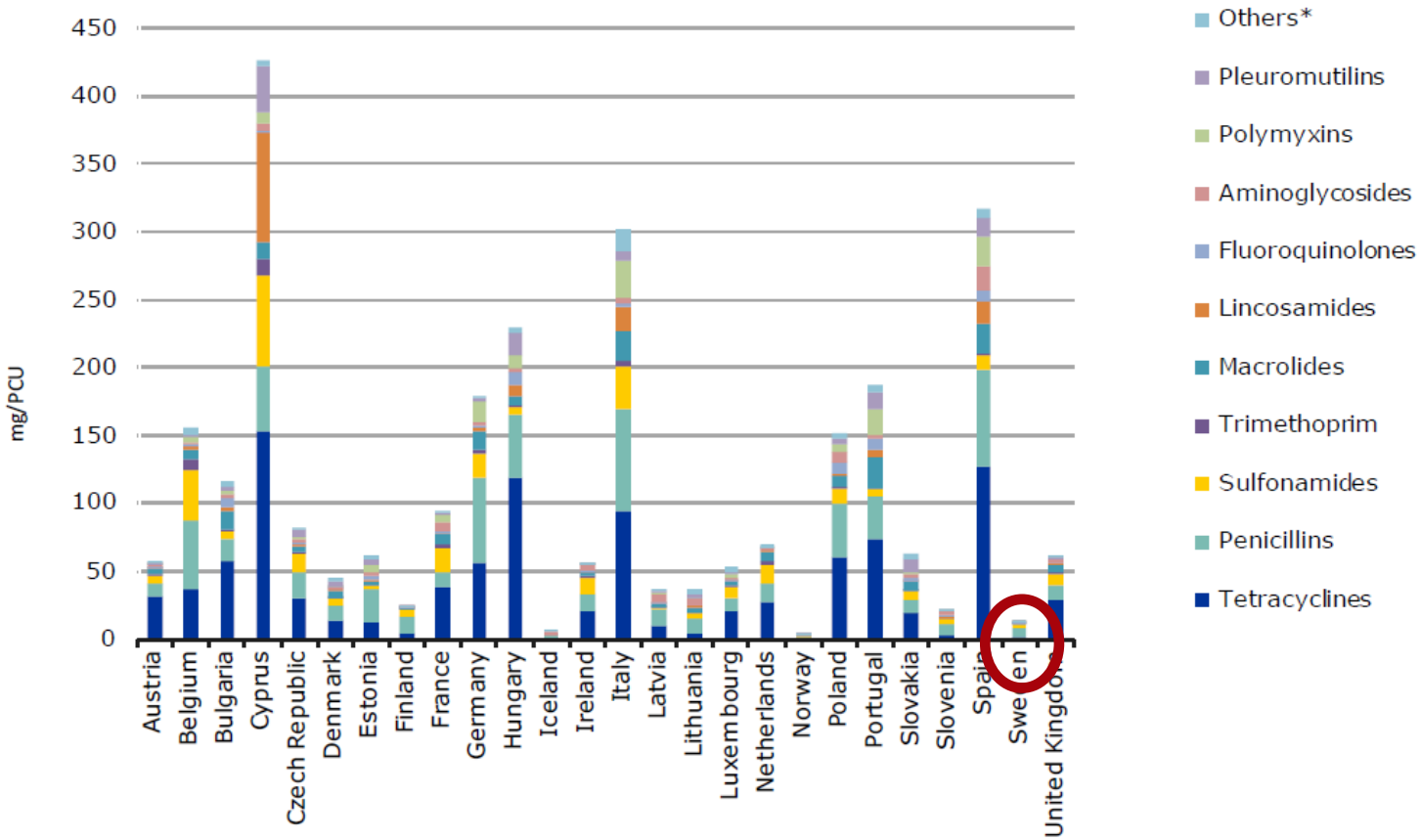
Source: ECDC Annual epidemiological report 2014

We are also among the countries with the lowest consumption of antibiotics in animal husbandry per kilogram produced meat.



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Source: ESVAC: Sales of veterinary antimicrobial agents in 26 EU/EEA countries in 2013

Key strategies to contain AMR in Sweden

Political and professional awareness and commitment

National and local surveil-lance with standardized methods

- Resistance patterns
- Antibiotic usage
- Health care associated infections

Reduced need for antibiotics

Prevention of disease

Prevention of bacterial spread

Rational use of antibiotics

Guidelines for
-treatment
-diagnosis

Financial incentives

Ban as growth promotors in farm animals 1986

Data
For action
Open
benchmarking

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Milestones in Swedish work to contain AMR

- ”Strama”-The Swedish Strategic Programme Against Antibiotic Resistance (1995)

- National action plan ”SPAR” (2000)
- National strategy (2006)

- Intersectorial coordinating mechanism (2012)
- Action plan against AMR and Health-care associated infections for national agencies (2015)

- Updated national strategy (2016)

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Champions with high scientific credibility

Otto Cars
co-funder of Strama
funder of ReAct

Gunnar Kahlmeter
former president ESCMID
steering committe EUCAST

Sigvard Mölstad
Professor
General practice

Christina Greko
National Veterinary
Institute

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Steering mechanisms

National:

- Laws (with explanatory background text ”Government bills”)
  - Communicable Diseases Act (2004)
  - The Drug Therapeutics Committees law (1996)
  - The Swedish Health and Medical Services Act (1982)
- Supervision
- Regulations
  - Antibiotics by prescription only

Regions/counties:

- Patient safety
- QA
- Economic (contracts, bonus and fine)

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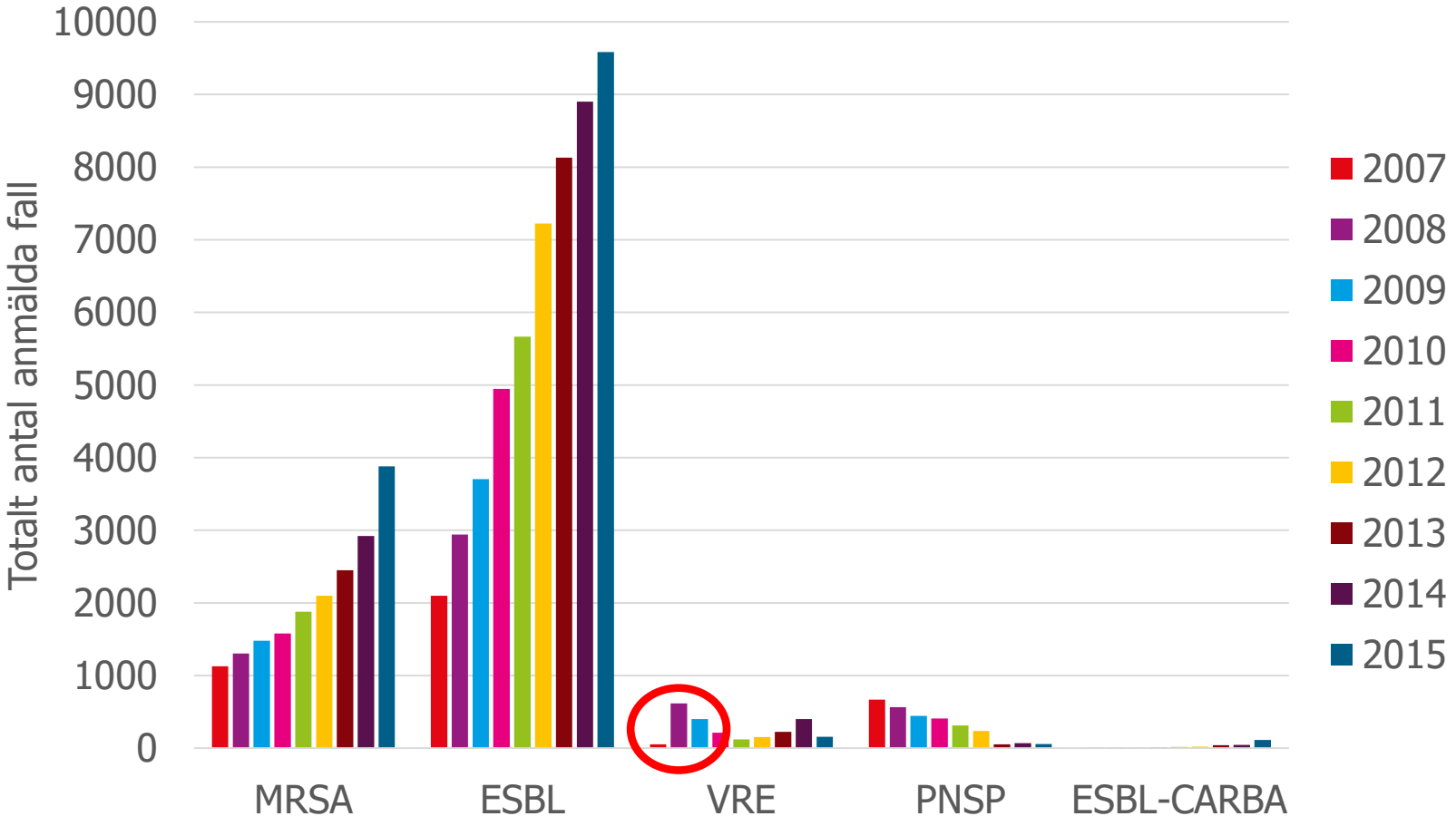
Mandatory notification of AMR of particular concern according to communicable diseases act



Lab + clinical notification within 48 hours

Mandatory contact tracing (except ESBL)

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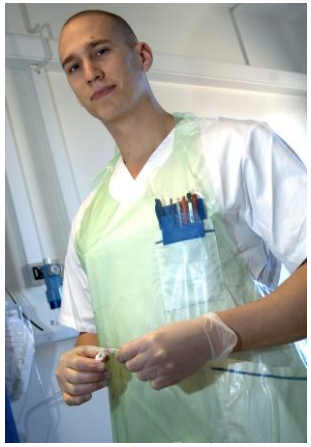
Regulation on basic hygiene in health services 2007, updated 2015

- Includes all types of care, not only hospitals
- Hospitals shall implement basic hygiene procedures
- All staff, including doctors, shall comply to the regulation during examination, care and treatment or other direct contact with patients



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National treatment guidelines -implementation strategy

Expert workshops producing National treatment guidelines

DEBATT OCH BREV

Förkorta behandlingstiderna vid nedre urinvägsinfektion hos kvinnor och använd inte kinoloner!

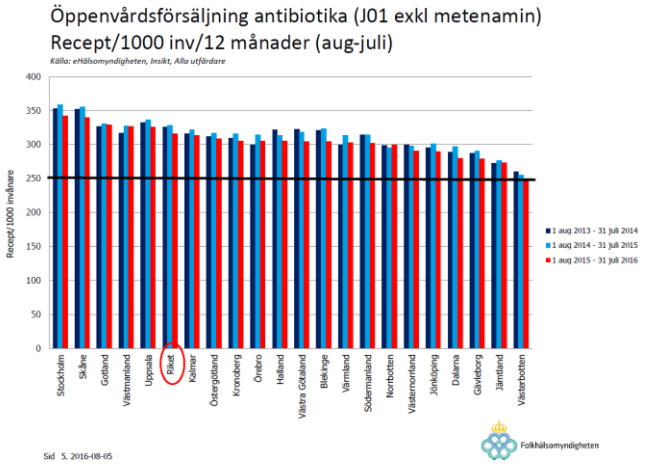
Antibiotikaresistens hos urinvägsbakterier ökar. Kinolonresistensen har passerat 10-procentsnivån, och frekvensen ESBL-bärande E coli stiger kraftigt. Nu krävs ett ansvarstagande för att begränsa antibiotikaresistensproblemet! Läkemedelsverkets och Stramas nya rekommendationer för behandling av urinvägsinfektion måste omsättas i praxis, och läkemedelsindustrin måste anpassa förpackningsstorlekarna

vissa fall måste behandlas intravenöst därför att inga perorala alternativ återstår.

I en studie i Läkartidningen 4/2008 (sidorna 210–4) av Anders Österlund och Åsa Carlsson jämfördes förskrivningen av antibiotika bland primärvårdslä-

Kinolonresistensen hos E coli har ökat från några få procent till över 11 procent under den senaste 10-årsperioden i Sverige.

Articles in medical journals regarding new guidelines



Monthly updates on prescribing patterns at the PHA website

Treatment guidelines sent to all doctors

Strama-guided prescribing feed-back and discusssions at Primary Health Care Centres

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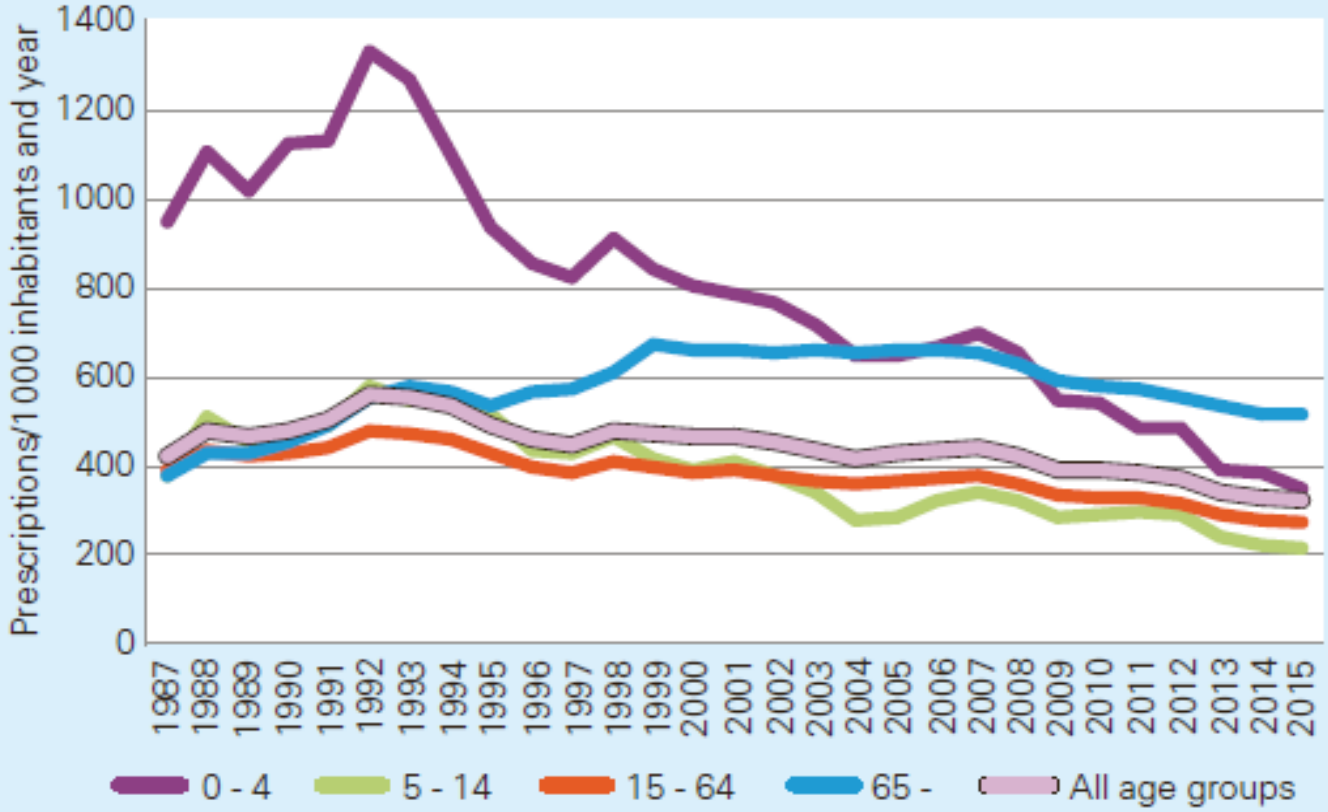
Antibiotic sales in out-patient care have decreased

(perscriptions/1000 inhabitants and year)

FIGURE 1.3. The sales of antibiotics for systemic use in out-patient care (sales on prescriptions) 1987-2015, prescriptions/1 000 inhabitants and year, both sexes, different age groups.



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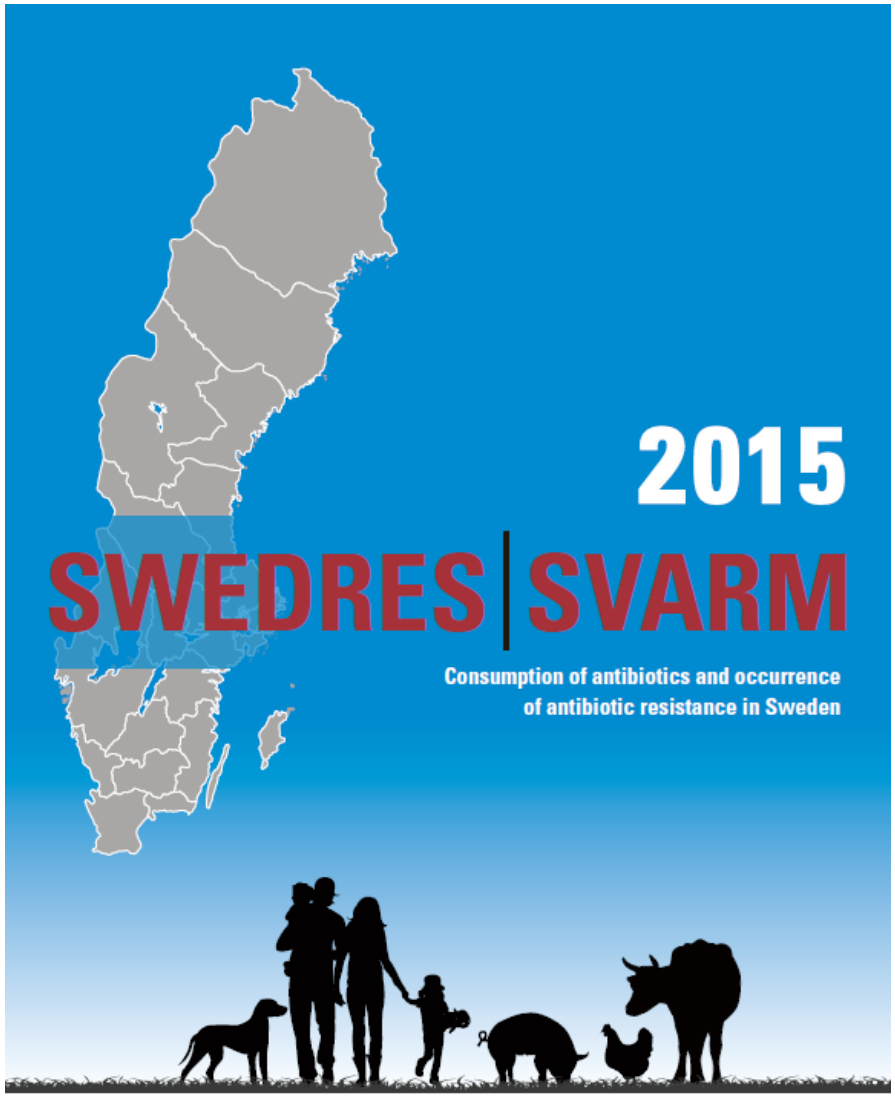
Source: Swedres 2015

Multisectoral engagement



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SVA NATIONAL VETERINARY INSTITUTE

Intersectorial Co-ordinating Mechanism (ICM)

Action plan against AMR and HAI for national agencies (2015)

Common communication strategy

Stakeholders of the Swedish Work Against Antimicrobial Resistance and Healthcare Associated Infections Within the Human Sector

NATIONAL LEVEL

Ministry of Health and Social Affairs

Intersectoral Coordinating Mechanism
23 agencies and organisations within different sectors, led by the Public Health Agency and the Swedish Board of Agriculture.

Public Health Agency

Strama Collaboration Group

Strama Programme Council

Swedish Association of Local Authorities and Regions

LOCAL LEVEL

County Councils

Drug and Therapeutic Committees

Local Strama Groups

Health Care Providers, Infection Control Units, Microbiological Laboratories

Departments of Communicable Disease Control

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Thank you !

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