Background

• Antimicrobial resistance (AMR) not a new phenomenon, but increasing and new resistant strains continue to emerge
• Misuse of antibiotics (health, agriculture) and poor infection control responsible for AMR emergence and spread; important link between use of antibiotics in agriculture and resistance to human strains
• Very few new antibiotics in the pipeline
• World Health Day 2011: committing to fight AMR

Regional focus on AMR related to bacterial infections, particularly in health care settings, and multidrug-/extensively drug-resistant tuberculosis (M/XDR-TB)
Global burden of AMR

TB
- 440,000 new MDR-TB cases annually
- XDR-TB reported in 58 countries

Malaria (Plasmodium falciparum)
- Artemisinin resistance linked to monotherapy

HIV
- With expanded use of antiretrovirals, resistance now a concern

Health-care-associated infections
- Lethal methicillin-resistant Staphylococcus aureus (MRSA) is a significant threat in hospitals
- Escherichia coli and Klebsiella pneumoniae resistant to multiple drugs on the rise
- Increasing resistance in gonorrhoea and shigellosis
Justification

- AMR costs money, livelihoods and lives, and undermines health programmes
- **WHO global strategy for containment of AMR** published in 2001
- AMR action plans for European Union (EU) Member States
- Member States in transition still require guidance
- **Coherent and concrete strategy needed for the WHO European Region**
AMR in the European Region

- AMR as high as 25% in some Member States
- Every year, 25,000 people die of resistant infections in hospitals in the EU (+ Norway and Iceland)
- About €1.5 billion in extra hospital, treatment, societal costs
- Lack of systematic approach for all sectors
- Poor health systems and weak regulation in many countries
- Insufficient commitment and action plans
- Low awareness among the public and health care professionals

Proportion of MRSA isolates in western Europe, 2008

Source: European Centre for Disease Prevention and Control
European strategic action plan on antibiotic resistance

• Reduce morbidity, mortality and related costs
• Raise awareness of the emergence and spread of antibiotic resistance
• Promote national coordination and action plans
• Promote prudent use of antibiotics and infection control
• Address antibiotic use in human and animals
• Promote innovative financing to develop new antibiotics
• Promote involvement of patient safety groups
Strategic objectives

1. Strengthen intersectoral coordination
   - Comprehensive national action plans
   - Multisectoral and interdisciplinary national coordination mechanisms

2. Strengthen surveillance of antibiotic resistance
   - National surveillance systems, collecting, analysing and reporting data to monitor trends
   - Regional databases, tools and standards

3. Promote rational use of antibiotics and strengthen surveillance
   - National mechanisms for coordination
   - National guidelines on prudent use of antibiotics
   - Surveillance of antibiotic consumption

4. Strengthen infection control and surveillance in health care settings
   - Prevention of hospital-acquired infections
   - Hospital infection control and surveillance committees
Strategic objectives

5. Prevent emerging resistance in veterinary and food sectors
   • Prudent use of antibiotics in these sectors
   • Integrated systems for surveillance of antibiotic resistance and use

6. Promote innovation and research on new drugs
   • International surveillance networks and information sharing on promising research areas
   • Active role in research for governments and academic networks; national and international task forces

7. Improve awareness, patient safety, and partnership
   • Educational initiatives, behaviour change campaigns and awareness programmes for health care providers and the public
   • Broad partnership at national, regional and global levels
Considerations for implementation and monitoring

• Strategic action plan with:
  - time frame for implementation
  - estimated resource needs
  - input, process and output indicators to monitor progress

• Stepwise approach:
  - mapping of available data,
  - identification of current practices

• Support to Member States in:
  - developing and implementing national action plans
  - establishing national coordinating mechanisms
Timeline, 2010–2012

- Expert consultation, 25 August 2010
- European Antibiotic Awareness Day, 18 November 2010, with the European Centre for Disease prevention and Control (ECDC)
- World Health Day 2011, 7 April 2011
- **WHO regional strategy and resolution presented to the sixty-first session of the WHO Regional Committee for Europe, September 2011**
- Publication of regional action plan, 2011
- Expansion of EU surveillance protocols to Member States outside the EU, 2011–2012
Partners

- ECDC
- CDC (Centers for Disease Control and Prevention, United States of America)
- Gates Foundation, CGD (Center for Global Development)
- TATFAR (Trans Atlantic Task Force on Antimicrobial Resistance)
- ReACT (Action on Antibiotic Resistance)
- APUA (Alliance for the Prudent Use of Antibiotics)
- IFPMA (International Federation of Pharmaceutical Manufacturers and Associations)
- FIP (International Pharmaceutical Federation)
- UNITAID, the Global Fund, Stop TB Partnership, Roll Back Malaria, UNAIDS (Joint United Nations Programme on HIV/AIDS)
- WHONET (information system for monitoring antimicrobial resistance, Brigham and Women’s Hospital, Boston, United States)
- Governments (e.g. the Netherlands, Sweden)
## Draft resolution

### Member States

- Ensure political commitment and resources for developing and implementing national plans
- Strengthen surveillance and monitoring of antibiotic resistance and consumption
- Establish multisectoral and comprehensive coordination and cooperation mechanisms
- Adhere to infection control
- Raise awareness through national campaigns

### WHO Regional Office for Europe

- Provide strategic leadership, guidance and tools for implementing the strategic action plan
- Support Member States in implementing national plans
- Create platforms for sharing and analysing data and experience
- Engage in broad regional and global partnerships
- Promote innovation and research
Thank you