Why AMR is a global concern?

- Antimicrobial resistance (AMR) kills
- Challenges care and control of infectious diseases
- Greatly increases care costs
- Threatens a return to the pre-antibiotic era
- Jeopardizes healthcare gains for individuals and society
- Compromises health security, damages trade and economy
- Lack of coherent approaches to prevention and containment
AMR: a major challenge

- **Tuberculosis (TB):** 440,000 new multidrug resistance (MDR) TB cases annually; extensively drug resistance (XDR) TB cases reported in 64 countries so far
- **Malaria:** Emergence of Artemisinin resistance linked to ongoing use of monotherapies
- **HIV:** With expanded use of antiretrovirals (ARVs), resistance is a concern
- **Methicillin-resistant Staphylococcus aureus:** lethal infections in hospital settings becoming increasingly frequent
- **Multi-drug resistant E.coli, K.pneumoniae and Enterobacter sp.:** infections are on the rise and a new beta-lactamase, NDM-1, is causing alarm
- **Neisseria gonorrhoeae and Shigella:** becoming increasingly resistant to drugs

Distribution of proportion of MDR among new TB cases, 1994–2010

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. © WHO 2010. All rights reserved.
**P. falciparum** resistant to artemisinin
Cambodia-Thailand border

% of patients with *P. falciparum* parasitaemia on day 3 after treatment with an ACT (2006-2010)

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**Methicillin-resistant Staphylococcus aureus**

% of Methicillin-resistant *Staphylococcus aureus* out of all *S. aureus* causing hospital-related infections in Latin America, 2007
Highly resistant *Escherichia coli*

Proportion of invasive isolates with resistance to fluoroquinolones in 2009

Proportion of 3\textsuperscript{rd} generation cephalosporins resistant isolates in 2009

Source: ECDC, Antimicrobial resistance surveillance in Europe 2009

Distribution of NDM-1 producing *Enterobacteriaceae* strains

Strains in Bangladesh, India, Pakistan and UK

Source: Lancet ID, 2010
What drives AMR?

• Plans and resources not comprehensive or coherent; poor accountability
• Consumers and communities not engaged
• Surveillance systems weak or absent
• Systems for ensuring quality and supply of medicines inadequate
• Use of medicines inappropriate and irrational, including in animal husbandry
• Infection prevention and control poor
• Antimicrobials and diagnostics arsenal limited
• Research and development for diagnostics and medicines insufficient

AMR: What is blocking progress?

• Complex problem requiring a comprehensive response among and between Member States across different sectors

• Actions needed are clear – but there is a failure of commitment, implementation and accountability

• Preventing AMR is a "public good" which strengthens health security – but financing is insufficient
WHD 2011- flagship event of the year!

• World Health Day will:
  Draw global focus on AMR
  Engage all 193 WHO Member States and the global health community
  Foster action for change worldwide

• World Health Day will engage and enlist:
  Health Ministers, other policy makers and health leaders
  The public, patients and civil society
  Pharmaceutical industry, health institutions, prescribers and dispensers
  Journalists and the media

WHD 2011: What will we achieve?

• Goal:
  To save lives and protect health by keeping precious, lifesaving medicines effective and useful to combat disease

• Aims:
  To raise awareness on what drives AMR
  To build commitment for effective policies and practices and their implementation to combat AMR

• Objectives:
  To provide policy guidance to Member States on top priority actions to combat AMR
  To reach and engage key stakeholders through innovative communications, advocacy and events
  To promote further collaboration across sectors and among stakeholders
WHD 2011: Toolkit
for Health Ministers, stakeholders & partners

In Preparation:
• Website
• Brochure
• Basic Factsheet
• Poster
• PSA
• Event planner

On World Health Day:
• Policy Package background paper
• Policy Briefs
• Events and Press briefings
• Press kit including news release, statement, photos and videos
WHD 2011 Core Product:
Six Point Policy Package

1. Commit to a comprehensive, financed national plan with accountability and civil society engagement

2. Strengthen surveillance and laboratory capacity

3. Ensure uninterrupted access to essential medicines of assured quality

4. Regulate and promote rational use of medicines including in animal husbandry and ensure proper patient care

5. Enhance infection prevention and control

6. Foster innovations and research and development for new tools

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  - CGD (Center for Global Development)
  - ECDC (European Center for Disease Control)
  - FIP (International Pharmaceutical Federation)
  - IDSA (Infectious Disease Society of America)
  - IFPMA (International Federation of Pharmaceutical Manufacturers Association)
  - INRUD (International Network for the Rational Use of Drugs)
  - OIE (World Organization on Animal Health)
  - Patient Safety Alliance
  - ReACT (Action on Antibiotic Resistance)
  - WHONET