# Consumption of antimicrobials in food animals outside EU/EEA



Hilde Kruse, DVM, PhD Programme Manager Food Safety



#### Antimicrobial Resistance: A Global Concern

- Use of antimicrobials in people, animals and plants can promote development and spread of resistance.
- Borderless spread of resistance 

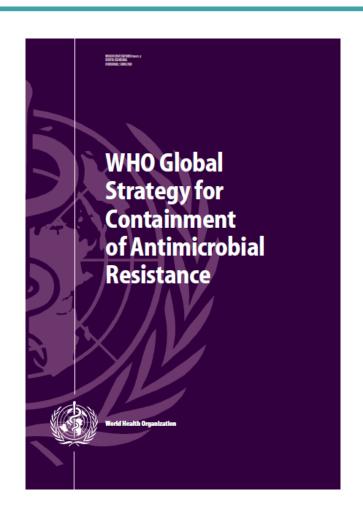
   growing international public health problem.
- Use of antimicrobials in animals is a food safety issue e.g. foodborne zoonotic bacteria (Salmonella and Campylobacter).



#### Antimicrobial resistance is a WHO priority

WHO global strategy for containment of antimicrobial resistance published in 2001

WHO European Strategic
Action Plan on antibiotic
resistance adopted by
Member States in 2011

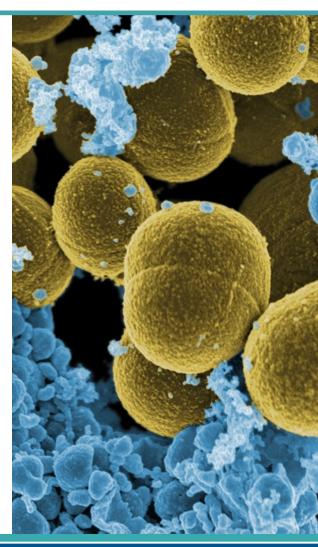




## WHO European Strategic Action Plan

#### **Seven action areas:**

- 1. Promote national coordination.
- 2. Strengthen surveillance.
- 3. Promote rational use of antibiotics, including surveillance of antibiotic consumption.
- 4. Improve infection control and stewardship of antibiotic use in health care settings.
- 5. Promote surveillance, prevention and control of antibiotic resistance in the food chain.
- 6. Promote research and innovation on new antibiotics.
- 7. Improve awareness on antibiotic use and risk of increasing resistance.

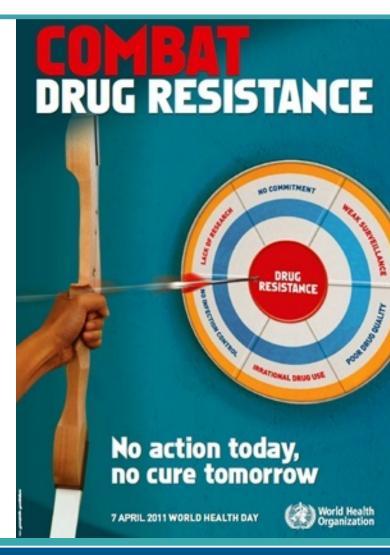




## World Health Day 2011 Missions

## "No action today, no cure tomorrow"

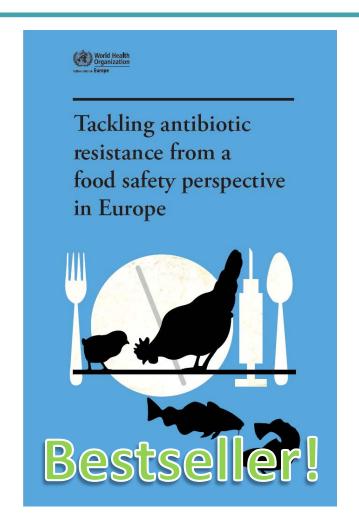
- Copenhagen, Denmark
- Strasbourg, France
- Moscow, Russia
- London, UK
- Rome, Italy
- Tashkent, Uzbekistan
- Tirana, Albania
- Dushanbe, Tajikistan





#### WHO Emphasizes the Food Safety Aspects

Publication issued on occasion of the World health Day 2011. Provides guidance on actions for tackling antibiotic resistance from a food safety perspective.





#### Key Messages for Countries



- 1. Improve overall coordination.
- 2. Improve regulatory framework.
- 3. Reduce the need for and promote prudent use of antibiotics.
- 4. Improve surveillance.
- 5. Advocate and communicate.
- 6. Build capacity and provide training.
- Address knowledge gaps and research needs.



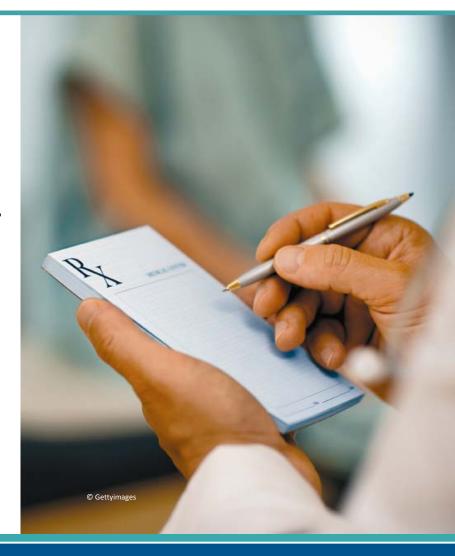
#### Intersectoral Coordination

- National and international interdisciplinary cooperation.
- National intersectoral holistic strategy and action plan with an intergovernmental steering committee.
- Formal mechanism between health authorities and food safety/veterinary authorities.



## Improved Regulatory Framework

- Eliminating the use of antibiotics as growth promoters.
- Requiring that antibiotics be administered to animals only when prescribed by a veterinarian.
- Requiring that antibiotics identified as critically important in human medicine - especially fluoroquinolones and third/fourth generation cephalosporins – only be used in food animals if their use is justified.



#### Reduce Usage and Promote Prudent Use



- Reducing the need for antibiotics in animal husbandry, by improving animal health through biosecurity measures, disease prevention (including vaccine use), and good hygienic and management practices.
- Eliminating economic incentives that facilitate the inappropriate prescription of antibiotics.

#### Surveillance

- Establishing a surveillance system for the use of antibiotics in food animals.
- Establishing an integrated

   (among public health, food and veterinary sectors) surveillance system to monitor antibiotic resistance in selected food-borne bacteria.



#### Survey in WHO EURO 2007

- Surveillance of antibiotic resistance in food bacteria
  - Most EU countries do have
  - Most non-EU countries do not have
- Surveillance of antibiotic usage in animals
  - Some EU countries do have
  - Most non-EU countries do not have
- Prescription for use of antibiotics in animals
  - Armenia, Kazakhstan, Russia, Turkmenistan, Tajikistan, Uzbekistan,
     Ukraine: Not required
  - Unknown in several other countries



### Snapshot: Albania

- Regulations
  - None controlling on-farm use.
- Availability
  - No prescription required. Anecdotal veterinarian estimates suggest usage is 2-3 times that of EU estimates.
- AMR Surveillance
  - No active program.
  - Study of intensive poultry breeding programs found high levels of resistance to a wide range of antibiotics in both *E. coli* and *Salmonella* spp isolates.



## Snapshot: Tajikistan



#### Regulations

- None for Human Use.
- None for Animal Use.
- Availability
  - Purchasable with or without a prescription.
- AMR Surveillance
  - Pilot Program started for Human & Animal Salmonella spp. isolates.
  - Preliminary data suggests that 48% of animal isolates show resistance to at least 1 antibiotic.

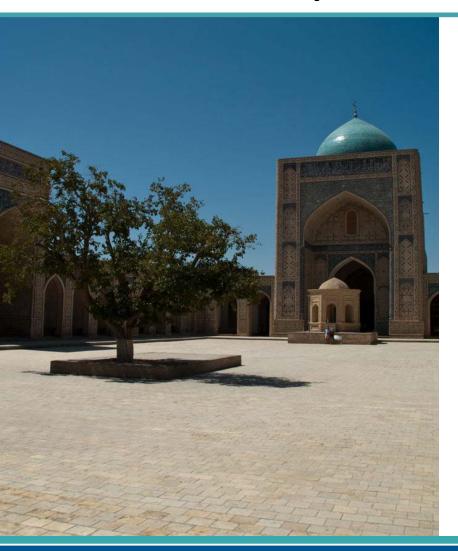


### Snapshot: Kosovo

- Regulations
  - None for Animal Use.
- Availability
  - 7.62 tons of antibiotics were imported in 2012.
  - Used for treatment and growth promotion.
- AMR Surveillance
  - Study performed on Salmonella spp. isolates from intensive poultry farms.
  - Study found that 49% of farms tested positive for the presence of Salmonella.
  - 100% of the isolates test, were resistant to at least 1 antibiotic.



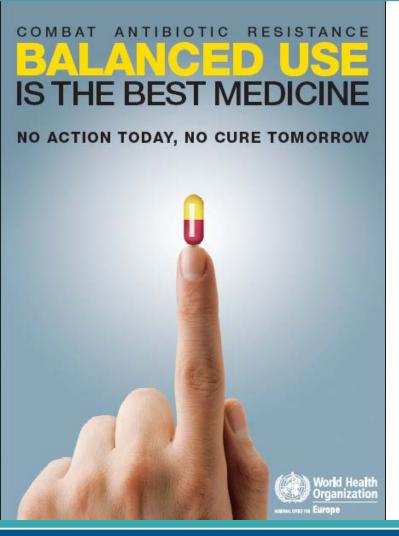
## Snapshot: Uzbekistan



- Regulations
  - None for Animal Use.
- Availability
  - Used for treatment and growth promotion.
- AMR Surveillance
  - Currently no programs to understand usage levels or prevalence of resistance.



## Advocacy and Communication



- Raise awareness of antibiotic resistance from a food safety perspective.
- Prompt action that prevents the development and spread of antibiotic resistance in the food chain.



## Training and Capacity Building

- Develop guidelines on the prudent use of antibiotics in food animals, taking a multidisciplinary approach.
- Provide the training needed to implement them.

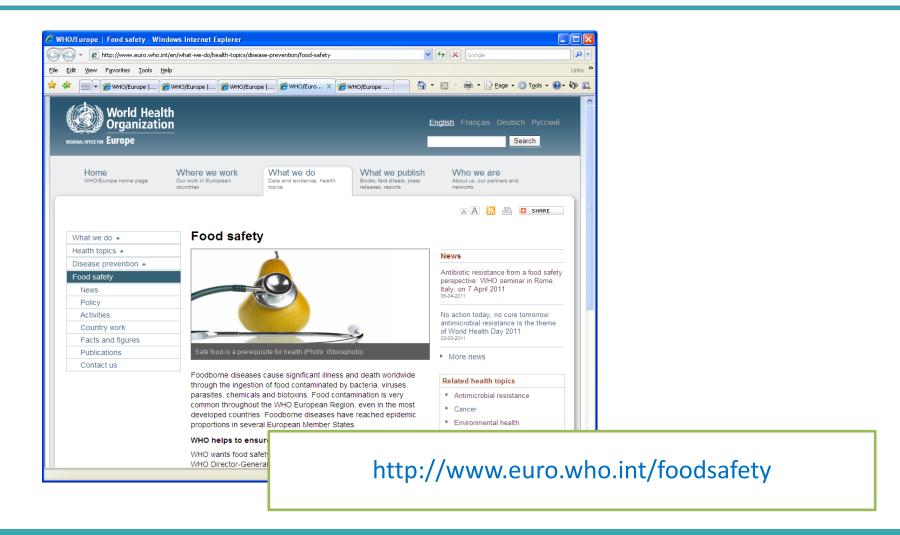


#### AMR Focused Food Safety Capacity Building

- Workshops
- Belgrade, Serbia, 2010 (CRO, ROM, SRB)
- Durres, Albania 2012 (ALB, CRO, MNE, ROM, SRB)
- Global Foodborne Infections Network (GFN) training
- St. Petersburg, Russia, 2011 (Russian speaking countries)
- Almaty, Kazakhstan, 2012 (Central Asian Republic)
- Dushanbe, Tajikistan, 2013 (national)
- o GFN national training, Tashkent, UZB, Nov 2013
- Other activities
- Montenegro, 2010 (food safety and nutrition action plan)
- Tajikistan, 2012 (national of strategy on nutrition and food safety)
- Project in Kosovo on integrated surveillance of antimicrobial resistance, 2013
- Session on AMR in food safety workshop, ALB, Dec 2013
- Survey on AMR in Salmonella in ALB (ongoing)
- Survey on AMR in Salmonella in TJK (ongoing)



#### Thank You!





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