AMR in food chain in Asia
Content

- Information on OIE
- Livestock Production Landscape
- Use of Antimicrobials in Livestock Production
- Current Issues
- What can you do?
Demand for Animal Protein

*Growth in poultry meat demand from 2000 to 2030 in Asia

- Poultry demand will increase by 725% by 2030 in South Asia
- Pork demand in China in 2030 to increase by 54% as compared with 2000

*Source: http://www.fao.org/docrep/014/i2425e/i2425e00.htm
Changing Livestock Production Landscape

Livestock: one of fastest-growing agricultural sectors

Transformation of livestock production system

Source: http://www.fao.org/docrep/014/i2425e/i2425e00.htm, UN; The Poultry Site, Google Image
1. Need for enhanced hygiene, sanitation and biosecurity
2. Vulnerability to diseases and rapid spread
3. Economic vulnerability

*Asia
By 2030, intensive farming = 46% increase in antimicrobial consumption

*Antimicrobial consumption in chickens in 2010 (kg per 10km², purple colour indicate consumption exceeding 30 kg

*Major consumer of antimicrobials in food animals
- China, India

*Source: van Boeckel et al., 2015;
Amount of Antimicrobial Agents used in Animals (mg/kg)

Global consumption of antimicrobials = 144.39 mg/kg of animal biomass

- AMU data submitted by 152 OIE members
- Global use of antimicrobials in terrestrial and aquatic food producing animals
- Asia Pacific Region
  - Highest antimicrobial usage in animals

https://www.oie.int/fileadmin/Home/eng/Our_scientific_expertise/docs/pdf/AMR/A_Fourth_Annual_Report_AMR.pdf
Fourth OIE Global AMU global report

Use of antimicrobial growth promoters (AGPs)

- 118 countries did not use AGPs
- 35 countries still use AGPs
- 9 in Asia still use AGPs

OIE encourages countries to phase out the use of antibiotics for growth promotion in the absence of risk analysis
Key Issues on AMR in Asia Pacific Region

Current Situation

- Weak legislations and enforcements to regulate import, production, sale, monitoring of antimicrobials
- Weak supervision on usage of antimicrobials in animals
- Use as antimicrobial growth promoters (AGPs) without risk assessment
- Use of medicated animal feed
- Weak AMR surveillance system
- Lack of awareness

Impacts

- Quality issues, over-the-counter sale, misuse
- Inappropriate use, incomplete treatment, under dosing
- Lack of data to support action/policy decisions
- Contribute to AMR
Lessons from Europe

- Strong legal framework for responsible use of antimicrobials in livestock production
- Banned use of AGPs since 2006
- Monitoring of antimicrobials used in animals since 2005 (available online)
- Surveillance of antimicrobial resistance in humans, animals, and food since 2004
  - Surveillance reports published here
- Analysis of antimicrobial consumption and resistance
  - Association between consumption of antimicrobials in humans and animals and occurrence of AMR
Lessons from Europe – the UK Experience

Antimicrobials sold/supplied only on prescription by a veterinarian

Medicated feeds sold only on prescription

Antibiotic Usage Data

Antibiotic usage by food-producing animal species, 2018 compared with 2015, 2016 and 2017

<table>
<thead>
<tr>
<th>Animal</th>
<th>2018 Total coverage %</th>
<th>2018 Total tonnage**</th>
<th>2018 Total per unit***</th>
<th>Compared with 2015 %</th>
<th>Compared with 2016 %</th>
<th>Compared with 2017 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs</td>
<td>89</td>
<td>76</td>
<td>110 mg/kg</td>
<td>↓ 60</td>
<td>↓ 40</td>
<td>↓ 16</td>
</tr>
<tr>
<td>Turkeys</td>
<td>90</td>
<td>16</td>
<td>47 mg/kg</td>
<td>↓ 77</td>
<td>↓ 46</td>
<td>↑ 3</td>
</tr>
<tr>
<td>Broilers</td>
<td>90</td>
<td>16</td>
<td>12 mg/kg</td>
<td>↓ 55</td>
<td>↓ 27</td>
<td>↑ 26</td>
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<tr>
<td>Ducks</td>
<td>90</td>
<td>3.2</td>
<td>1.6 mg/kg</td>
<td>↓ 79</td>
<td>↓ 46</td>
<td>↓ 47</td>
</tr>
<tr>
<td>Laying hens</td>
<td>90</td>
<td>3.2</td>
<td>0.63 bird days</td>
<td>—</td>
<td>↑ 13</td>
<td>↑ 11</td>
</tr>
</tbody>
</table>

Source: UK VARSS Report 2018
What CAN YOU do to tackle AMR?

Government Regulators

- Develop and Implement legislations for prudent and responsible use of antimicrobial in animals

Private sectors (drug manufacturer, importers, sellers, feed manufacturers)

- Comply with good manufacturing practices
- Comply with government regulations
- Share data

Food animal producers

- Apply good animal husbandry practices
- Only use when prescribed by veterinarians
- Comply with regulations

Consumers/general population

- Be aware of AMR
- Lobby with politicians/policy makers
- Spread the word about AMR
The OIE Strategy on AMR and the Prudent Use of Antimicrobials

Context

- **OIE Strategy** launched in November 2016
- Aligned with WHO Global Action Plan on AMR in 2015 and the Tripartite Partnership

Objectives

1. Improve awareness and understanding
2. Strengthen knowledge through surveillance and research
3. Support good governance and capacity building
4. Encourage implementation of international standards

https://www.oie.int/en/for-the-media/amr/
• AMR is an emerging threat to humanity

• Maintain high level political engagement to implement and sustain activities to combat AMR

• AMR occurs due to inappropriate use of antimicrobials in humans, animals, and environment

• Spread the Word – AMR

• World Antimicrobial Awareness Week 2020, 18-24 November play your part
Thank you for your attention!