



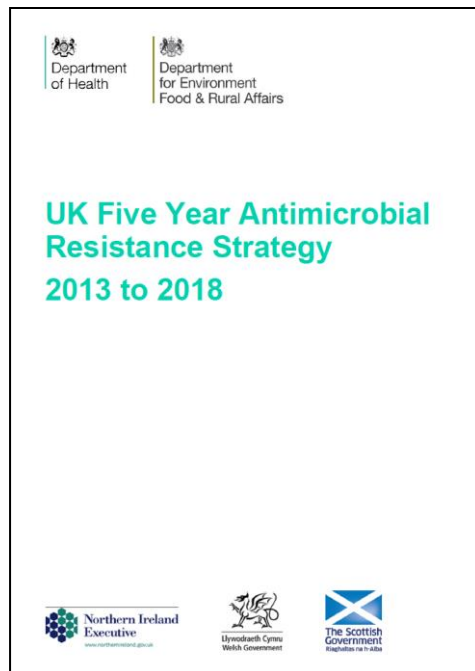
Veterinary  
Medicines  
Directorate

# Developing a collaborative approach to reducing antibiotic use

Presented by: Dr Fraser Broadfoot MRCVS

# Timeline of Actions - strategic

- **2013** – One Health UK AMR Five Year Strategy published
- **2014** – Independent Review on AMR Commissioned
- **2015** – AMR added to UK National Risk Register



# Timeline of Actions – data and stewardship

- **1993** – Antibiotic sales data collection for animals starts

**Table 12: Sales of total antibiotics for food-producing animals only (tonnes active ingredient) by food animal species 2006–2011**

	2006	2007	2008	2009	2010	2011
	<b>Tonnes Active Ingredient</b>					
Cattle Only Products	10	9	11	11	11	12
Pig Only Products	71	66	62	62	47	62
Poultry Only Products	17	18	31	37	50	23
Sheep Only Products	<1	<1	<1	<1	<1	<1
Fish Only Products	4	4	1	3	1	2
Pig and Poultry Combined Only	234	216	195	205	252	162
Multi Species Products In Food Animals Only	21	22	28	31	29	29
<b>Total</b>	<b>356*</b>	<b>335</b>	<b>327</b>	<b>349</b>	<b>390</b>	<b>290</b>

\*A difference in rounding from Table 2 gives a total of 358 tonnes.

# Timeline of Actions – data and stewardship

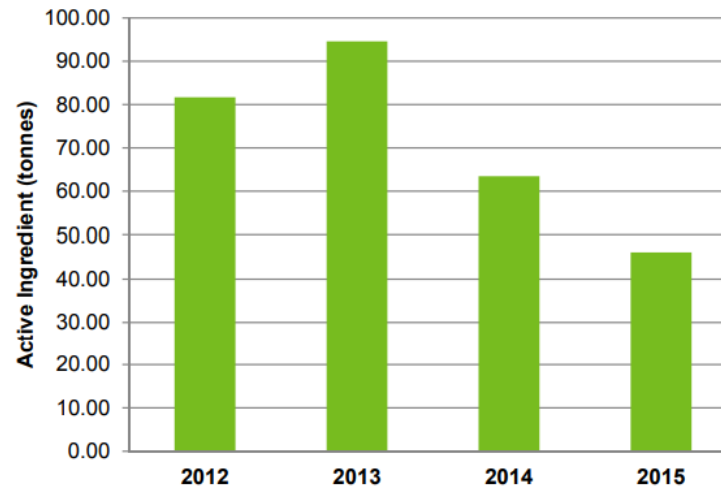
- **1993** – Antibiotic sales data collection for animals starts
- **2011** – British Poultry Council Stewardship formed



# Timeline of Actions – data and stewardship

- **1993** – Antibiotic sales data collection for animals starts
- **2011** – British Poultry Council Stewardship formed
- **2015** – Poultry antibiotic usage data published

Figure A4.1: Tonnes of active ingredient of antibiotic used by all members of the BPC Antibiotic Stewardship Scheme 2012-2015



# Timeline of Actions – data and stewardship

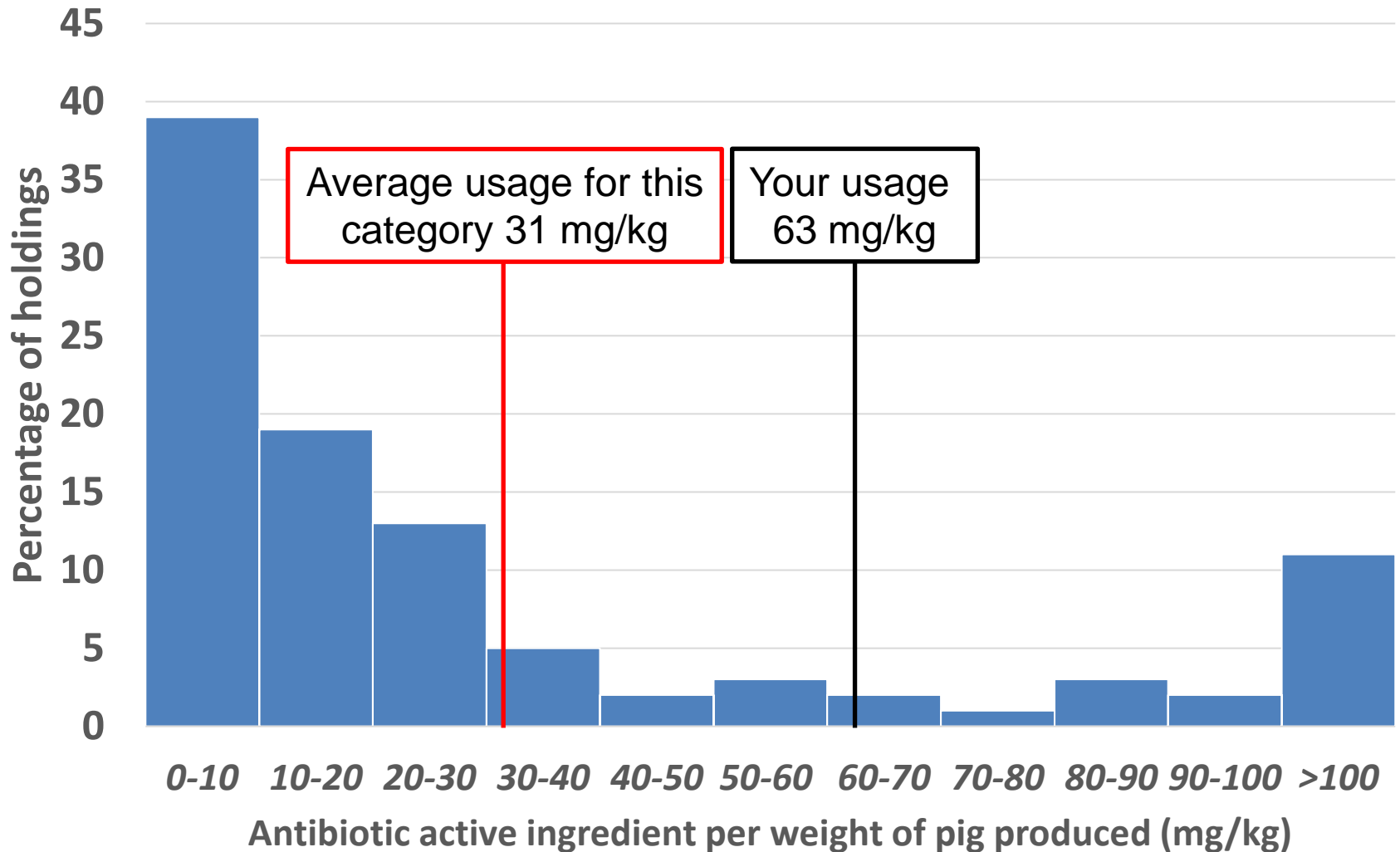
- **1993** – Antibiotic sales data collection for animals starts
- **2011** – British Poultry Council Stewardship formed
- **2015** – Poultry antibiotic usage data published
- **2016** – Pig industry developed stewardship programme and launches electronic Medicines book for pigs



# Timeline of Actions – data and stewardship

- **1993** – Antibiotic sales data collection for animals starts
- **2011** – British Poultry Council Stewardship formed
- **2015** – Poultry antibiotic usage data published
- **2016** – Pig industry developed stewardship programme and launches electronic Medicines book for pigs
- **2017** – Antibiotic use data published for pigs, laying hens and gamebirds
- **2018** – Antibiotic use data published for salmon and trout
- **2021** – Medicine Hub for ruminants launched

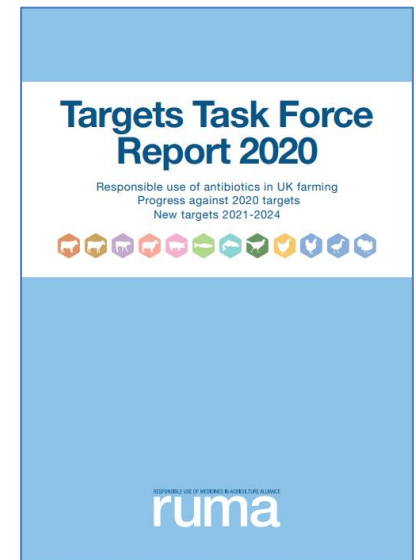
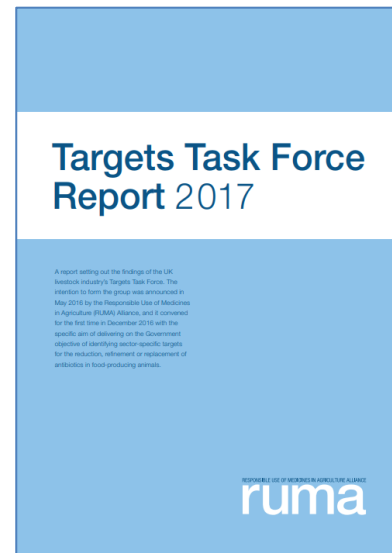
# Benchmarking





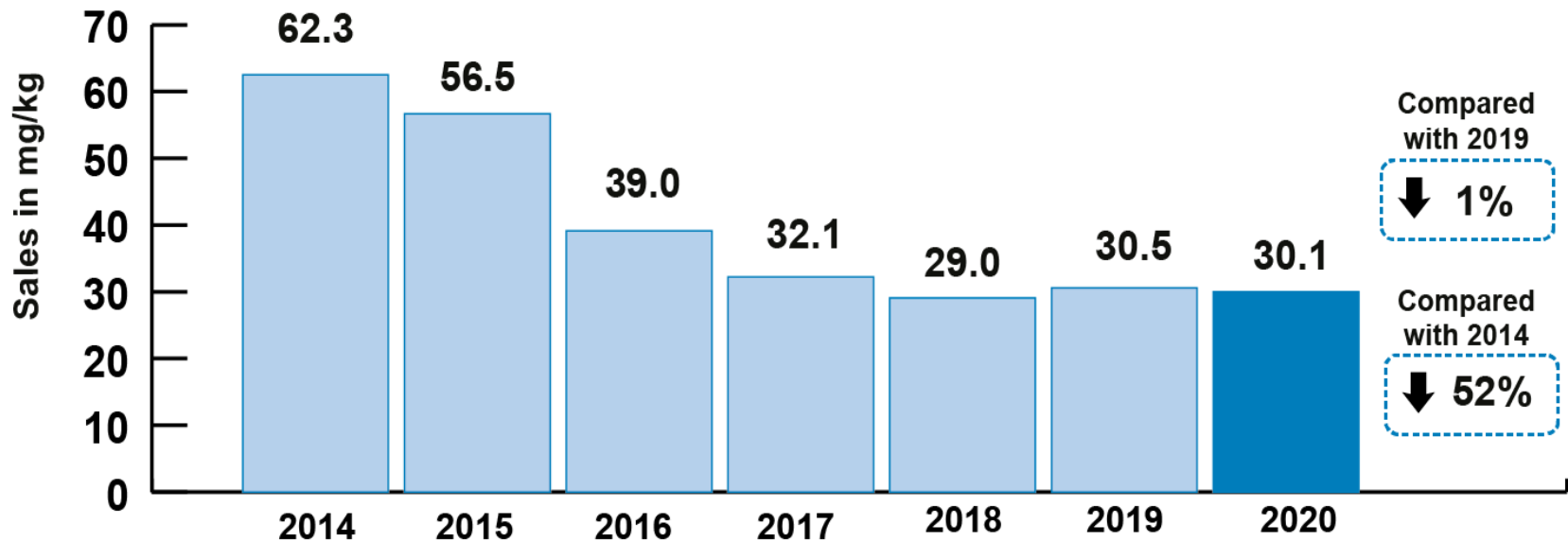
# Timeline of Actions – targets

- **2015** – RUMA plans industry taskforce
- **2016** – Government response to independent review on AMR committing to developing sector targets
- **2016** – Industry taskforce used to develop sector targets
- **2017** – Sector targets published



# Antibiotic Sales Data – Food Producing Animals

## Sales for food-producing animals (mg/kg)

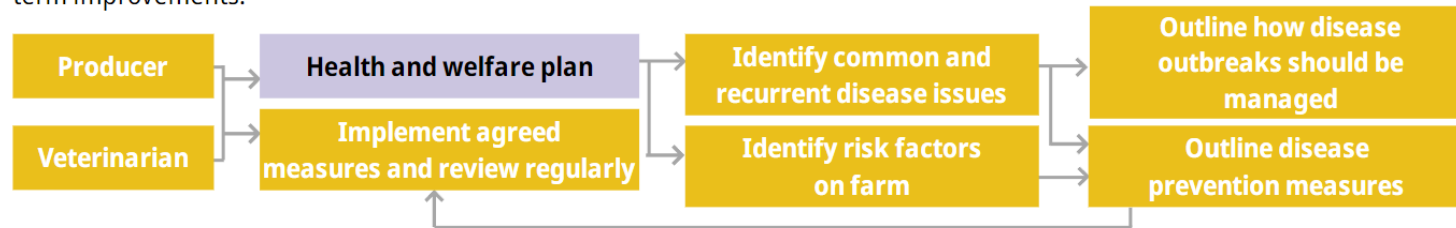


Source: UK-VARSS 2020 - [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1033825/VARSS\\_Main\\_Report\\_Final\\_Accessible\\_version.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033825/VARSS_Main_Report_Final_Accessible_version.pdf)

# FAO e-learning Session Three

## 3 The role of food and agriculture stakeholders in antimicrobial resistance Proactive approach

The next diagrams highlight the importance of a **proactive approach** to preventing disease. An important part of this involves veterinarians\* and producers working together to create, implement and monitor health and welfare plans and focus on long-term improvements.



## 3 The role of food and agriculture stakeholders in antimicrobial resistance Record-keeping

This diagram highlights the importance that keeping good records has for monitoring disease/treatments and informing management decisions. This includes monitoring the supply, use and prescription of antimicrobials, and assessing the health and welfare of the treated and untreated animals.

<i>Click on the hand icon to learn more</i>	Supply records	Use records	Prescription records	Health and welfare monitoring	Adverse events	Clinical records/laboratory test results
Wholesale and retailer distributor						
Medicated feed manufacturers						
Producer						
Veterinarian*						

\*or other suitably trained person authorized in accordance with national legislation

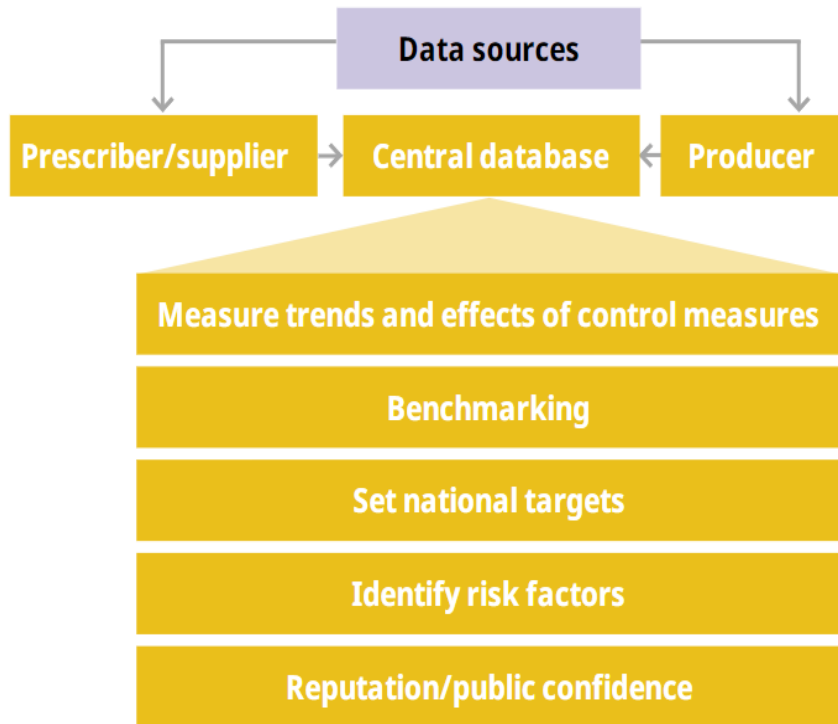
Learn more about [record-keeping](#)

# FAO e-learning Session Three

3 The role of food and agriculture stakeholders in antimicrobial resistance

## Monitoring antimicrobial use

Antimicrobial use data can be collected in several ways and has many benefits.



*Click on the yellow buttons to learn more*

# FAO e-learning Session Four

## 4 How can antimicrobial resistance be contained and its impacts minimized on food and agriculture? Antimicrobial stewardship groups

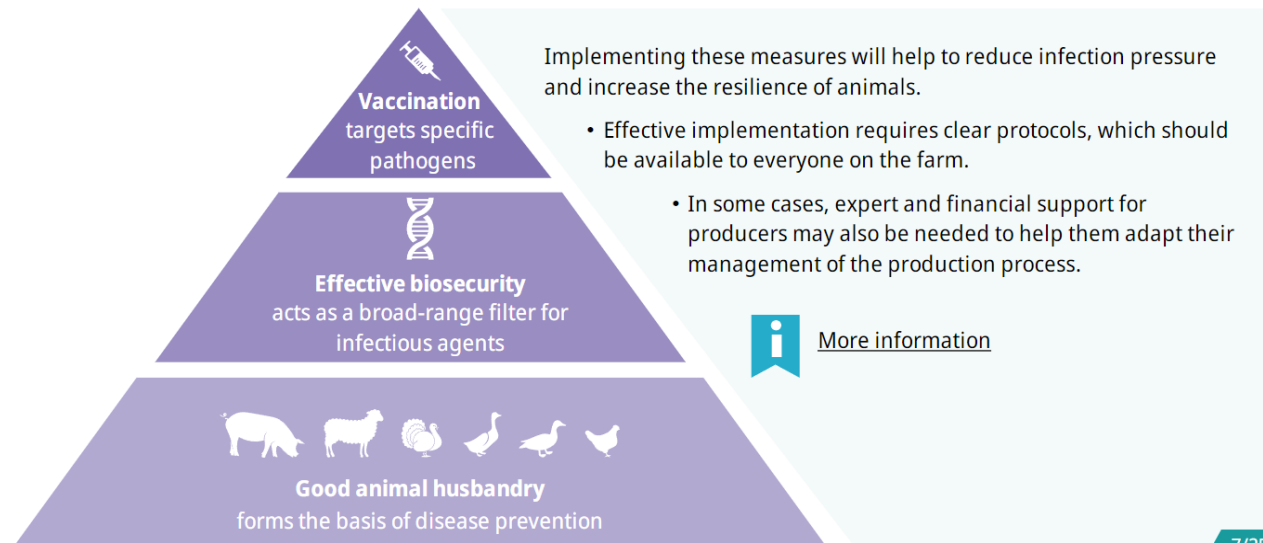


The diagram below illustrates the key stakeholders that can form Antimicrobial Stewardship Groups.



## 4 How can antimicrobial resistance be contained and its impacts minimized on food and agriculture? Disease prevention - Key areas

As highlighted in the infographic below and in the previous screen, disease prevention requires a holistic approach, focusing on **good animal husbandry**, **effective biosecurity/infection prevention and control**, and **vaccination**.



# FAO e-learning Session Four

4 How can antimicrobial resistance be contained and its impacts minimized on food and agriculture?

## Sector examples

Below are some examples of diseases in various animals sectors.

### Pigs



#### Respiratory diseases:

- [Respiratory diseases in pigs](#)

#### Example of biosecurity in Indonesia



- **Biosecurity interventions** can be practical yet inexpensive. For example, the 3-Zone Biosecurity model that FAO's Emergency Centre for Transboundary Animal Diseases (ECTAD) and partners developed divides a farm into three separate areas, according to the associated biosecurity risk:

- high-disease risk external areas (**red zone**);
- medium-risk service areas (**yellow zone**); and
- the clean and highly secure access-restricted **green zone**, where the chicken flock is located.

[Click on the arrow to learn more](#)



# Conclusion - Key factors of success

- Strong leadership
- Collective approach with accountability
- Cross sector organisations to lead on the work
- Strong relationship between farmers and vets
- Government and livestock industry working together
- Setting targets relevant to the challenges of each livestock sector
- Access to data to set and monitor targets and assess impact
- Clear and transparent communications