# Antibiotics report

September 2025

# Antibiotics.

Tesco is a member of the Food Industry Initiative on Antimicrobials (FIIA), which has the stated vision of 'Retailers, manufacturers, processors, and food service companies coming together to promote and support responsible antimicrobial use and action on antimicrobial resistance'. The intention of this initiative is to support and engage with existing industry groups working in this area, ensuring work is aligned and avoiding duplication of effort.

FIIA is a UK initiative therefore unless otherwise specified, this report and data reported relates to Own Brand products supplied to Tesco UK (excluding Booker). Tesco UK accounts for approximately 74% of all Tesco Group products by sales value.

### The FIIA has 3 key areas of focus: Responsible Use, Research & Development and Data.

The Tesco antibiotic use commitments were developed and published in 2017 to ensure responsible antibiotic use is a key area of focus for our supply chains. These commitments were developed with our supply chain and industry experts and align with FIIA commitments to support a common approach to embedding and evidencing responsible use principles throughout each protein supply chain.

1. **We restrict the use of the highest priority "critically important" antibiotics for human health (fluoroquinolones, 3rd and 4th generation cephalosporin's and colistin)— as defined by the European Medicine Agency in our supply chain— and make sure these antibiotics are used only as a treatment of last resort, where no other viable treatment is available to prevent animal welfare issues. We are working with our suppliers to reduce the use of other critically important antibiotics, including macrolides.**

**Progress:**

The Tesco Welfare Approved (TWA) standards for all meat, farmed fish and eggs restrict the use of highest priority "critically important" antibiotics (HPCIAs). We continue to see a reduction in the use of HPCIAs and the complete elimination of key classes (e.g. Colistin) in the pig and poultry sectors. However, these key classes remain available to our supply chains where there is no other viable treatment to ensure animal welfare is not compromised. We evaluate therapeutic usage trends by every antibiotic class across our egg, continental pork and sustainable beef and lamb supply chains. In all sectors, any reported incidence of HPCIA use must be supported by documented evidence of clinical need, e.g. sensitivity testing which indicates that the disease-causing bacteria will only be responsive to that medicine.

2. **We work with our suppliers to make sure there is no unauthorised use of veterinary medicines, including antibiotics, in our supply chain.**

**Progress:**

No unauthorised use of any veterinary medicines, including antibiotics, is permitted in our

livestock supply chains. All traceability exercises associated with our Tesco Welfare Approved audit programme have demonstrated that all farms are compliant.

3. **We do not allow the routine use of antibiotics for prophylactic purposes in our supply chain. Preventative treatment is only allowed where animals are diagnosed as being at high risk of bacterial disease and must only occur under prescription by a veterinarian based on epidemiological and clinical knowledge, in line with Responsible Use of Medicines in Agriculture Alliance (RUMA) guidance.**

**Progress:**

The TWA standards ban the routine use of antibiotics for prophylactic purposes for meat and shell eggs.

Across the Tesco Sustainable Dairy Group and Tesco Cheese Group, selective dry cow therapy was introduced in August 2018 to reduce the routine use of antibiotics to prevent mastitis. Tesco's target is for no more than 40% of the herd on each farm to receive antibiotic dry cow treatment, either alone or in addition to teat sealment. Reducing routine antibiotic dry cow therapy is a key strategy to reduce total antibiotic use in our dairy supply chain and we have seen significant progress in this area in recent years.

It is recognised that production methods such as type of housing may present species-specific challenges to prescribing. Therefore, selective dry cow therapy and metaphylaxis (group) treatments are still permissible in key sectors (e.g. broiler chickens). However, the prescription of these treatments remains in line with the overall trend reduction in net usage recorded over the last 8 years. Similarly, we have reported consistent reductions across our UK and EU pig supply chains and are approaching zero use of Highest Priority Critically Important Antibiotics in both the pig and poultry sectors.

4. **We measure antibiotic use in our supply chain and have made reviewing antibiotic usage records a key feature of our farm audit programme. Visibility of records of any antibiotic usage at Tesco supplying farms is required to enable us to monitor levels of use and to help target reduction strategies.**

**Progress:**

We continue to embed antibiotic reporting across our supply chains and usage records continue to be an important component of our TWA audit programme. The maturity of reporting varies by sector and by geography. All sectors across our supply base now report usage and we can track and trend usage by species sector, geography, and method of production. This facilitates evaluation of absolute usage and trend changes based on outcome measure data.

Sector-specific reporting can be found in the appendix.

5. **We will implement the UK species-specific targets for antibiotic reduction— as defined by RUMA and the Veterinary Medicines Directorate— in our supply chain. Since 2018, we have worked with the supply base to ensure that usage does not exceed sector targets based on species-specific data sets collated in the intervening period.**

**Progress:**

The global reduction in antibiotic use in the Tesco supply base either meets or exceeds UK

sector equivalents (with the exception of the duck sector, where usage exceeds the reported VARSS average) as benchmarked against the latest Veterinary Antimicrobial Resistance and Sales Surveillance (VARSS) report, which was published in November 2024.

Since 2021, there has been an increased industry focus on maintaining low usage of antibiotics by understanding the challenges and underlying reasons for their use and exploring the implementation of preventative disease programmes (i.e. through increased vaccination). In line with RUMA targets, the industry emphasis is now on identifying persistent high usage (PHU) within supply chains, working with individual outliers to drive reductions, and demonstrating where supported engagement has led to reductions at individual farmer level. The ruminant sector has been presumed to have comparatively low usage but presents limited shared data to support this. Therefore, in line with RUMA objectives, we are focusing on the continued development of reporting metrics across our Sustainable Beef and Lamb groups – now in their third and fourth year respectively.

6. **We will help build farmers' capability on responsible antibiotic use and animal health in our supply chain, to help them to reduce use without compromising animal welfare. We will work with our Product Partners, wider suppliers, and other bodies to identify the right educational approaches and the best ways to share this knowledge among farmers.**

**Progress:**

This is a key area of focus for each Tesco Sustainable Farming Group. All farmers in our Tesco Sustainable Dairy Group report on a range of animal health and welfare measures, including antibiotic use. Benchmarking and vet-facilitated workshops support them to achieve continuous improvement in this area. Pig and poultry suppliers are provided with data visibility and insight at both individual supplier and group level, and we have introduced qualitative reporting to understand farm-level health challenges and associated management strategies. All farmers in our Tesco Sustainable Beef Group and Tesco Sustainable Lamb Group report antibiotic usage data annually at the level of individual treatment occasions. This allows us to monitor trends and disseminate valuable insight into those sectors where greater engagement has been identified as an industry priority. Across all sectors, this comparative overview and knowledge sharing has helped inform strategic approaches and been instrumental in the reductions in use seen to date.

7. **We will support Research and Development (R&D) opportunities that will help drive the reduction of farm antibiotic use.**

**Progress:**

We have supported supplier/manufacturer research trials and associated analytics regarding the application of alternative hatching technology, e.g. Hatch-in-house systems for broilers. Consistent with other industry case studies, this showed indications of associated improvements in chick welfare and reductions in antibiotic use.

We are collating supplier data and experience in relation to the use of pre and probiotic feed additives in the pig and poultry sectors, where there is an indication that use appears to be associated with improved performance outcomes and reduction of antibiotics.

Our Tesco Sustainable Dairy Group R&D committee is focusing on management approaches to

help reduce pneumonia in calves, an area where reductions in antibiotic use have proved harder to achieve.

By evaluating antibiotic use across multiple geographies and methods of production, we are able to collate and disseminate best practice on-farm management strategies, while maintaining optimal animal health and welfare.

# Appendix.

Data sets are available across Tesco Livestock Supply chains to evidence the quantitative progression against commitments. These vary in terms of maturity of data set but span between 3-8 years depending on sector.

The reporting metric will reflect industry reference values (e.g. VARSS), which are a function of species/production specifics. Where the whole life reporting impacts directly on the product at consumer level (i.e. meat and fish) this is summarised based on total amount of antibiotic administered during lifetime relative to weight of animal in mg/kg. However, in the case of milk and eggs the focus is on reporting the number of treatment occasions of the dairy cow/hen.

Unless otherwise stated the figures cover the Tesco reporting year from March 2023 to February 2024.

Where an equivalent VARSS figure is available, this is included for comparison and 2021-24 RUMA target data is provided for reference. VARSS data reflects the 2023 calendar year.

Species specific RUMA targets are summarised below (Table 1):

**Table 1: 2024 RUMA targets for antibiotic usage metrics**

| Species | 2024 Target | Metric |
|---|---|---|
| Broiler Chicken | **25** | **mg/kg** |
| Turkey | **50** | **mg/kg** |
| Duck | **No target specified** | |
| Laying hens | **1** | **Total treatments/100 bird days** |
| Pigs | **73.5** | **mg/kg** |
| Beef | **No target specified** | |
| Lamb | **No target specified** | |
| Salmon | **5** | **mg/kg** |
| Trout | **20** | **mg/kg** |

## Poultry

The year-on-year trends for broiler chickens, turkey and duck are illustrated below (Figures 1, 2 and 3). Poultry data applies to 100% of farms supplying Tesco with fresh chicken, turkey, or duck with figures reported every 4 weeks for all birds processed in the preceding period. The final figure is a weighted average based on product volumes and declared for each geography and method of production. All Tesco data is presented relative to VARSS equivalent. Statistically, there has been no significant difference in antibiotic use in the broiler sector since 2019. This highlights that reduction strategies have been effective, and that the industry has reached a plateau in terms of what can be considered a functional minimum i.e. antibiotic usage that simultaneously safeguards bird welfare while adhering to best practice principles.

**Figure 1: Antibiotic Use (mg/kg) across Tesco Broiler Supply Chains (all) vs. reported VARSS Data.**

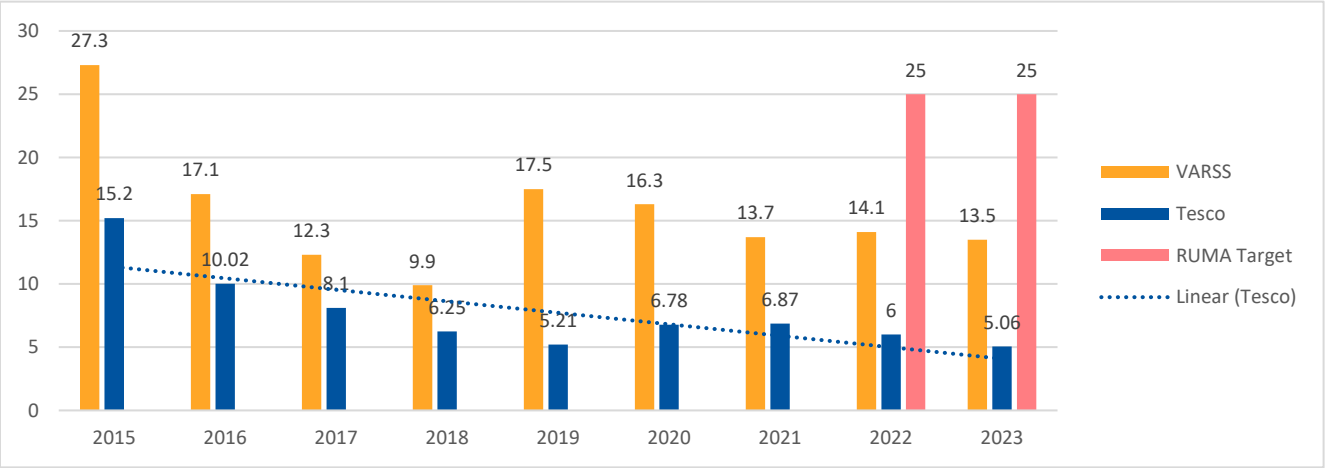



**Figure 2: Antibiotic Use (mg/kg) across Tesco Turkey Supply Chain (Seasonal) and Tesco Turkey Supply Chain (Year-Round) vs reported VARSS Data.**

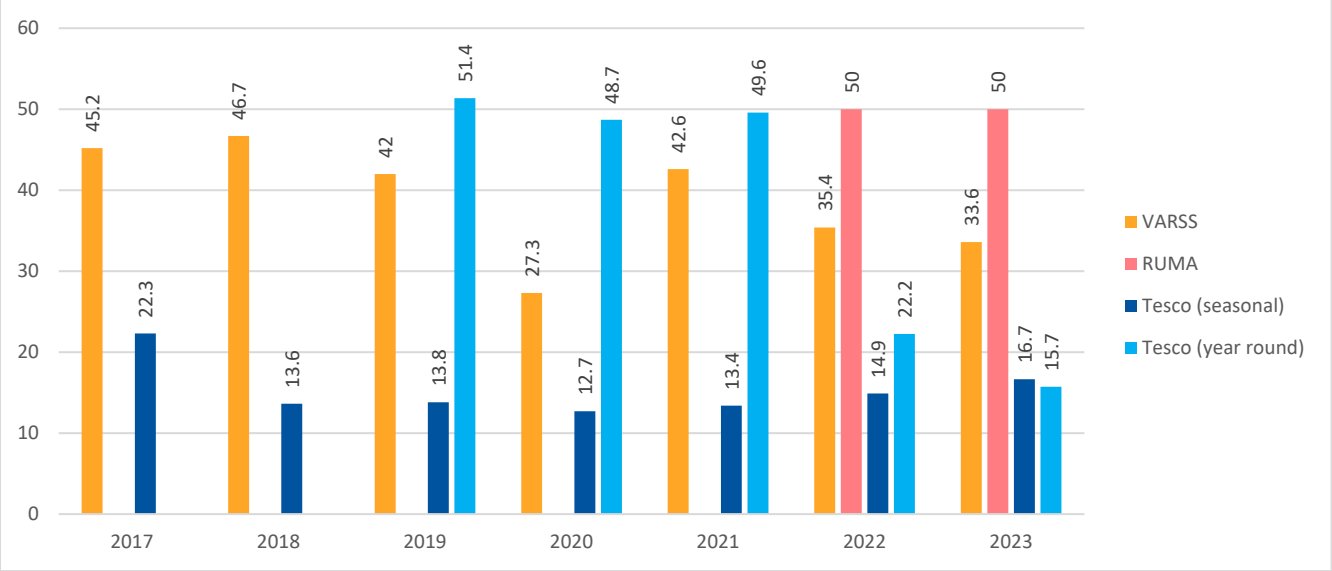
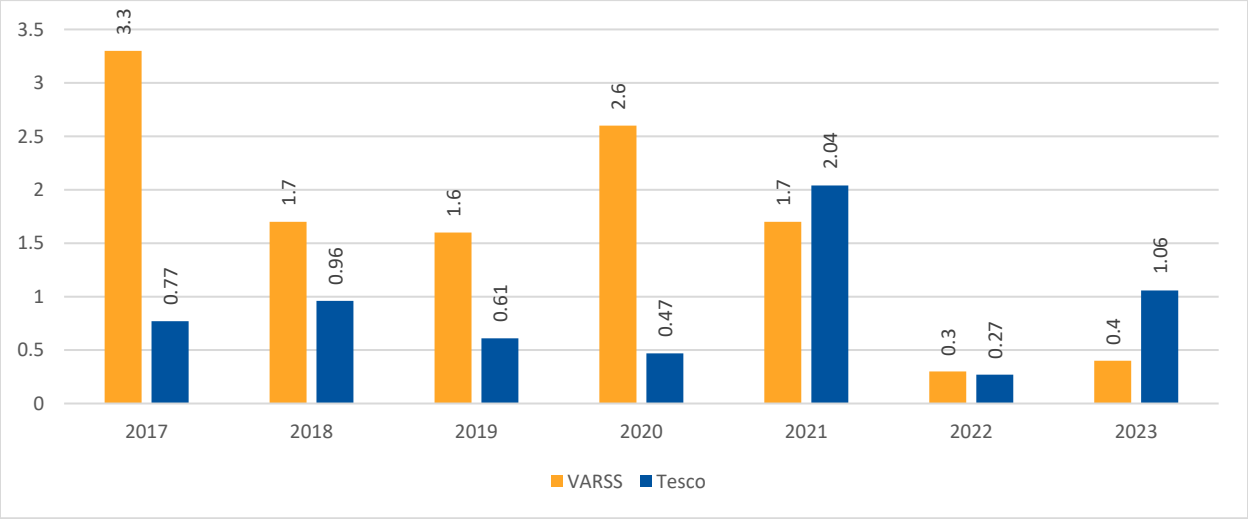



**Figure 3: Antibiotic Use (mg/kg) across Tesco Duck Supply vs reported VARSS Data.**



When comparing profiles, both Tesco and VARSS data highlight those sectors where reduction presents a challenge and also where usage has been low and comparatively static. The total usage in the chicken and turkey sectors is however lower across the Tesco supply base than the equivalent UK VARSS value. For ducks, there was an increase in usage seen in Tesco supply versus VARRS data (Figure 3).

The Tesco turkey data sets continue to provide separate visibility of seasonal and All-Year-Round production (established in 2019). This acknowledges the very different specifics in terms of breed, bird weight and method of production, while the VARSS reporting aggregates this data. All-year-round data shows a continued year-on-year trend decrease, whereas the seasonal data supports a slight increase in use. This is mostly attributed to one outlying supplier, which is an important consideration when reporting from a smaller data pool than the VARSS report. This year both the seasonal and all-year-round values are lower than the last reported VARSS figure. While the seasonal figure has remained relatively stable since 2018, a significant reduction in the all-year-round figure is shown between 2021 and 2022, which has been maintained into 2023.

The duck sector continues to be the lowest overall user of antibiotics in the poultry sector. Following a significant decrease in usage between 2021 and 2022, Tesco duck supplier usage increased this year. VARRS also reported increased use for 2023, however, Tesco supply exceeded the VARRS figure. As with turkey, the supply base for duck is moderate in size meaning that one poor flock result can skew the data considerably but would not be statistically significant given exceptionally low usage as a whole.
Note: there is no established RUMA target for antibiotic use in duck sector.

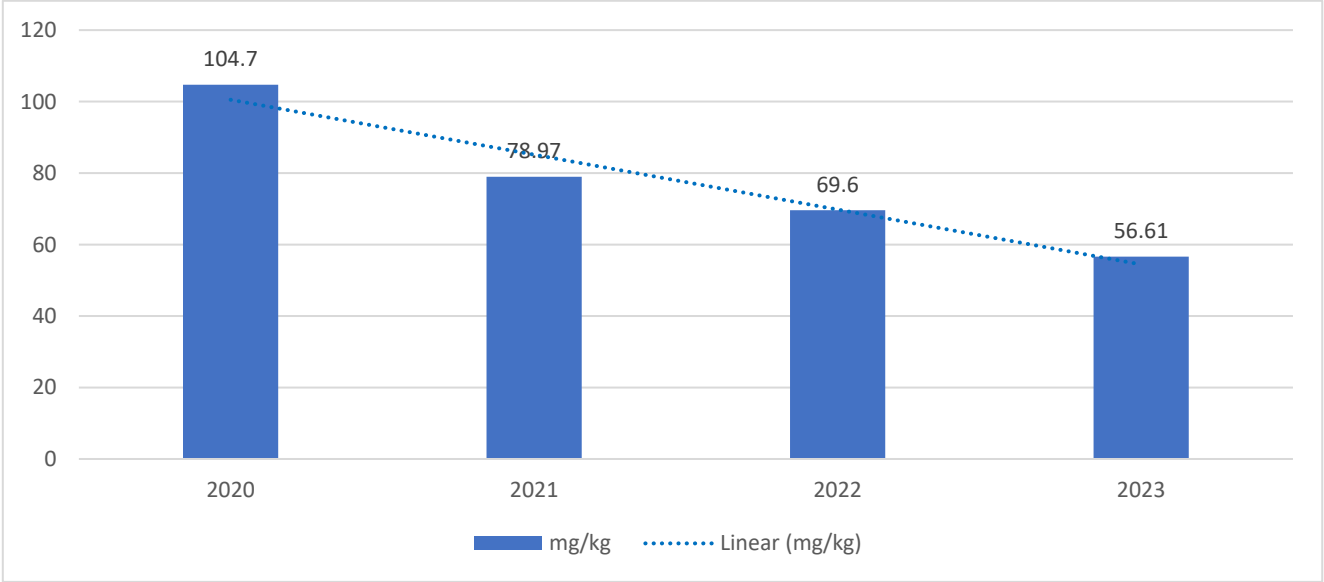
In each of the above, the use of 3$^{rd}$ and 4$^{th}$ generation cephalosporins is prohibited and the default position is that fluoroquinolones must be excluded except where sensitivity testing indicates that no other treatment option is available (in the interests of safeguarding animal welfare). Tesco enforces an industry emphasis on ensuring a robust evidence base for clinical decisions.

## Eggs

Egg data applies to 100% of all farms supplying Tesco with shell eggs. Figures are reported every 4 weeks, and the final figure is a weighted average based on product volumes and declared for each geography and method of production. As of 2020, Tesco has collated data as a mg/kg PCU value based on laying hens having an average lifetime weight of 2kg. This now allows for four years of comparative data to be compared.

There has been a continued trend reduction in total antibiotic use over the last 3 years. This reflects the change in prescribing policy, namely that colistin and HPCIA use is prohibited, and that preferential use of macrolides and aminoglycosides is discouraged.

**Figure 4: Antibiotic Use in Commercial Layers (mg/Kg PCU) across Egg Supply Base.**



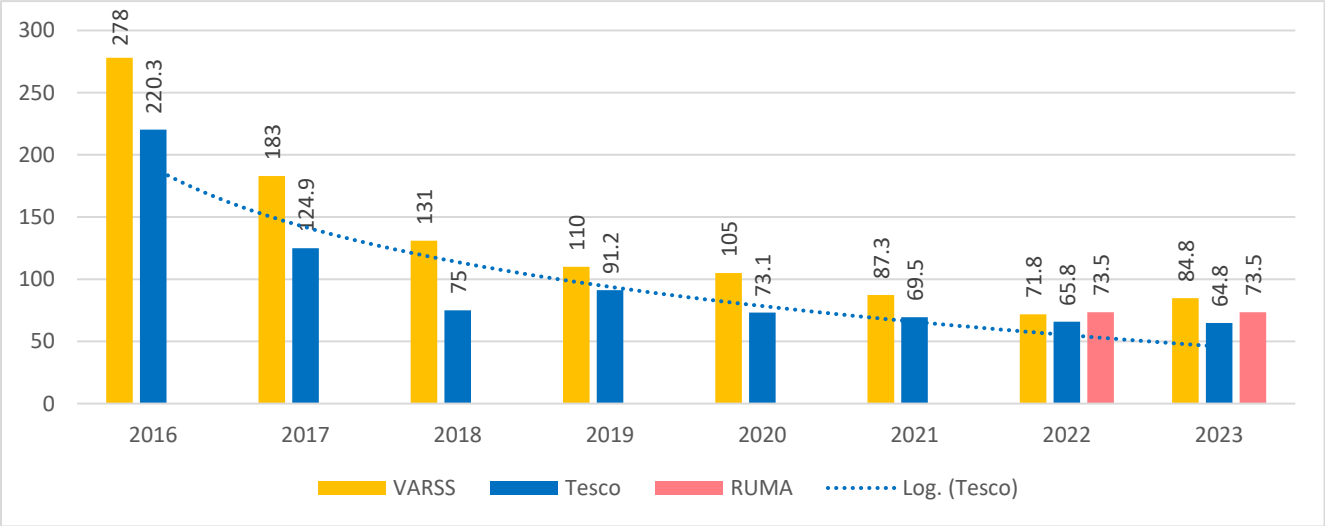
## Pigs

Reporting across the pig sector is differentiated in terms of conventional supply (from UK, Netherlands and Denmark) and continental meats (Spain and Italy). Pork figures are calculated on a quarterly basis, and the figure is a weighted average derived from nationally reported figures and individual farm data. This again totals 100% of Tesco fresh pork production.

For continental pork the figure is reported every 4 weeks (as per poultry).

All Tesco data is presented relative to VARSS equivalent.

**Figure 5: Antibiotic Use (mg/kg) in Pork Supply Base (UK/Denmark/Netherlands) vs reported VARSS Data.**



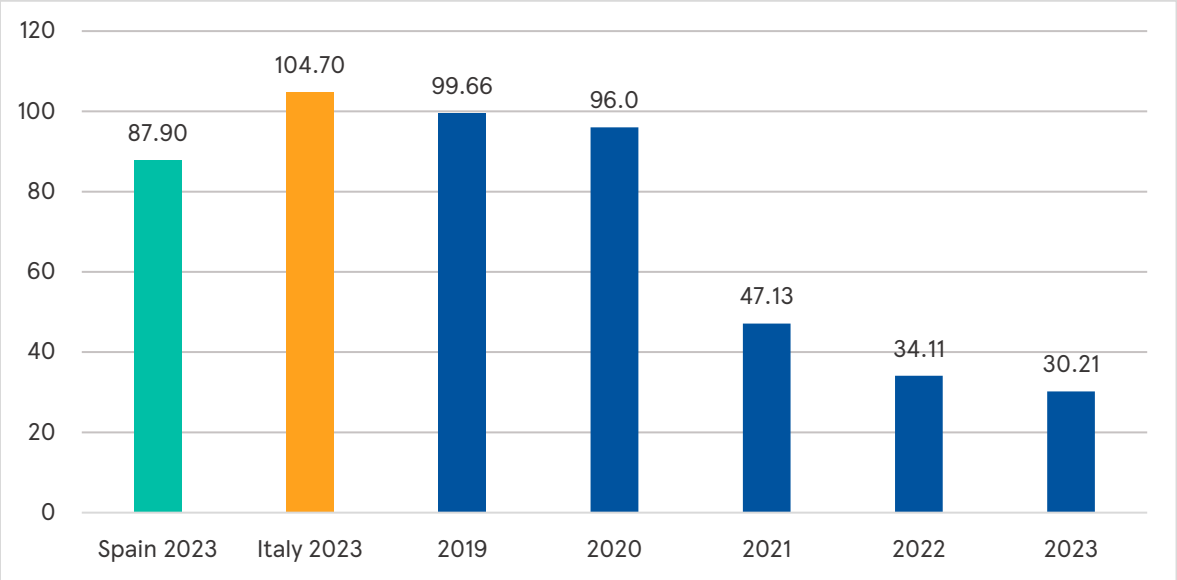

There have been significant reductions across the pig sector (Figure 5) since reporting began. As with the poultry supply chains the data includes submissions from geographies with well-established reporting and reduction strategies (i.e. VetStat in Denmark and MARAN in the Netherlands), which has contributed to the lower initial figure, but again means the greatest reductions have already been achieved and focus is now on patterns of therapeutic prescribing.

Since the 2019 reporting year, we have seen a steady net reduction, with the Tesco supply base for the latest data showing 12% lower usage than the RUMA target of 73.5 mg/kg. This is particularly impressive when UK averages reported by VARSS have increased in 2023, meaning that the average has likely been driven down by low usage in Denmark and the Netherlands (circa 55mg/kg).

Perhaps the most important aspect is that the focus on reducing HPCIA use has been maintained even in the face of complex disease challenges that often need antibiotic treatment having increased. There has been negligible use overall and some suppliers reporting zero use.

There are dedicated Tesco supply chains in Spain and Italy respectively and variances in usage have a proportionally greater net impact due to the smaller farm/pig numbers involved. The net trend in terms of antibiotic use is comparatively stable, after the large reductions initially seen between 2019 and 2022. It has been acknowledged previously that continental pork is potentially challenging given that the Spanish and Italian pig sectors remain two of the highest users of antibiotic for any species/geography as illustrated by the last published European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) reference data. Use across the Tesco continental suppliers is, however, consistently lower than the UK industry average (30.2mg/kg), while HPCIA use also remains low (Figure 6).

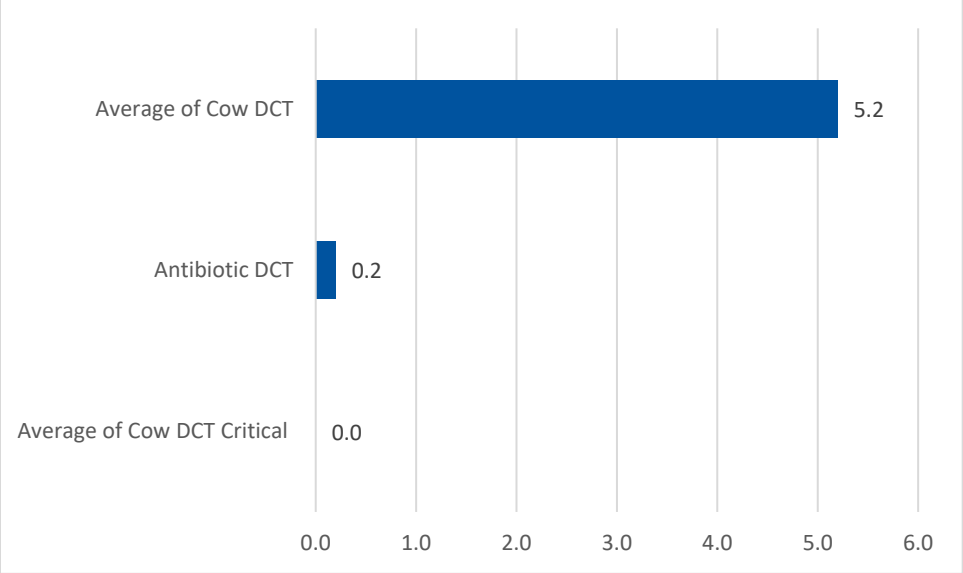
**Figure 6: Antibiotic Use (mg/kg) in Tesco Continental Pork Supply (all) vs ESVAC Data.**



## Dairy

Data from the Tesco Sustainable Dairy Group (TSDG) and Sustainable Cheese Group (TCG) demonstrate that both groups are making strong progress across all key parameters.

**Figure 7: Proportional (%) Dry Cow Therapy and Antibiotic Dry Cow Therapy for TSDG Dairy Cows**




A reduction in antibiotic Dry Cow Therapy (DCT) and proportional increase in selective DCT is indicative of management approaches which are pro-active (preventative) rather than reactive (treatment) strategies. For 2023/24, HPCIA Dry Cow Therapy in the TSDG in has declined to zero treatment occasions being reported from a total of 202,159 head of cattle.

A total of 482 farms have submitted data onto the AHDB Medicine Hub (Figure 8), which is an industry wide online platform to allow farmers to collate, report and compare antibiotic use at individual farm level.

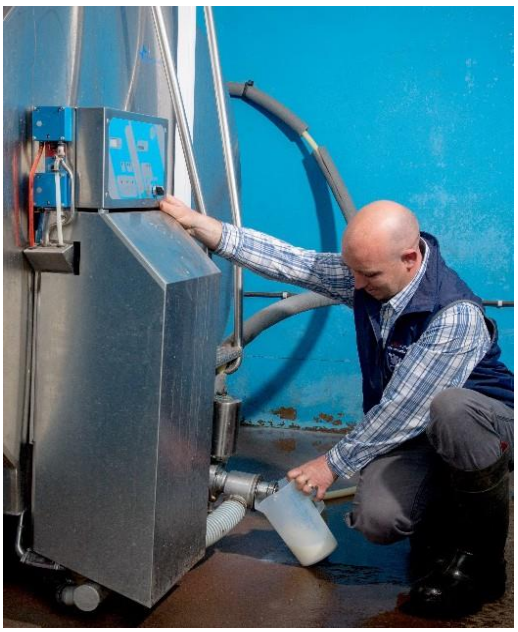
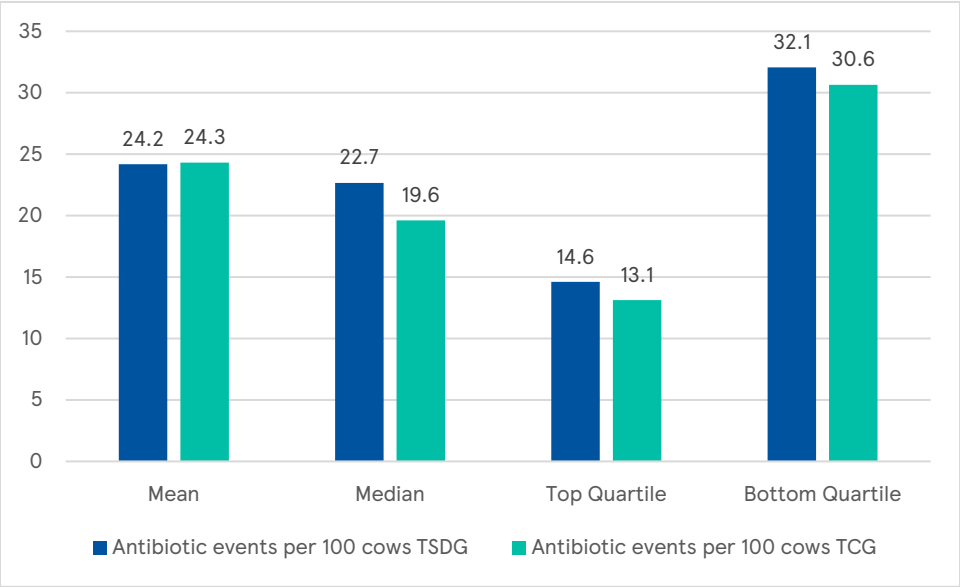


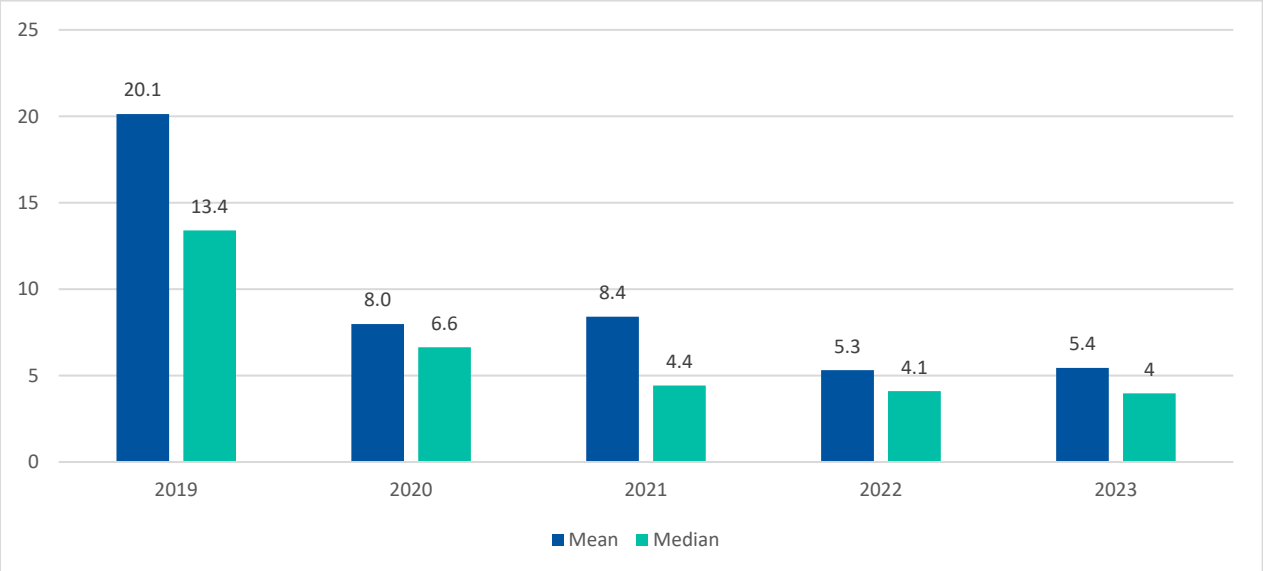
**Figure 8: Annual antibiotic events per 100 cows in the TSDG and TCG.**




## Lamb

Antibiotic usage data collected from the Tesco Sustainable Lamb Group (TSLG) details use across flocks by total antibiotic use (mg/kg PCU) and percentage treatment of neonatal lambs (Figures 9 and 10).

**Figure 9: Antibiotic Reporting (mg/kg PCU) in Tesco Sustainable Lamb Group.**

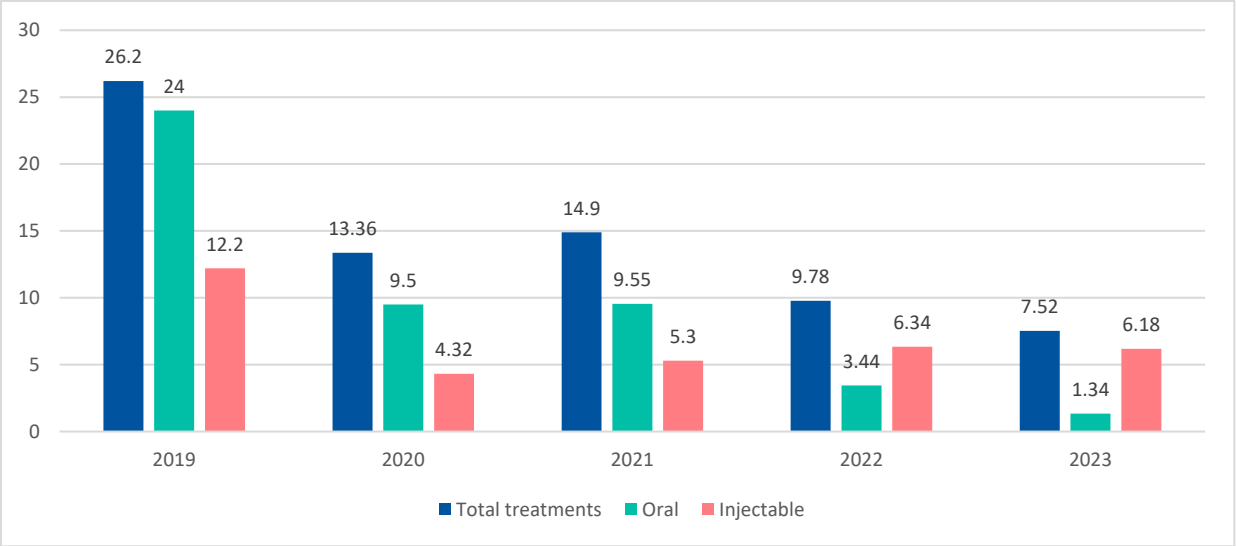



The reporting methodology was amended between the collation of the 2019 and 2020 data sets; moving from a calculation based on antibiotic purchase figures to actual administration figures. The median and range (mean/mode and distribution of outliers) usage is statistically unchanged in 2023. This indicates that the incidence of persistent high usage in a minority of individuals is

declining. Whilst there was a reduction in overall antibiotic use, there were a minority (2.75% of overall antibiotic use) of occasions where the HPCIA macrolide group of medicines were reported in 2023. This likely coincides with a reduction in usage within other antibiotic groups, for example VARSS reported a 56% resistance to tetracycline in their clinical surveillance studies, which typically is a medicine group used for lamb treatment, suggesting that prescribing may have had to move to the HPCIA options.

In neonatal lamb treatments (Figure 10), there has been an overall reduction in total treatments between 2022 and 2023 reporting periods, with treatment levels now approximately 20% of previously reported figure.

**Figure 10: Mean Antibiotic Use (% Total Treatment Days) for Neonatal Lambs.**



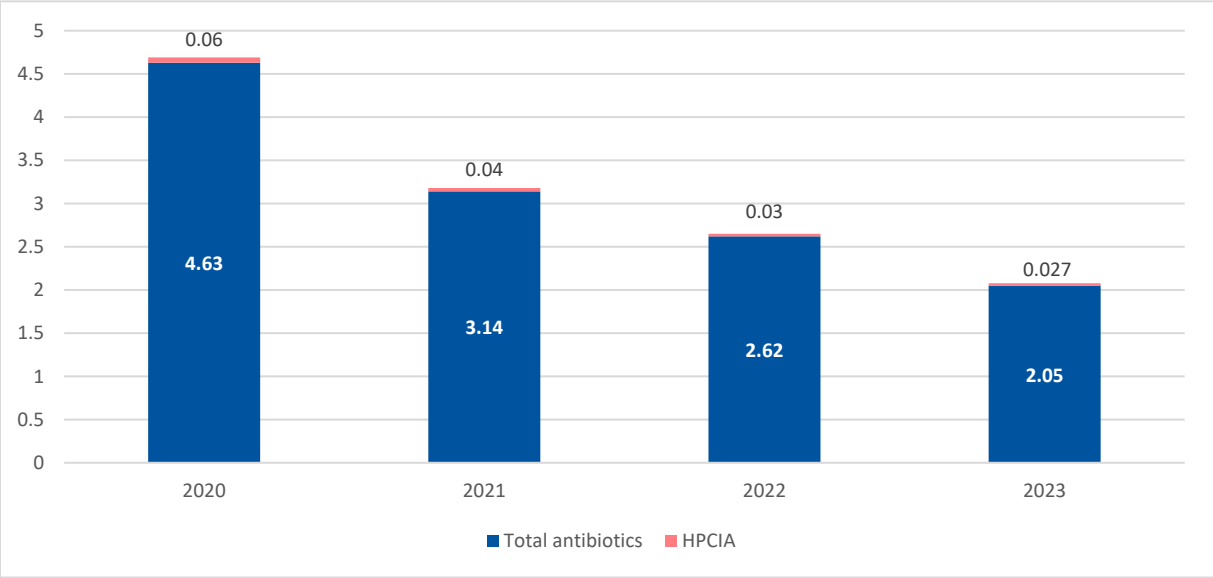

In due course comparative data will be made available from the AHDB Medicine Hub, as a first stage in creating a standardised, centralised reporting mechanism across the ruminant sectors.

## Beef

For the fourth year Tesco has collated reporting figures for the Tesco Sustainable Beef Group (TSBG) (Figure 11). The metric used is consistent with Cattle Health and Welfare Group (CHAWG) methodology and compatible with AHDB Medicines Hub reporting.

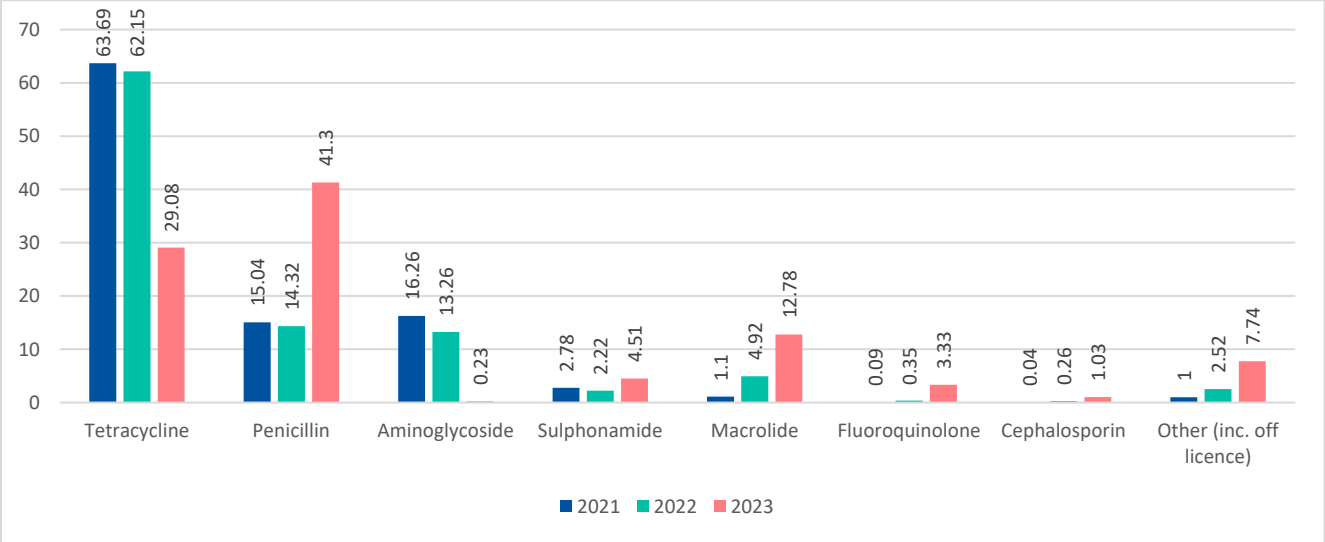
At present, the data set can only be considered in isolation as there is no directly comparable industry figure. However, averages and distribution are quite consistent with the TSLG data set, suggesting that ruminant usage in general may be similar across extensively farmed species in respect of both total amounts (mg/kg PCU) and HPCIA. Total antibiotic use in the TSBG has continued to reduce in 2023.

**Figure 11: Mean Antibiotic Use (mg/kg PCU) for Tesco Sustainable Beef Group.**




Tetracycline is still the predominant treatment choice (Figure 12), but the distribution of product use has shifted with a significant reduction in the use of aminoglycosides in 2023. This mirrors what has been seen across all species groups antibiotic sales figures as reported by VARSS. Conversely, proportionally more HPCIA fluoroquinolone and cephalosporins are documented but these still represent a marginal minority and are reserved for last line treatments (where others have not provided the desired therapeutic outcome).

**Figure 12: Mean Antibiotic Use in Tesco Sustainable Beef Group (% Total Treatment) by Antibiotic Class.**

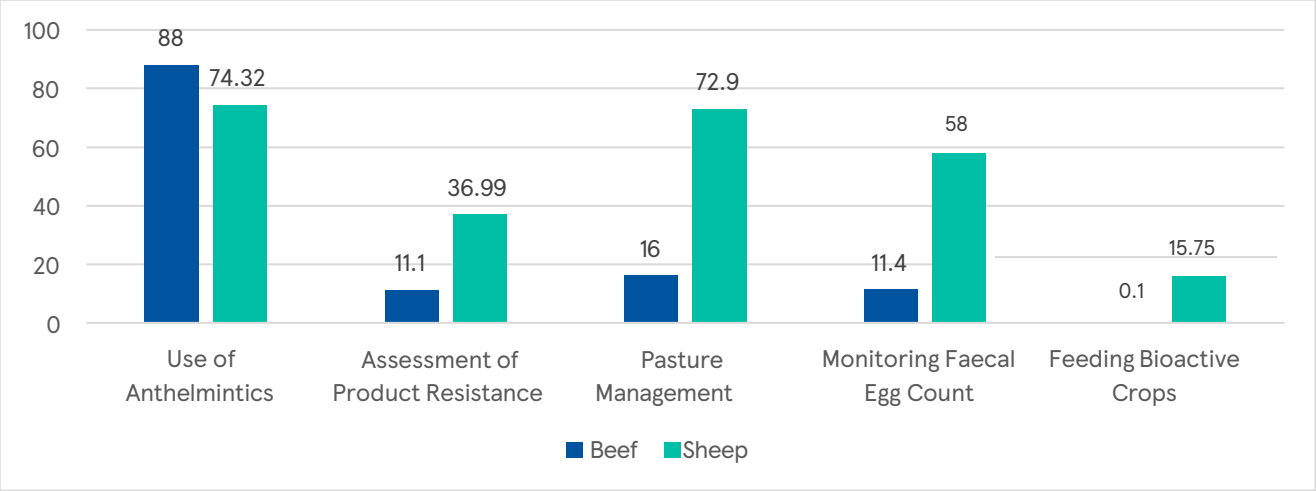



Consistent with both Tesco Antibiotic Commitments and RUMA targets, reporting within the TSLG and TSBG supply chains has also captured extensive data on preventative health programmes, with the majority of producers implementing an integrated strategy comprised of 2 or more different management approaches.

A particular focus has been on endoparasite control because of increasing concerns about the

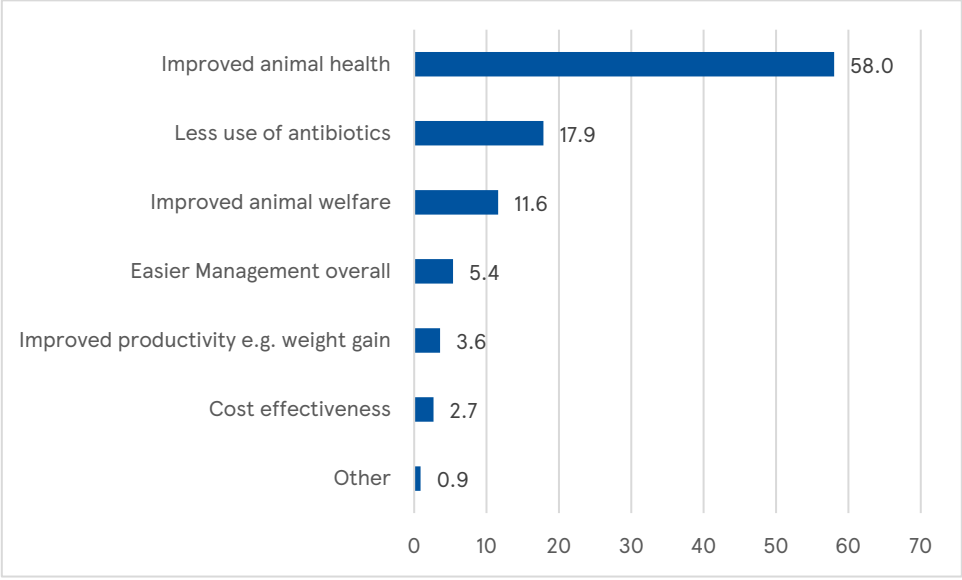
potential for cross-resistance and so integrated approaches using multiple strategies are encouraged (Figure 13). While TSLG producers are arguably more advanced in this respect, it is encouraging to see the range of approaches being adopted by both groups.

**Figure 13: Comparative Approaches to Endoparasite Control in the TSBG and TLSG.**




TSLG members were surveyed to understand their motivations behind treatments, and encouragingly, 17.9% cited reduction of antibiotic use as a key driver to their health management decisions (Figure 14).

**Figure 14: TSLG Producer Motivation for Implementing Preventative Health Strategies (%).**



## Salmonids

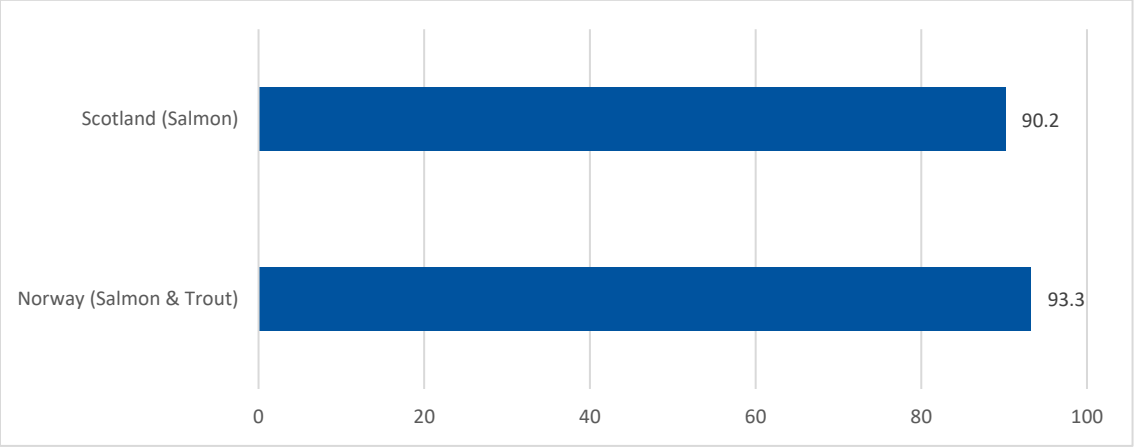
Tesco is conducting an overarching review of data and reporting requirements across its aquaculture supply chains. This is to determine what will add most value over and above existing industry metrics that are already in the public domain. On that basis, and because of significant differences between Norwegian versus UK salmonid (trout & salmon) production, antibiotic use in 2023 is being reported by geography and derived from national reporting systems:

- VARSS (UK)
- NORM-VET (Norway)

The NORM-VET monitoring programme for antimicrobial resistance in the veterinary and food production sectors was established in 2000 and is coordinated by the Norwegian Veterinary Institute and collates prescribing and sales data across all livestock and companion animal species.

In Norway, for Atlantic salmon and rainbow trout, fish in 3.3% of the on-grower locations were given antibacterial treatment in 2023, i.e. over 96% of production received no antibiotic treatment in this period. Sales and treatment occasion data show a total usage figure of 0.34mg/Kg PCU for Norwegian Salmonid production in 2023. VARSS data indicated that antibiotic use across the UK salmon industry increased by 1.4mg/kg in 2023 to an average of 19.9 mg/kg, with over 90.2% of marine farms reporting no antibiotic treatments in 2023 (Figure 15). There were no HPCIAs used in 2023.

**Figure 15: Proportion of Marine Production reporting no Antibiotic Use by geography (%).**




In 2021, a significant increase was recorded in the trout sector, where usage jumped from 8.9 mg/kg to 44.1 in 2022 (VARSS). The increase was attributed to diagnosis and appropriate treatment of an outbreak of *Aeromonas salmonicida* on a small number of production sites; given the limited nature of trout production in the UK any significant disease condition necessitating treatment has a pronounced effect on industry averages. In 2023, VARRS reported a reduction to 6.9 mg/kg, which is less than the RUMA trout target of usage below 20 mg/kg.

There has been no reported antibiotic use across pangasius or shrimp supply chains.

## Summary

In all instances it should be noted that Tesco places overarching importance on the need for suppliers to demonstrate that antibiotic therapy is not to be used at the expense of sound management practice. This is evidenced through a range of approaches including review of company Veterinary Health Plans, company policy documents, medicine records (to identify patterns that could be considered consistent with poor husbandry) and Food Chain Information (FCI) disclosures. Tesco works with producers through a programme of supplier reviews to support intervention strategies aimed at delivering reductions in antimicrobial use, where this can be applied in a responsible manner and without compromising animal health and welfare.