# **QS-Report** Meat and Meat Products 01/2019













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#### **Editorial**

Dear readers,

Since April 2019, the German "big players" in food retail rely on a common four-level farming system labelling. We talked to Christof Mross, Managing Director Purchasing Food at Lidl, about the new label.

QS has now developed a supporting document for assisting abattoirs and food processing companies in determining the risk of occurrence of listeria and reduce it accordingly. Read more about this on page 3.

This issue of the QS-Report also includes a supplement with exciting facts and figures on scheme participants, audits, sanction procedures and monitoring programmes for the year 2018.

We hope you enjoy it! Your QS-Team



## Farming system labelling

#### QS is the benchmark for the first stage

Since April 1, 2019, the food retail companies ALDI Nord, ALDI Süd, EDEKA, Kaufland, Lidl, Netto Marken-Discount, PENNY and REWE are labelling their meat according to the system "Haltungsform". In this way, the retailers are now establishing a consistent, cross-company framework that provides clarity about how the animals, from which the meat originated, were kept.

The "Haltungsform" (farming system) label is not a new animal welfare label but, in view of the variety of existing quality and animal welfare labels, it creates the transparency desired by consumers with regards to the farming system for cattle, pigs, chickens and turkeys. For level 1 "Stallhaltung" (sty farming), it is required to have the approval in the QS scheme – for pigs

Haltungsform

1 2 3 4 2 3 4 1 2 3 4

Stallhaltung
haltungsform.de
haltungsform.de
haltungsform.de
haltungsform.de
haltungsform.de
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haltungsform.de

The 4 levels of the labelling system "Haltungsform"

and poultry this requirement is to apply immediately, for cattle it is to apply from January 2020. Level 2 "Stallhaltung plus" (sty farming plus) corresponds to the current requirements of the Initiative Tierwohl (Animal Welfare Initiative, ITW for its initials in German). Level 3 "Außenklima" (outdoor climate) requires, among others, even more space and contact with fresh air. Level 4 "Premium" corresponds to

a significantly higher level of animal welfare. Meat from organic livestock is generally assigned to level 4.

#### COMPLIANCE WITH LEGAL MINI-MUM STANDARDS IS NOT ENOUGH

An approval in the QS scheme is a precondition for level 1. Fulfilling the legal minimum standards is not enough. Participation in the monitoring programmes organized by QS is also decisive. The monitoring programmes for feed, salmonella and antibiotics identify and monitor important indicators. For the assessment of animal health and animal welfare in the sties, all slaughter findings are evaluated by QS and the results are transmitted to the livestock owners.

#### UNIFORM ANIMAL WELFARE LABEL-LING - LIDL ALSO CHANGES OVER

In 2018, several food retailers had opted for their own farming system labels. Thanks to the common labelling system, the previously different labels of every food retail company will now be converted into a uniform form. Lidl was the first German retailer to publish its own farming system label. By participating in the new "Haltungsform", the company is now transferring its farming system labelling, which has been successfully introduced on the market, to the uniform system. "As a founding member of the ITW, which was successfully launched in 2015 under the coordination of QS Qualität und Sicherheit GmbH and has meanwhile established itself very well on the market, Lidl is participating in the joint development of the farming system labelling by the retail trade. This enables us to offer consumers more transparency and uniformity in the labelling of fresh meat," explains Christof Mross, Managing Director Food Purchasing at Lidl Deutschland. "Since the farming system labelling alone does not raise animal wel-

fare standards, we have already set ourselves concrete goals for a more animal welfare-oriented product range with the introduction of the Lidl farming system compass last year. In our stores, customers can already find every second meat product on level 2 "sty farming plus" or higher. In the long term, we plan to establish level 2 as the Lidl minimum standard for our fresh meatrange," Mross continues.

## ALLOCATION TO THE UNIFORM FARMING SYSTEM LARFILING

The allocation to the levels 1 to 4 of the farming system labelling is carried out by the Gesellschaft zur Förderung des Tierwohls in der Nutztierhaltung mbH (Society for the Promotion of Animal Welfare in Animal Husbandry mbH), which is also responsible for the Animal Welfare Initiative of the industry. This company publishes the requirement profiles for the stages and assigns individual programmes to the respective level of the farming system at the request of a participating food retailer. QS supports the ITW in the management of the business with the organisation of audits and data management.

## QS antibiotics monitoring

#### Antibiotics usage in pigs and poultry continues to decrease

The veterinarians and livestock owners in the QS scheme apply antibiotics responsibly. This is confirmed by the current figures from the QS antibiotics monitoring: the amount of antibiotics administered in pigs and poultry farms has further decreased for almost all groups of active substances and particularly for critical antibiotics.

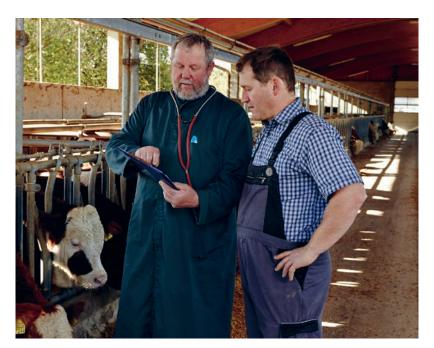
Reviewing the last data obtained from the QS antibiotics monitoring, the total amount of antibiotics used in the 29,864 pig and 3,184 poultry QS farms is 4.8 percent lower than in the previous year, at close to 464 tonnes. The use of critical antibiotics has also significantly decreased. This contrasts with the accusation

expressed by some experts that veterinary medicine has switched from classical active ingredients with a larger volume to more modern, highly effective and low-dose active ingredients.

Thomas May, responsible for the QS antibiotics monitoring, comments: "The current evaluation shows that the administration of so-called reserve antibiotics in livestock farming remains very cautious. While in 2017 still 0.4 tons of cephalosporins of the 3rd and 4th generation were administered, the figure is now around 30 percent lower at 0.28 tonnes. The same applies for the consumption of fluoroquinolones, which decreased almost 20 percent, going from 4.75 tons to 3.81 tonnes in 2018."

# Participation in antibiotic monitoring becomes more concrete for cattle farms

The QS Antibiotics Working Group is currently discussing the feasibility of collecting the data on antibiotics use in cattle. The Antibiotics Monitoring Coordination Committee considers it would be meaningful to integrate the beef sector into the antibiotics monitoring of the QS scheme. The Federal Association of Practicing Veterinarians (Bundesverband für praktizierende Tierärzte) points out that based on the German Medicines Act (Arzneimittelgesetzes, AMG for its initials in German), an obligation to report the use of antibiotics in dairy farms could be possible. At present, the QS scheme is mandatory for the registration of antibiotics in fattening calves; around 900 beef cattle farmers are already using the QS database out of their own interest to record and forward the information to the HIT database. The aim is to record all antibiotics in all cattle in a central database. The next step will be an exchange between experts from cattle farming and veterinarians, to jointly develop a concept.



## Survey: Legal changes contributed to further sensitization in antibiotics' use

An evaluation of the reduction of antibiotics carried out on behalf of the German Federal Ministry of Food and Agriculture, as part of the implementation of the 16th amendment to the German Medicines Act (AMG), reveals the measures that were preferentially implemented. Most veterinarians and livestock owners stated that the amendment had helped them to become more aware of the use of antibiotics. The most frequent measures mentioned were the increased use of vaccination, further optimisation of husbandry conditions and the implementation of additional hygiene measures. The respondents were critical of the non-binding nature of the active days (duration of use), as well as the calculation of the therapy frequency and the associated regular obligation for 25 % of all farms to elaborate a plan of measures to reduce the use of antibiotics.

## Monitoring of diagnostic data

# Reporting of diagnostic data in poultry extended

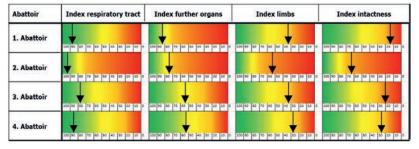
Since January 1, 2018, all poultry abattoirs in the QS scheme report the official ante-mortem and post-mortem inspections to the QS diagnostic data database. With effect from 1 March 2019, QS added two new indicators to the requirements for reporting diagnostic data in poultry slaughtering.

The Guideline Diagnostic Data in Poultry Slaughtering newly includes the report of discarded animals (with main reasons for discarding) and of breast skin changes in turkey cocks. Specifications for the operation of the camera systems were also defined. Sample images for different degrees of foot pad changes for chickens and turkeys were included in the guideline (stating the level or score), to improve the comparability of the results. As part of the revision, the abattoirs were requested to supplement the data already recorded in the poultry diagnostics database for 2019 with the new findings and to transfer them. As of 1 July 2019, only data records containing the complete information on the new findings will be accepted in the database.

# Animal health index for pigs: presentation of results in information letter optimised

The next calculation of the Animal Health Index (AHI) will be carried out in May 2019. The information letter sent by the coordinators to the pig farmers will contain an additional graphic representation, which will enable the livestock owners to classify the slaughter diagnostic data for their farm even more

easily and quickly (see figure). If the black arrow appears in the green area, everything is OK; if it is in the yellow or red area, the livestock owner should check in consultation with the farm veterinarian whether the animals have possible illnesses or, for example, there are deficits in feeding or stable management.



Optimized representation of the four sub-indices

## Tough opponent: Listeria monocytogenes

## QS offers supporting document for listeria prevention

QS has developed a supporting document for abattoirs, deboning and processing companies to determine the risk of the occurrence of *L. monocytogenes*. It shows how the risk of Listeria entry can be assessed on the basis of products, processes and structural conditions by means of a systematic self-assessment and, if necessary, reduced. It also provides recommendations and practical examples, which serve as a basis for adjustments in the event of identified risks or positive results.

Tastes good, smells good, looks good but even if nothing unusual can be externally noticed on the sausage on the bun, it may still contain bacteria that can pose a serious health hazard. Listeria monocytogenes is a particularly treacherous species. Food businesses are responsible for avoiding the contamination of their products with this pathogen. L. monocytogenes occurs almost everywhere in nature: in the soil, in water and on plants. The bacterium is very resistant, not very demanding and can multiply in a temperature range from -2 °C to 45 °C - thus also at refrigerator temperatures. The bacteria possess the ability to multiply in an oxygen-con-



taining atmosphere, as well as in the absence of oxygen. They even survive freezing and drying relatively well. Due to these properties experts call it "persistence" – *L. monocytogenes* belong to the so-called "niche organisms". In food production companies, they are regarded as particularly tough opponents.

## L. MONOCYTOGENES ARE THE MAIN SOURCE OF CONTAMINATION

A study by the European Food Safety Authority (EFSA) shows that more than 90 percent of human listeria infections (listeriosis) were caused by ready-toeat foods. Meat and meat products are the second most common cause of listeriosis after fish and fishery products. The persistence of *L. monocytogenes* remains the most important factor for contamination of ready-to-eat foods. The causes are insufficient hygiene conditions on the one hand, and the bacterium's high ability to adapt to physical and chemical factors on the other. Under certain circumstances, listeria can even form biofilms. This protection enables the bacterium to survive for longer periods of time. In practice, it is therefore important to consider all possible sources of entry in the value chain, in order to identify potential risks and contain them as early as possible.

QS scheme participants can download the supporting document listeria prevention in the Partner section of the QS website. All other interested persons can now order it via a form on the QS website: https://www.q-s.de/arbeitshilfe-listerien. Please note that the supporting document is only available in German.

## **QS Science Funds**

#### Online platform for farm-specific risk assessment of African Swine Fever

The QS Science Funds is currently funding a research project at the University of Vechta, in which an online tool for the single farm risk assessment on the entry risk of animal disease pathogens, particularly the African Swine Fever (ASF), should be developed.

Pig farmers must protect their herds against the introduction of animal diseases. The basis for a high level of biosecurity is the consistent compliance with the hygiene regulation for pig farming. In view of the current epidemiologic trend of ASF, it is extremely important that pig farms take all necessary biosecurity precautions to minimise the risk of entry. As early as 2018, the University of Vechta, together with experts from the poultry industry and also supported by the QS Science Fund, developed an online tool for assessing the risk of avian influenza, the "AI risk traffic light". Based on these findings and experiences as well as the nationwide success of the online tool, an online platform for the ASP risk in pig farms is currently being developed.

In the future, farmers will be able to use this online tool free of charge. By means of an online questionnaire, they receive an evaluation displayed in the form of a traffic light and containing a risk assessment of their farm. Additionally, an analysis of the identified risk factors shows the animal owner optimisation approaches and offers them a to-do list for download. Of course, everything can be used anonymously. In principle, risk assessment and suggestions for improvement

serve to reduce the risk of ASP entering the company. Moreover, they can also be used for preventing the spread of other stockthreatening diseases. The preparation of the questions and the evaluation of the epidemi-



ological risk factors of ASP pathogens were carried out within the framework of a Delphi study with the participation of a nationwide panel of experts from research, science, private sector, as well as agricultural and veterinary practice. The results will be presented at a symposium in Osnabrück in June of this year. You can register under the following link: www.transformationsforschung-agrar.de

## News in brief

#### SIMPLIFICATION FOR COMPOUND FEED PRODUCERS: KAT **RECOGNIZES OS AUDITS**

QS-certified compound feed producers are now able to supply laying hen feed to farmers on the basis of their QS eligibility of delivery. An additional KAT certification audit is no longer required. This has been agreed by QS and the Verein

für kontrollierte alternative Tierhaltungsformen e.V. (Association for Controlled Alternative Animal Husbandry, KAT for its initials in German). QS-certified compound feed producers who wish to make use of this possibility sign a license agreement with KAT and en-



ter their request for recognition in the QS database. For this purpose they log into the QS database, select the relevant location and tick the "Participation in KAT" box under the "Recognitions" tab.

www.q-s.de

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**Imprint Editor:** 

#### **UNANNOUNCED AUDITS NOW ALSO** IN GMP+

GMP+ Int. has recently informed about the decision to impose unannounced audits. Accordingly, GMP+ certified feed producers based in Europe will have to carry out unannounced audits in future. In order to have a smooth implementation the following deadlines have been set: the unannounced surveillance audit must be set no later than 31 December 2019 in the certification agreement between certifica-

tion bodies and manufacturers based in Germany. For the rest of Europe the deadline is



31.12.2020. QS emphatically welcomes the step taken by GMP+ International. "This reinforces the high standards of the audits, which QS has been successfully relying on for several years," emphasizes Claudia Brill, responsible for the feed sector at QS. "In the past, the different handling of unannounced audits in the two systems led to market differences, which are now being eliminated."

#### STORAGE OF MEAT AND MEAT PRODUCTS - OS ELIGIBILITY OF **DELIVERY REQUIRED SINCE JANUARY**

Since the beginning of 2019, the companies that store QS meat and meat products on behalf of other companies must have a QS eligibility of delivery in the QS database. There are two options available to obtain it:

- 1. QS certification according to the standard "Storage of meat and meat products."
- 2. Participation via a recognised standard with comparable requirements for the storage of meat and meat products (IFS Food, IFS Logistics,IFSWholesale/Cash&Carryand BRC Storage & Distribution).

In the second case, the recognition takes place via a certification body, with which the companies conclude a declaration of participation. Therefore, the storage companies register in the QS database and select a certification body. After the company has sent the signed declaration of participation to the certification body, it enters the duration of the correspondingly recognised certificate in the QS database. The company is entitled to store meat and meat products in the QS scheme until the end of the certificate validity.

# QS. Ihr Prüfsystem für Lebensmittel.

# Facts, Figures, Data 2018

## **Meat and Meat Products**





## Feed monitoring

Year-on-year analysis results of undesirable substances

**100** % of the German compound feed production is included in the QS scheme as well as a further **9,773 farms** in the fields of feed material production, trade, transport and storage.

		2016			2017			2018		Tre	end
Parameter	Number of analyses	Value above de- tection/ determi- nation limit	Values ≥ 50 % of the stric- test limit value	Number of analyses	Value above de- tection/ determi- nation limit	Values ≥ 50 % of the stric- test limit value	Number of analyses	Value above de- tection/ determi- nation limit	Values ≥ 50 % of the stric- test limit value	Value above de- tection/ determi- nation limit	Values ≥ 50 % of the stric- test limit value
Dioxine	4,455	87.21%	4.50%	4,642	90.41%	4.62%	4,234	86.35%	4.18%		
dl PCB	4,237	85.58%	3.78%	4,497	89.44%	5.40%	4,101	85.49%	4.51%		
Total of dioxin and dl PCB	1,911	89.48%	1.70%	2,073	89.77%	4.35%	1,830	88.80%	2.28%		⊜
ndl PCB	3,726	68.92%	1.44%	4,285	75.03%	1.65%	3,704	76.65%	1.48%	+	
Arsen	5,856	31.75%	21.30%	6,341	30.83%	20.87%	5,607	31.50%	20.89%		
Lead	5,931	46.03%	9.23%	6,379	45.27%	9.07%	5,662	44.58%	8.16%	Θ	Θ
Cadmium	5,933	64.92%	4.67%	6,378	65.27%	4.28%	5,656	67.36%	4.02%	+	Θ
Mercury	5,858	7.34%	11.86%	6,341	7.00%	11.26%	5,600	6.93%	8.51%	Θ	Θ
Salmonella*	10,114	0.07%	- ! -	10,472	0.23%	-	9,739	0.18%	- -		-
AwS <sup>a</sup> *	870	0.57%	-	970	0.62%	-	827	3.02%	-	<b>(+)</b>	-
Pirimiphos- methyl (PPP) <sup>b</sup>	4,651	13.24%	99.84%	4,974	10.55%	100.00%	4,593	11.06%	100.00%		<b>=</b>
Chlorpyrifos- methyl (PPP) <sup>b</sup>	4,651	3.23%	63.33%	4,974	2.92%	67.59%	4,593	2.66%	54.92%	Θ	Θ

<sup>\*</sup>only positive/negative results

a Antibiotically active substances b Plant protection product





## Current number of scheme participants

Stage	Total	Germany	Other y countries	
	105,005	93,872	11,133	
Feed sector	4,474	3,350	1,124	
- feed material production1,2	1,311	978	333	
- compound feed production <sup>3</sup>	1,362	932	430	
- trade, transport, storage <sup>4</sup>	1,801	1,440	361	
Agricultural production	72,397	63,606	8,791	
- cattle farming <sup>5</sup>	30,578	30,558	20	
- pig farming <sup>6</sup>	36,183	29,864	6,319	
- poultry farming/hatcheries	5,636	3,184	2,452	
Livestock transport	1,974	1,533	441	
Slaughtering/deboning	453	313	140	
Processing <sup>7</sup>	478	399	79	
Food retail <sup>8</sup>	25,229	24,671	558	

- 1 Further 608 companies eligible to deliver due to GMP+ certification
- 2 Including 188 additive and premix producers
- 3 Including 533 mobile feed milling and mixing plants
- 4 Further 6,002 companies eligible to deliver due to GMP+ certification;51 companies eligible to deliver due to GTP certification
- 5 Further 43,531 companies eligible to deliver slaughter cows due to QM-milk auditing
- 6 Further 7,960 QSG companies (DK) with eligibility of delivery due to bilateral agreement
- 7 Including 94 butchery companies
- 8 Including 156 meat wholesale companies, 161 storage of meat and meat products companies and 174 food retail warehouses

**12** % of the **72,397 cattle**, **pig and** poultry farms eligible to deliver into the QS scheme come from neighbouring European countries.

**1.57 million samples** were tested in the QS salmonella monitoring by 29 QS accredited laboratories in 2018.



Switzerland

95 abattoirs transferred diagnostic data from 48 million slaughter pigs into the QS database in 2018.



Approximately **8** million products with the **QS** certification mark end up in consumers' shopping carts every day.

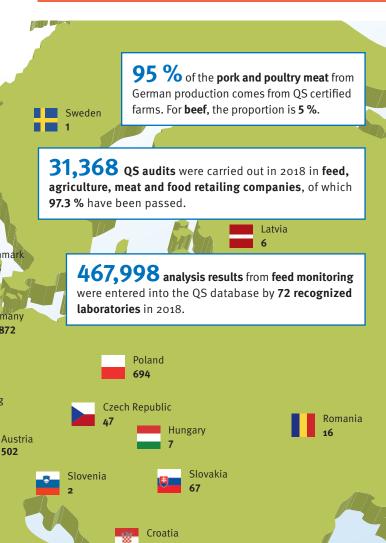


## Sanction procedures

## Common causes for sanction procedures

	2018 (previous year)	
Total sanction procedures	289 (480)	
Agriculture - Cattle - Pig - Poultry	219 (389) 84 (291) 126 (95) 9 (12)	
Feed sector	12 (18)	_
Agricultural coordinators	1 (0)	
Slaughtering/deboning, Meat wholesale	5 (6)	
Food retail	49 (42)	
Hatchery	1 (2)	-

- Veterinary stock care
- Conduct of self-assessment
- Insufficient documentation of medication
- Space allowances (Overcrowding)
- Insufficient calf farming
- Animal health status
- Conduct of feed monitoring
- Lack of management reviews
- Implementation of residue control program not adhered to
- Traceability not ensured
- Labelling of QS goods
- Temperature recording and monitoring
- Observation of best-before date and use-by date
- Animal welfare violations during selection and emergency killing





Stage	Regular audits	Of which not passed		
Total	29,206	792 (2.7%)		
Coordinators	99	2 (2.0%)		
Feed sector <sup>a</sup>	1,366	35 (2.6%)		
Agriculture Cattle farming Pig farming Poultry farming Poultry farming (adult breeding)	<b>22,554</b> 8,298 10,812 2,874 570	347 (1.5%) 179 (2.2%) 145 (1.3%) 12 (0.4%) 11 (1.9%)		
Hatchery	52	1 (1.9%)		
Livestock transport	495	8 (1.6%)		
Slaughtering/deboning	249	7 (2.8%)		
Processing <sup>b</sup>	244	2 (0.8%)		
Meat wholesale <sup>c</sup>	208	2 (1.0%)		
Food retail	3,939	388 (9.9%)		

- a of which 389 inspections small scale feed material producers and mobile feed miling and mixing plants
- b of which 49 audits butchery
- c of which 36 audits combination meat and FVP wholesale (central storage), of which 1 not passed

372 auditors and 27 certification bodies are currently trained and approved for auditing.

863 QS audits were not passed in 2018, 289 cases were considered by the sanction board. This imposed sanction penalties amounting to 217,600 €.



## Audits of special purpose

In addition to the regular audits, QS carries out unannounced audits of special purpose - especially in suspicious situations and with concrete information on violations of QS requirements. In 2018, **74** special audits were carried out in the meat and meat products supply chain.

## Event and crisis management

QS actively supports its scheme participants in coping with incidents and crises - on an operational and communicative level. For this purpose, QS determines the facts of the case, monitors the flow of goods and informs the economic operators. In 2018, the event and crisis management in the QS scheme was confronted with **54** cases. These cases were brought to QS by scheme participants, third parties or the media. **15** cases were classified as so-called incidents\*. **7** of the 15 incidents concerned animal welfare.

\*The incident has relevance to the QS scheme. Other QS scheme participants or the QS scheme as a whole (reputation) may also be affected. The authorities have been informed and measures by the authorities are imminent or have already been initiated.

Stage	Number of audits	Of which not passed
Total	74	23 (31.1%)
Feed sector <sup>a</sup>	3	-
Agriculture Cattle farming Pig farming Poultry	<b>52</b> 16 30 6	17 (32.7%) 7 (43.8%) 9 (30.0%) 1 (16.7%))
Slaughtering/Deboning	6	1 (16.7%)
Processing	2ª	1 (50.0%)
Meat wholsesale	2 <sup>b</sup>	1 (50.0%)
Retail	9	3 (33.3%)

a of which 1 audit butchery, of which 1 not passed

b of which 2 audits combination meat and FVP wholesale (central storage), of which 1 not passed

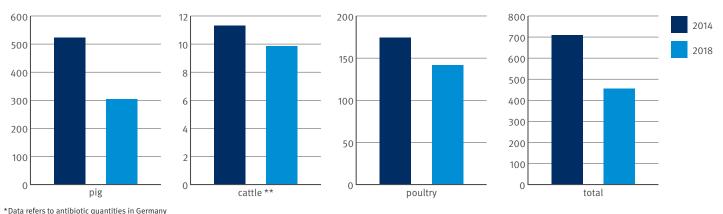


# **Antibiotics monitoring**

The antibiotic quantities are recorded by **2,484** domestic and **142** foreign veterinarians from **14** nations. For this purpose, **606** domestic and **697** foreign preparations are stored in the QS antibiotics database.

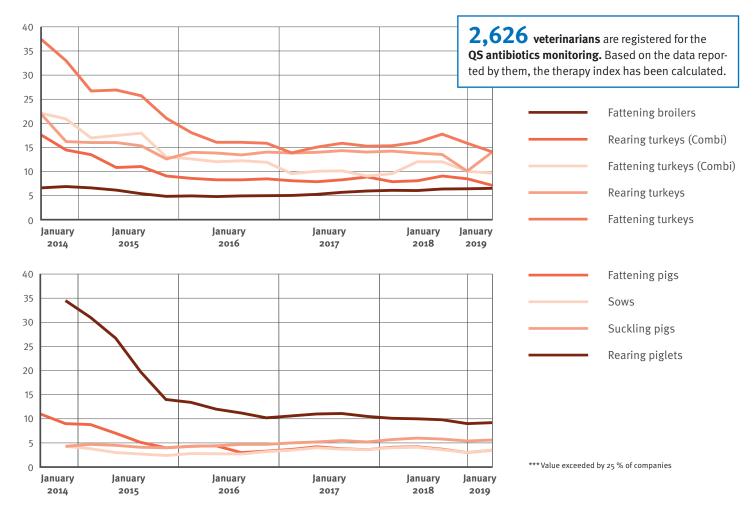
Since 2014, the **amount of antibiotics** used in the QS scheme has been **reduced** by **35.7 %**. The largest decrease was in pig farming with **41.9** %.

## Comparison of the antibiotic quantities (in tonnes) used in 2014 and 2018\*



<sup>\*</sup>Data refers to antibiotic quantities in German

## Development of the QS therapy indices poultry and pig (3rd quartile)\*\*\*



<sup>\*\*</sup>includes data for the 2nd half of each year