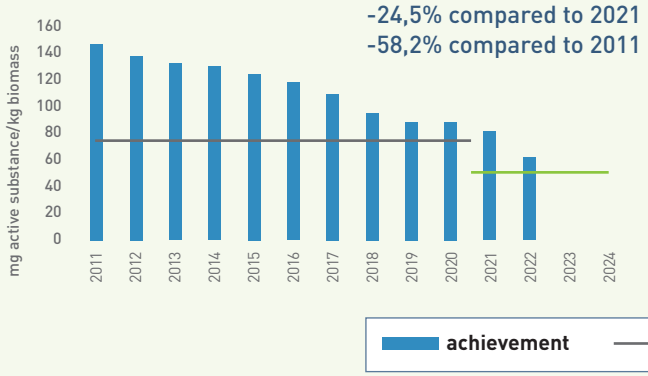
ANTIBIOTIC USE IN ANIMALS IN BELGIUM IN 2022

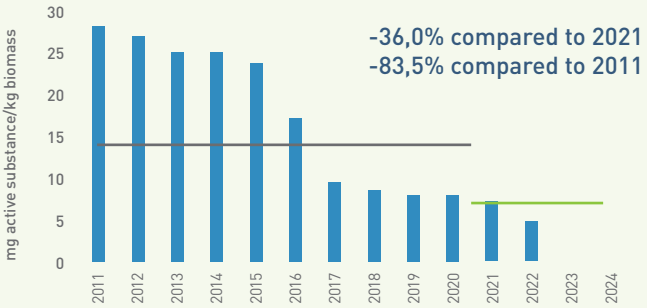
EVOLUTION IN THE SALES OF ANTIBIOTICS (2011-2022) *

1 A 65% reduction in total antibiotic use compared to 2011

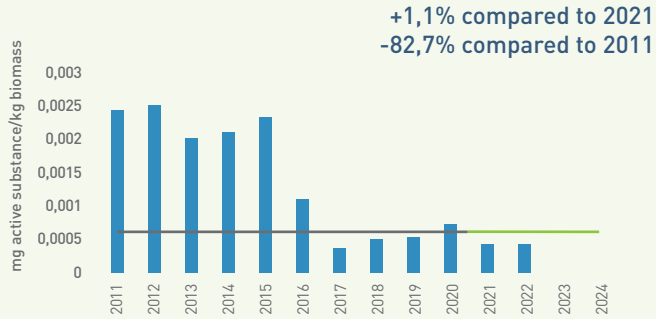


2 A maximum use of colistin of 1 mg/kg (biomass)

3 A 75% reduction of medicated feed with antibiotics compared to 2011

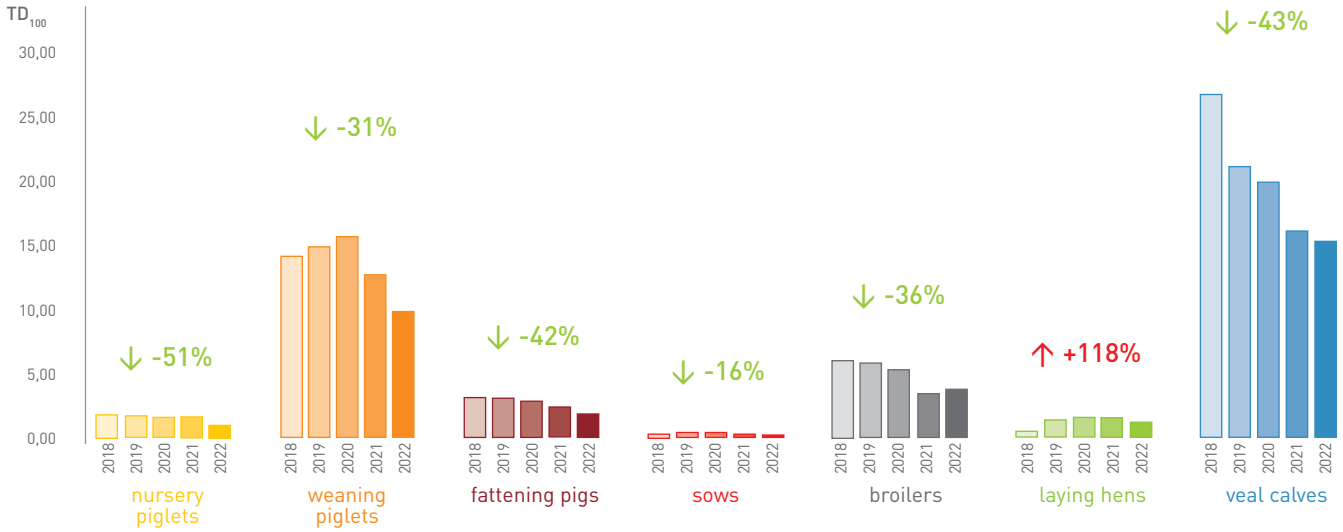


4 To maintain at least annually the already obtained 75% reduction compared to 2011 for the use of critically important antibiotics



** Sales figures include all animal species and are collected at the level of Belgian distributors and compound feed manufacturers. Pursuant to European Regulation 2019/6, as of 2022, veterinary medicines can be purchased from distributors from other European Member States. These sales figures are not included in the current figures.*

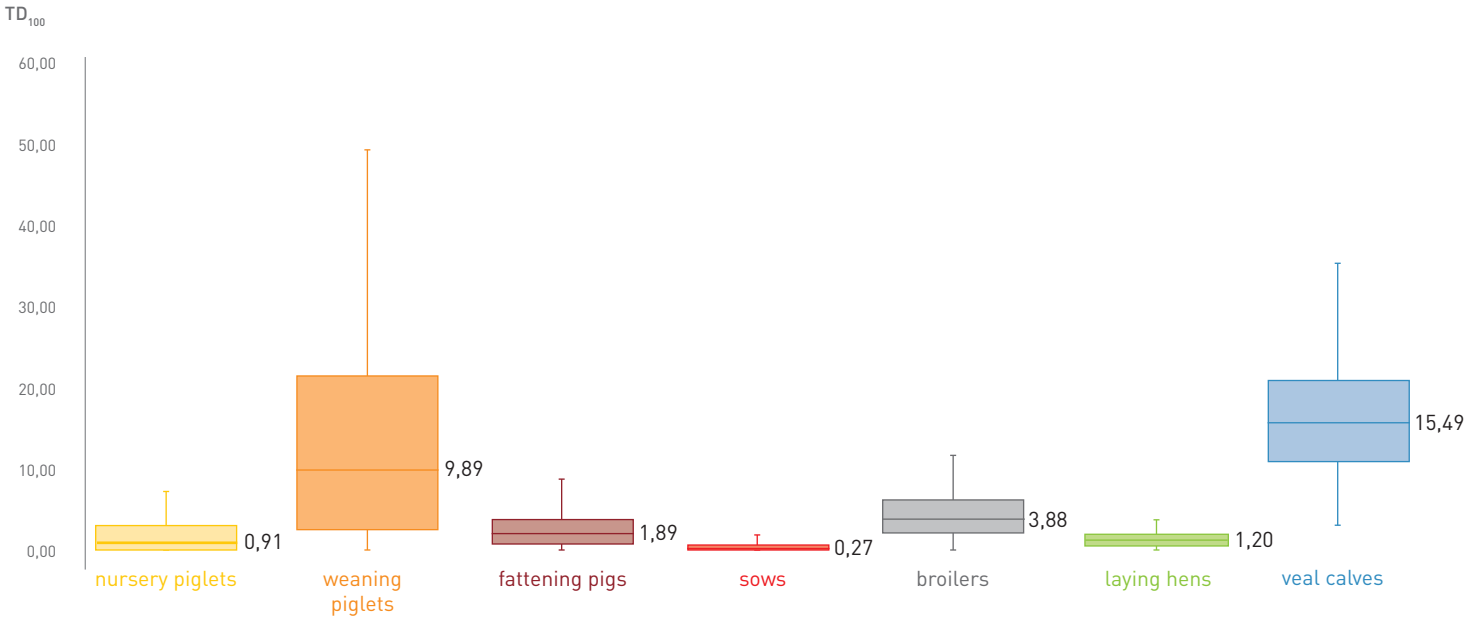
EVOLUTION IN THE USE OF ANTIBIOTICS PER ANIMAL CATEGORY (2018-2022)



Results are based on records of AB-use in Sanitel-Med for the animal categories currently required by legislation. The numbers shown per year are the median TD_{100} in the annual benchmark groups of each animal category (farms with zero use of antibiotics were removed from the analysis). The percentage shown above each animal category is the difference between the median TD_{100} in 2022 and the median TD_{100} in 2018.

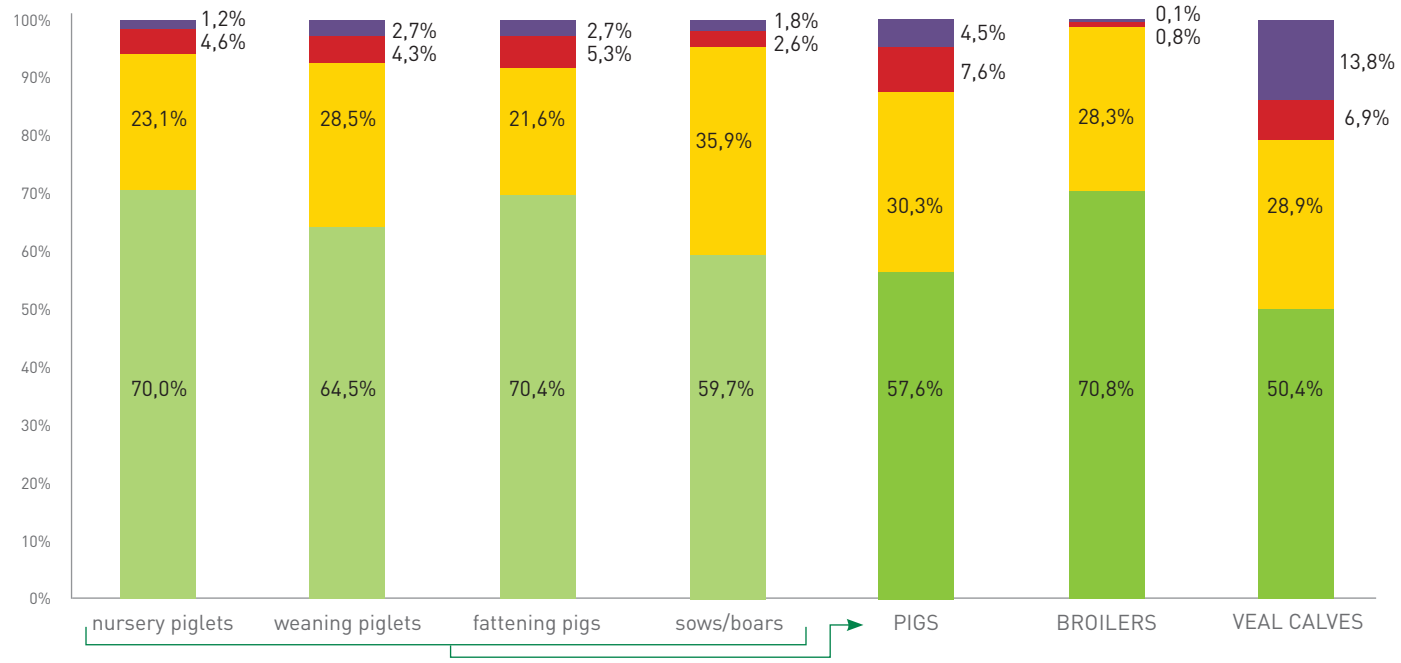
Source: BelVet-SAC-2022

ANTIBIOTIC USE AT FARM LEVEL PER ANIMAL CATEGORY IN 2022



Results are based on records of AB-use in Sanitel-Med for the animal categories currently required by legislation. For each animal category, the distribution of antibiotic use (expressed in TD_{100}) across the farms that register AB-use, is shown.
The line in the box and the number beside the box are the median for 2022: 50% farms use less antibiotics, 50% use more.

ALARM USERS PER ANIMAL CATEGORY IN 2022



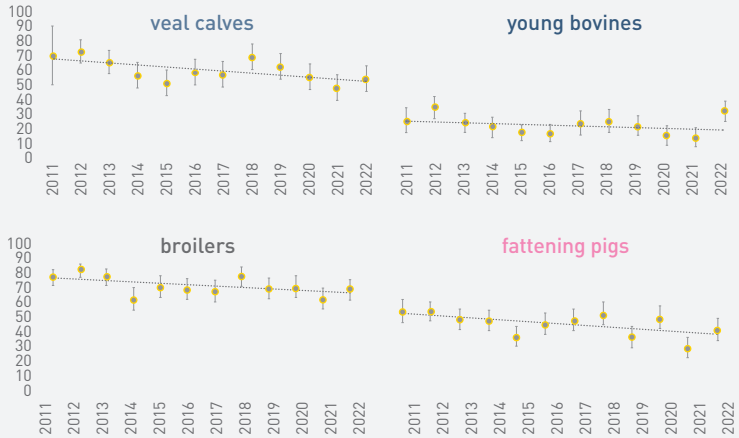
Results are based on records of AB-use in Sanitel-Med. Benchmark colour zones are determined based on TD_{100}-threshold values established in the sector specific reduction pathways. For each animal category and animal species the percentage of farms is shown in each benchmark colour zone based on the situation at the end of 2022, compared to threshold values applicable since 1 January 2023.
The percentage of alarm users is shown in purple.

Source: BelVet-SAC-2022

ANTIBIOTIC RESISTANCE IN ANIMALS IN BELGIUM

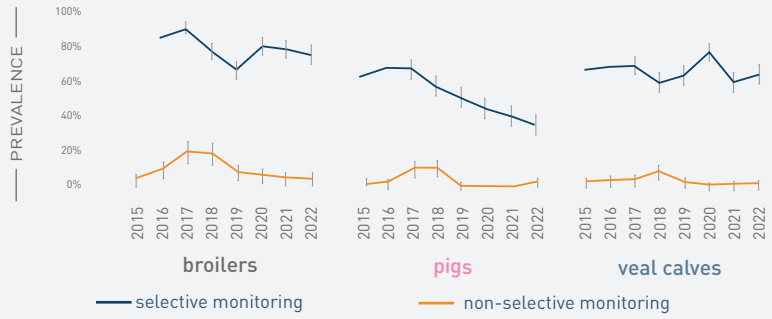
MONITORING OF INDICATOR BACTERIA

Multi-resistant *E. coli* in food-producing animals



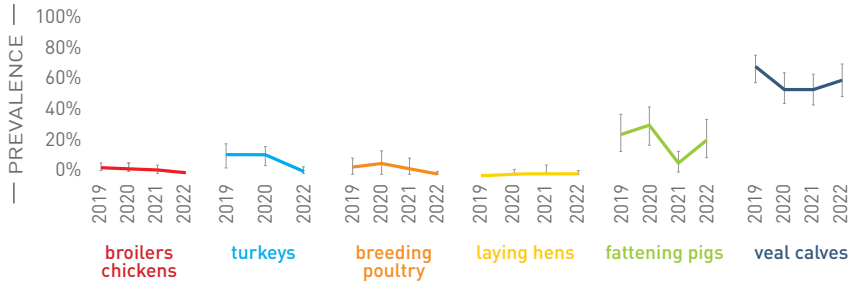
Antibiotic classes tested: aminopenicillins, phenicols, (fluoro)quinolones, polymyxins, 3rd generation cephalosporins, aminoglycosides, sulfamides, trimethoprim, tetracyclines. Analysis samples: Sciensano

ESBL-producing *E. coli*

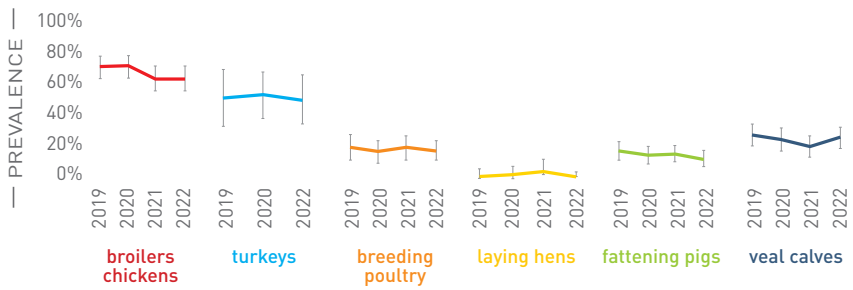


Selective monitoring: McConkey + cefotaxime – Non-selective monitoring: without cefotaxime. Analysis samples: Sciensano

Multi-resistant *Enterococcus faecalis*



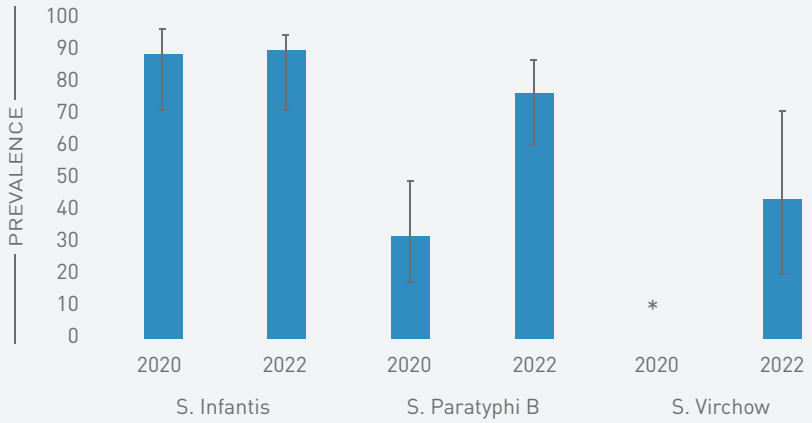
Multi-resistant *Enterococcus faecium*



Antibiotic classes tested: aminoglycosides, aminopenicillins, diaminopyrimidines, fluoroquinolones, glycopeptides, glycylcyclines, lipopeptides, macrolides, oxazolidinones, phenicols, streptogramines and tetracyclines. Enterococcus faecalis *is intrinsically resistant at quinupristine/dalfopristine. Resistance to this class of antibiotics is not included in the prevalence of multi-resistance. Analysis samples: Sciensano*

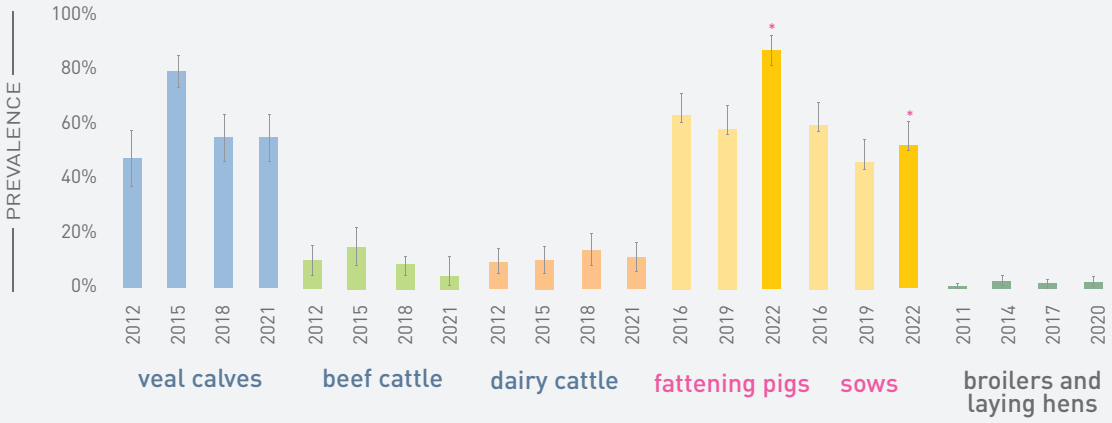
MONITORING OF ZOONOTIC BACTERIA

Resistance to ciprofloxacin in *Salmonella enterica* from broiler chickens



** In 2020 the* S. *Virchow serotype was not isolated.*
Of the 11,076 broiler chicken flocks tested in 2022, 223 samples were found to be positive for Salmonella enterica *(2.1%).* Salmonella *Infantis, Paratyphi B en Virchow do not belong to the most important serotypes being transferred from animals to humans. In 2022, 170 strains were tested for resistance to ciprofloxacin. Analysis samples: Sciensano*

Prevalence of MRSA in food-producing animals



Methicillin-resistant Staphylococcus aureus *are resistant to almost all ß-lactam antibiotics and are frequently not susceptible to many other classes of antibiotics. Analysis samples: Sciensano*
** In 2022 a new isolation method ("1-S") was used. According to the literature, this method should have a higher detection sensitivity for MRSA in pig samples than the method used in 2016 and 2019 ("2-S") (Larsen et al., 2017). Consequently, it is not possible to compare the results in 2016 and 2019 with the results in 2022.*

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For more information on antibiotic resistance, see the Antibiotics Covenant public report (www.amcra.be)