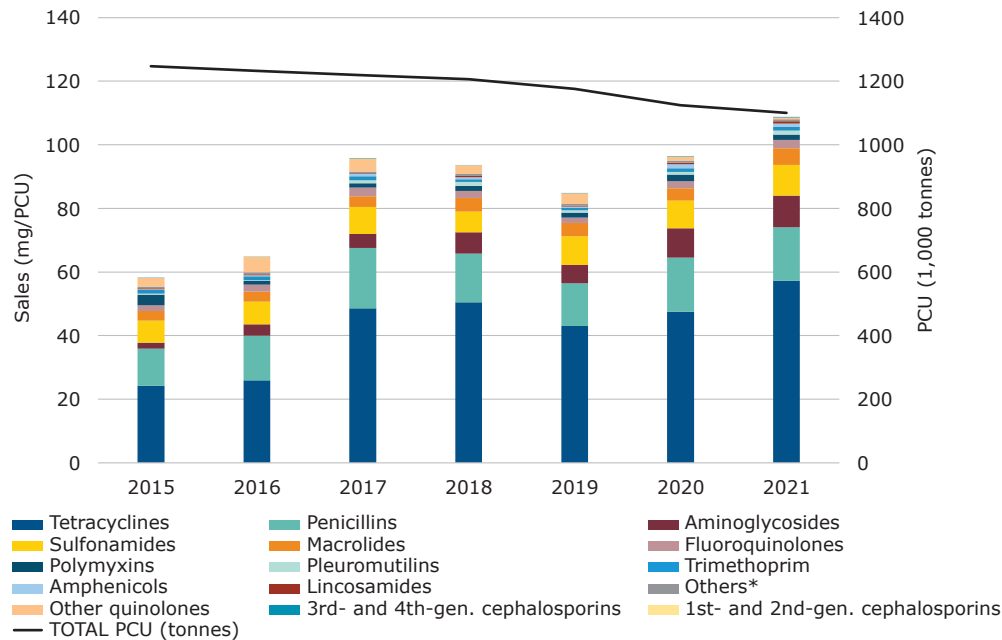


# Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

## Sales trends by antibiotic class (mg/PCU) from 2015 to 2021<sup>1</sup>



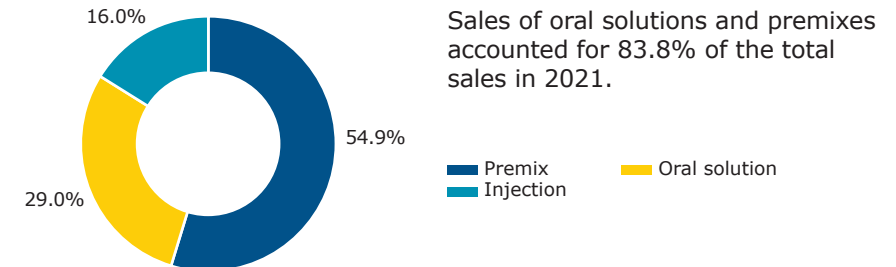
<sup>1</sup> Sales data sorted from highest to lowest in 2021.

\* The class 'Others' includes sales of novobiocin, rifaximin and spectinomycin (classified as other antibacterials in the ATCvet system).

## Since 2015:

- ↑ 87.0% overall annual sales (from 58.2 mg/PCU to 108.8 mg/PCU in 2021)
- ↑ 126.3% 3rd- and 4th-generation cephalosporin sales (from 0.09 mg/PCU to 0.21 mg/PCU in 2021)
- ↑ 49.6% fluoroquinolone sales (from 1.7 mg/PCU to 2.6 mg/PCU in 2021)
- ↓ 77.6% other quinolone sales (from 2.7 mg/PCU to 0.60 mg/PCU in 2021)
- ↓ 50.3% polymyxin sales (from 3.4 mg/PCU to 1.7 mg/PCU in 2021)
- ↓ The PCU decreased by 11.8% between 2011 and 2021

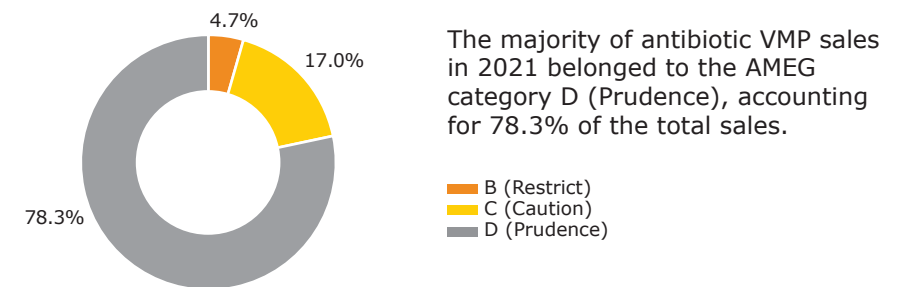
## Proportion of sales (mg/PCU) by product form in 2021<sup>1,2</sup>



<sup>1</sup> No sales of oral powders were reported in 2021.

<sup>2</sup> Sales of other forms (intramammary, intrauterine, bolus and oral paste products) are not represented in the figure and account for 0.2% of total sales.

## Proportion of sales (mg/PCU) by AMEG categories in 2021



The majority of antibiotic VMP sales in 2021 belonged to the AMEG category D (Prudence), accounting for 78.3% of the total sales.

## 2021 sales data

In 2021, overall sales increased by 12.8% in comparison to 2020 (from 96.4 mg/PCU to 108.8 mg/PCU). The three highest selling antibiotic classes were tetracyclines, penicillins and aminoglycosides, which accounted for 52.7%, 15.4% and 9.1% of total sales, respectively.

## Country information

In 2021, two events had an important influence on the increasing sales trend. On the one hand, the increase of sales in 2021 is particularly linked to products used in aquaculture and reflects the problems fish-producing companies are facing due to climate change. Due to the progressive increase in the average sea temperature each year, with peak surface values exceeding 27° C, Greek aquaculture is struggling against pathogens like *Pasteurella* and *Aeromonas*, resulting in the increased use of antibiotic VMPs. On the other hand, the decrease in the PCU observed in recent years is linked to the effects of the COVID-19 pandemic and the negative effects on the economy and the behavioural pattern of consumers. Also in 2020, caprine animals accounted for the vast majority of the PCU in Greece (62.4%), the highest proportion among ESVAC participating

countries. Based on national statistics, living goats represent approximately 30% of the total living caprinae population. As living goats are not included in the PCU calculation for the ESVAC analysis, this results in an underestimation of the PCU for Greece and, consequently, higher mg/PCU values.

An inter-ministerial committee has been established to handle matters related to the 'One Health' approach and implement WHO requirements, focusing on assessment and control of the consumption of antimicrobial agents and antimicrobial resistance in both humans and animals (Decision of the General Secretary of the Ministry of Health Α1β/Γ.Π.:64675/21/09/2018).