

The measures of the industry to promote responsible use of antibiotics in Finland

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Animal Health ETT¹

- Association established and financed by dairies, slaughterhouses and egg packaging companies
- Coordinating national animal health management for cattle, pigs and poultry
 - Naseva: Centralized health care register for Finnish cattle herds²
 - Sikava: Stakeholder's health and welfare register for swine herds⁵
- Giving instructions for biosecurity
 - Introduced Biocheck.UGent[®] method⁴ in Finland
- Giving additional instructions for import and trade of animals
 - E.g. testing of all imported poultry flocks for ESBL, AmpC and carbapenemase producers
- Advising responsible use of antibiotics and collecting medication data

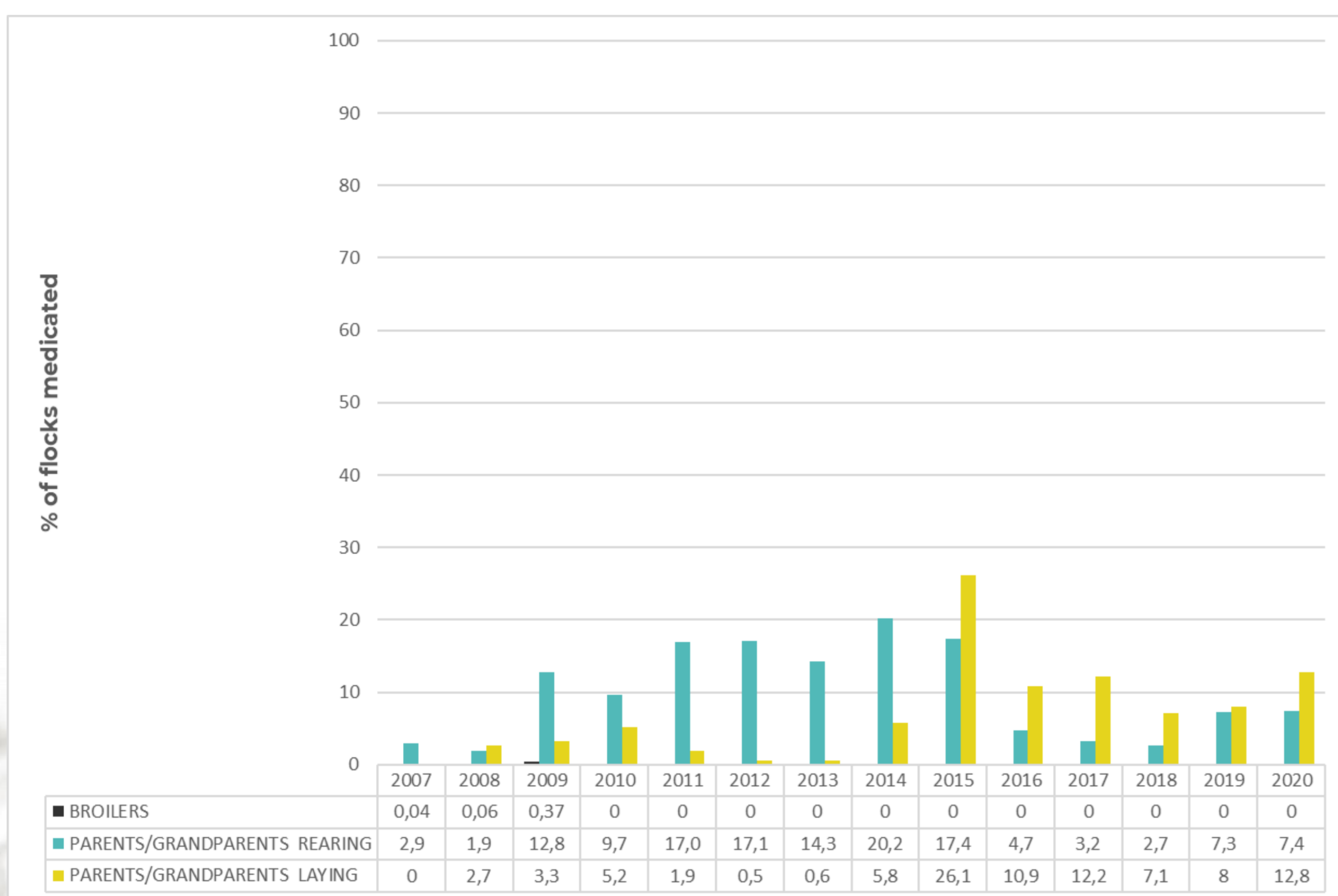


Fig. 1: Need for antibiotic medication in broiler production chain in Finland 2007-2020
No commercial broiler flocks medicated since 2009 (3000-4000 flocks slaughtered/year).
Broiler breeder flocks medicated mainly due to tenosynovitis.

Industry is promoting responsible use of antibiotics

- Commitment to comply with veterinary authorities' guidelines for responsible use of antibiotics
- Establishment and maintenance of medication records in Naseva and Sikava databases
- Collection and statistics of national antibiotic use data in pig, cattle and poultry production
- Control program for *Mycoplasma bovis* to ensure safe trade of cattle
- Guide to prudent use of medicines (pigs and poultry)
- Guide to weaning piglets
- Voluntary prohibition of use of critically important antibiotics for human medicine in pig and poultry production since 2019
 - Fluoroquinolones
 - 3rd- and 4th-generation cephalosporins
 - Colistin and new broad-spectrum and slowly eliminated macrolides (poultry)

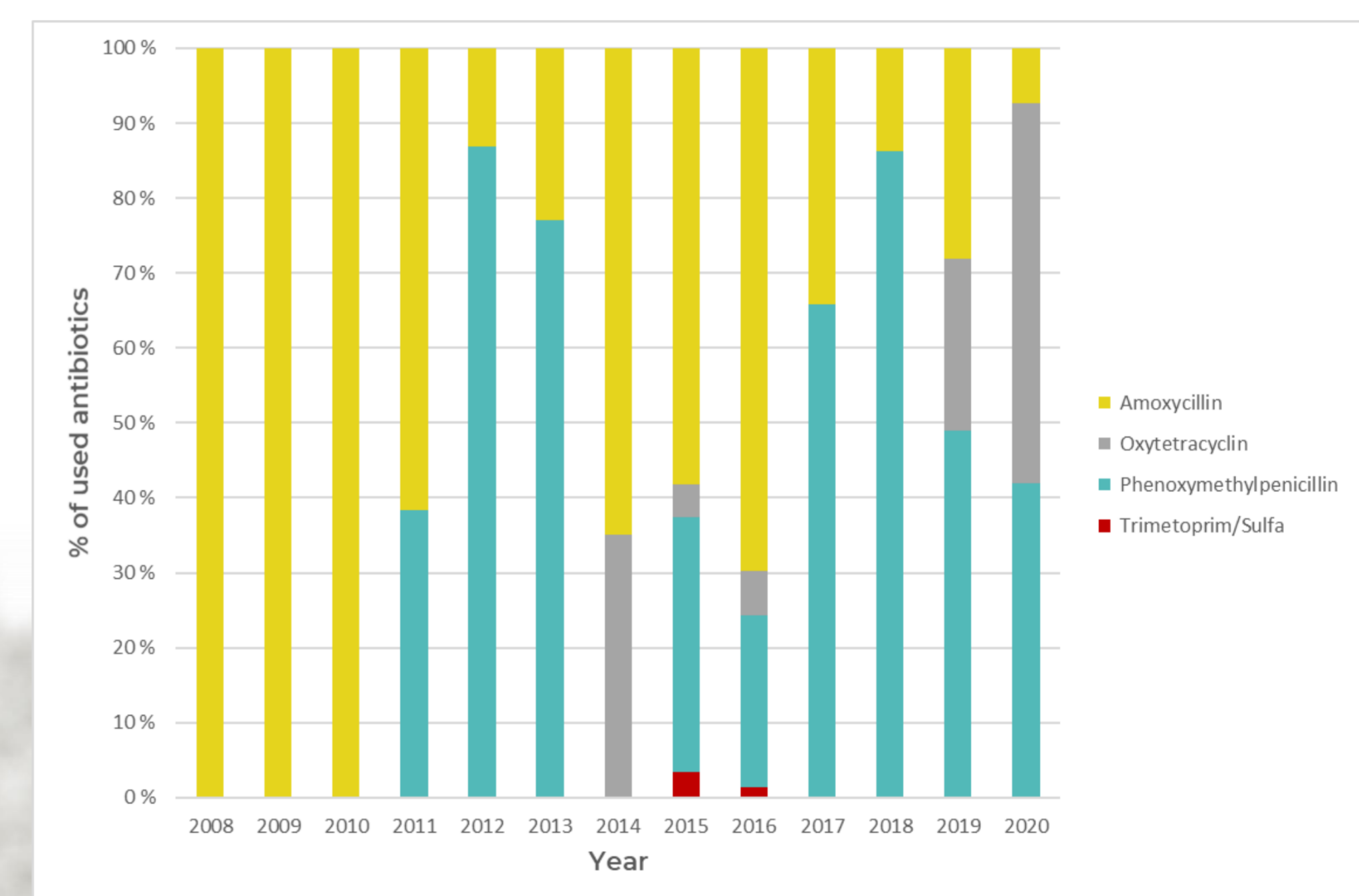


Fig. 2: Different antibiotics used for medication in broiler production chain (since 2010 only broiler breeders medicated)

Principles of responsible medication in Finland

- Veterinary visit and clinical inspection
- Bacteriological diagnosis and antimicrobial susceptibility testing
 - E.g. routine testing of quarter milk samples for mastitis with PCR
 - Selective dry cow therapy
- Choice of antibiotic based on *the Recommendations for the use of antimicrobials in the treatment of the most significant infectious and contagious diseases in animals*³
 - Preferring individual treatment (cattle and swine) and narrow spectrum antibiotics
 - Right dosage and sufficient treatment time
 - No mass medication as preventive treatment or growth promoter
- Withdrawal period must be followed
 - Routine testing of milk for antibiotics after treatment
 - Chain information of every batch to the slaughterhouse
- Medicine recording obligatory for farmers and veterinarians

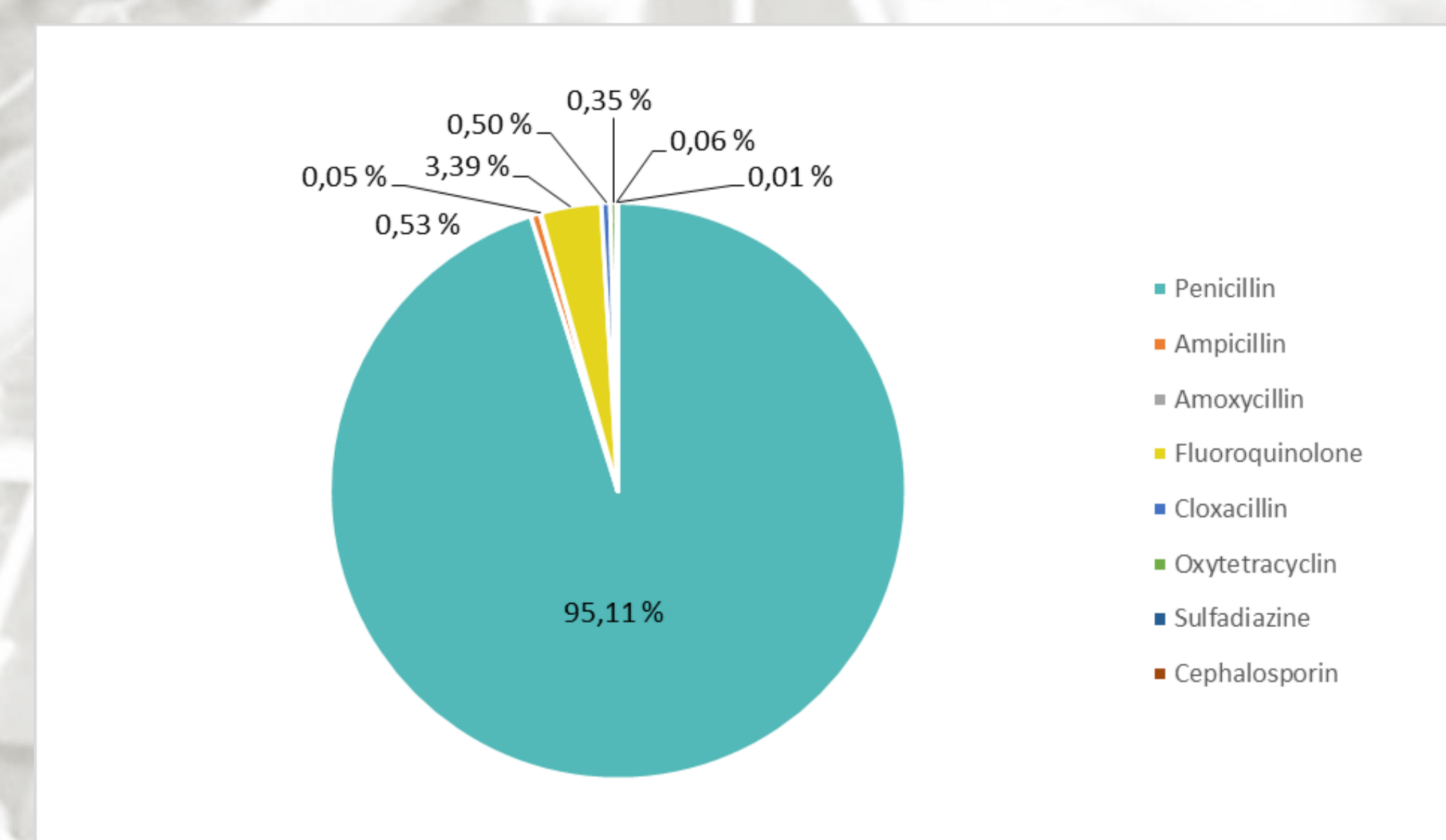


Fig. 3: Different antibiotics used for medication of bovine mastitis in 2021

Goal of the industry



References

¹Animal Health ETT, www.ett.fi

²Centralized health care register for Finnish cattle herds (Naseva), www.naseva.fi

³Finnish Food Authority 2018: Recommendations for the use of antimicrobials in the treatment of the most significant infectious and contagious diseases in animals

⁴Ghent University: Biocheck.UGent[®], <https://biocheck.ugent.be>

⁵Stakeholder's health and welfare register for swineherds in Finland (Sikava) www.sikava.fi