



**EUCAST**

European Committee  
on Antimicrobial  
Susceptibility Testing

# ***Salmonella* spp.**

**Pefloxacin 5 µg as screen for  
fluoroquinolone resistance**

Version 1.10  
January 2026

# *Salmonella* spp.

## MIC and zone diameter correlates

- The following histograms present inhibition zone diameter distributions from EUCAST antimicrobial susceptibility testing. In most, the different colours of the bars indicate different MIC values. In some, the colours of the bars indicate a resistance gene or a resistance mechanism.
- The distributions include data for wild-type isolates and for isolates with acquired resistance mechanisms. A large number of isolates with MIC values close to the edge of the wild-type distribution and/or close to EUCAST clinical breakpoints were intentionally included. These distributions can not be used to infer resistance rates or the performance of the tests with routine isolates.
- For some agents, isolates were tested on more than one occasion, including parallel tests with disks and media from several manufacturers. When this is the case, data are presented as both the “number of isolates tested” and the “total number of MIC-zone diameter correlates”, including replicate tests and parallel tests with disks and media from different sources.

# *Salmonella* spp.

## Materials and methods

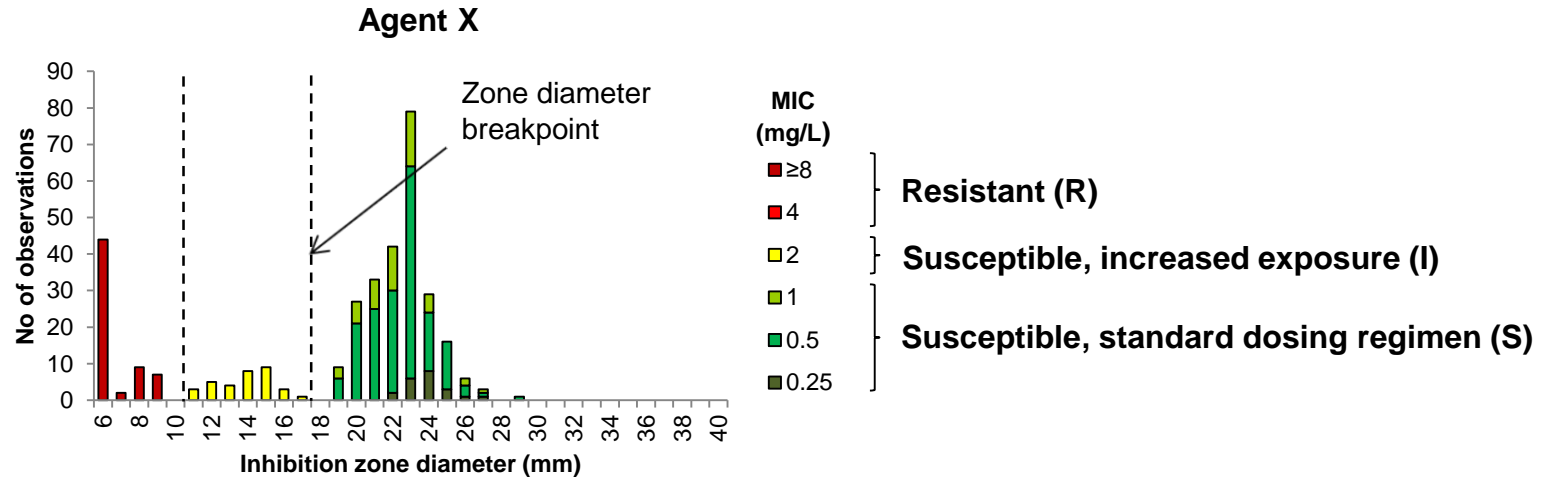
- Antimicrobial susceptibility testing was performed on clinical isolates of *Salmonella* spp.. Disk diffusion was performed in duplicate at three sites according to EUCAST methodology and MIC determination was performed with broth microdilution. The absence or presence of fluoroquinolone resistance mechanisms (*qnr*, *aac(6')Ib-cr* and QRDR mutations) was determined by PCR and sequencing.
- The distributions in this presentation are the result of a collaboration between EUCAST, Statens Serum Institut, Copenhagen, Denmark and Centers for Disease Control and Prevention, Atlanta, GA, USA.
- This presentation is based on EUCAST Clinical Breakpoint Tables v. 16.0.

# Changes from previous version (1.9)

<b>Changes</b>
<ul style="list-style-type: none"><li>• No changes. Breakpoints checked against latest version of EUCAST Clinical Breakpoint Tables.</li></ul>

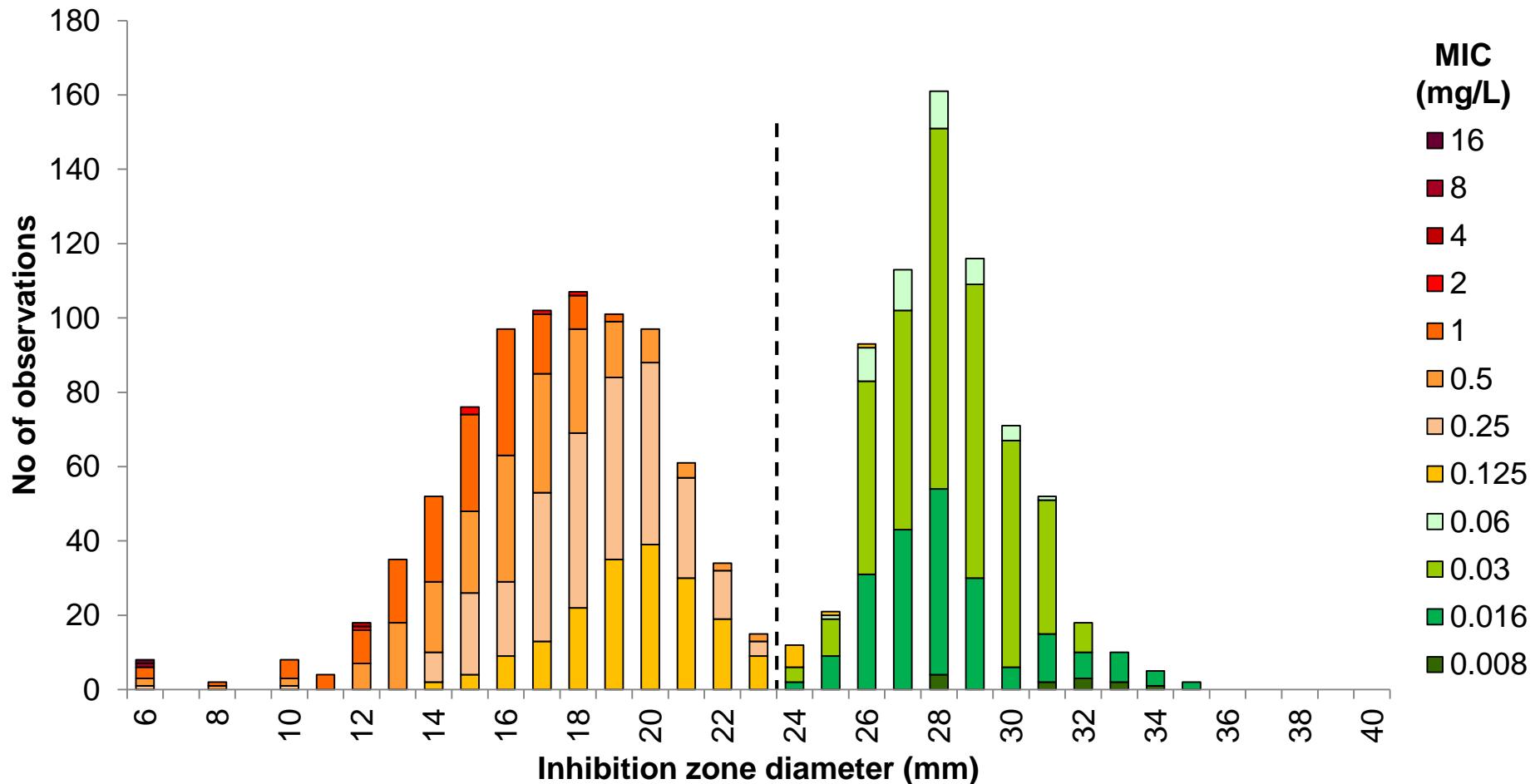
# Explanation of graphs:

- These graphs show zone diameter distributions with MIC values or resistance mechanisms as coloured bars. Colours are related to current EUCAST MIC breakpoints.



# Pefloxacin 5 µg vs. Ciprofloxacin MIC

## *Salmonella* spp., 268 isolates (1491 correlates)



### Breakpoints

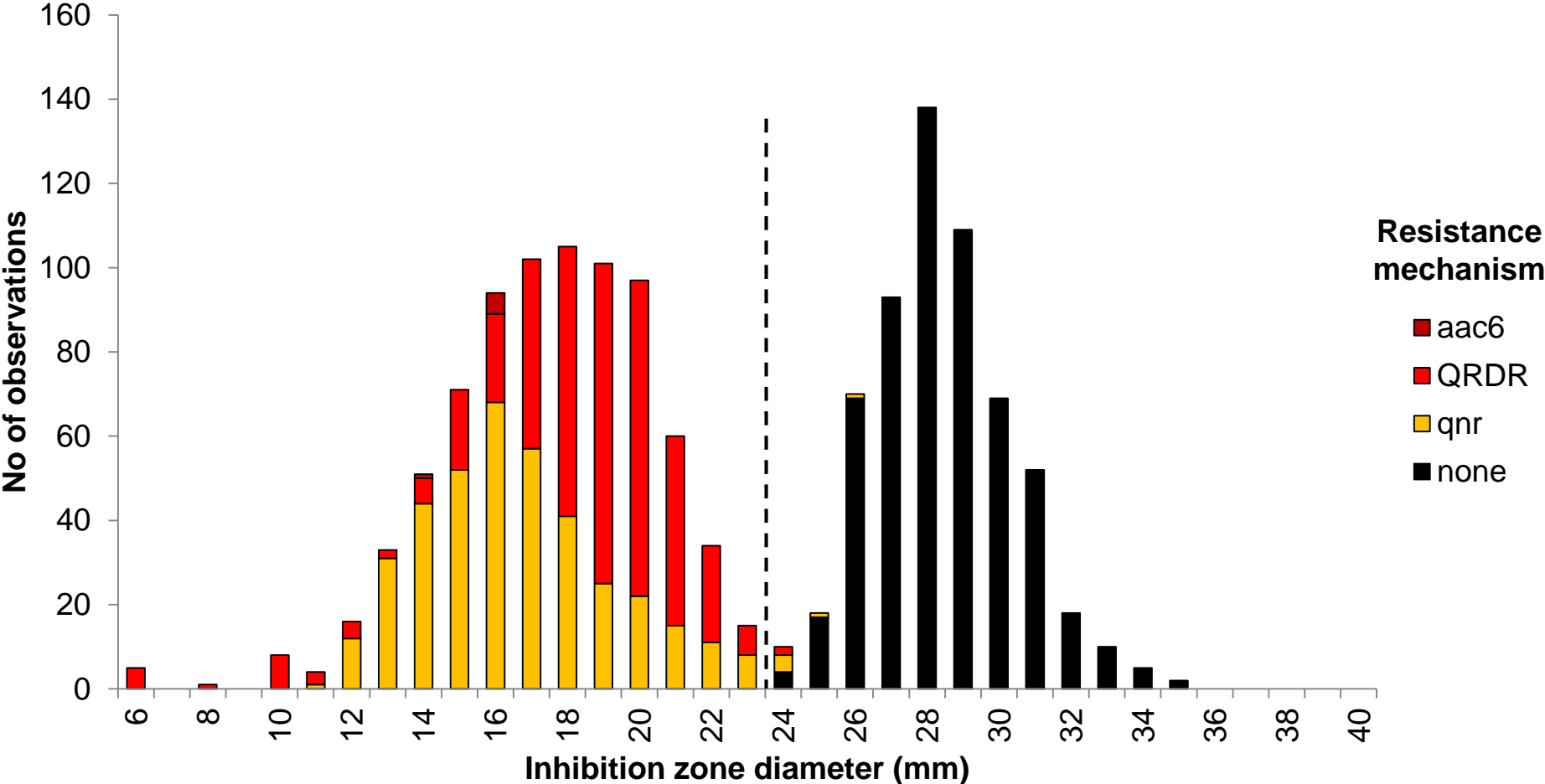
Ciprofloxacin MIC

$S \leq 0.06$ ,  $R > 0.06$  mg/L

Pefloxacin zone diameter (screen)

$S \geq 24$ ,  $R < 24$  mm

# Pefloxacin 5 µg vs. FQ resistance mechanism *Salmonella* spp., 168 isolates (1391 correlates)



## Breakpoints

Zone diameter (screen)

S $\geq$ 24, R<24 mm



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