

Antimicrobial Resistance (AMR) in E. coli from ducks and duck meat in Germany

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In Germany, in 2022, AMR in E. coli from ducks and duck meat was investigated in a monitoring program based on Commission Implementing Decision (CID) (EU) 2020/1729. Boot sock samples were randomly collected at farm and meat samples were collected at retail. E. coli was isolated from the samples using routine methods. Isolates were submitted to the NRL for Antimicrobial Resistance for species confirmation and antimicrobial susceptibility testing to 15 antimicrobials as prescribed in the CID and minimum inhibitory concentrations were evaluated based on EUCAST epidemiological cut off values or similar provisional values defined by the European Reference Laboratory and EFSA.

A total of 158 confirmed E. coli isolates from farms and 149 isolates from fresh duck meat were included in the analysis. Resistance in isolates from meat samples (M) tended to be higher than from farm samples (F). Highest resistance was observed to tetracycline (M 24.2 %, F 18.4 %), ciprofloxacin (M 20.1 %, F 15.2 %) and ampicillin (M/F 18.4 %). Resistance was absent to gentamicin, amikacin and meropenem and extremely rare to 3rd gen. cephalosporins, azithromycin (1 isolate M each) and tigecycline (1 isolate F). Resistance to colistin was observed in four isolates (1 F, 3 M). More F isolates were fully susceptible than M isolates (59.5 % vs. 48.3 %, $p=0.05$).

Resistance of E. coli from ducks and duck meat was lower than in isolates from broilers and turkeys. The reason remains to be elucidated.*

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AMR, E. coli, ducks, meat

Registration-ID code

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Professional Status of the Speaker

Senior Scientist

Junior Scientist Status

No, I am not a Junior Scientist.

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