

Supplementary Materials

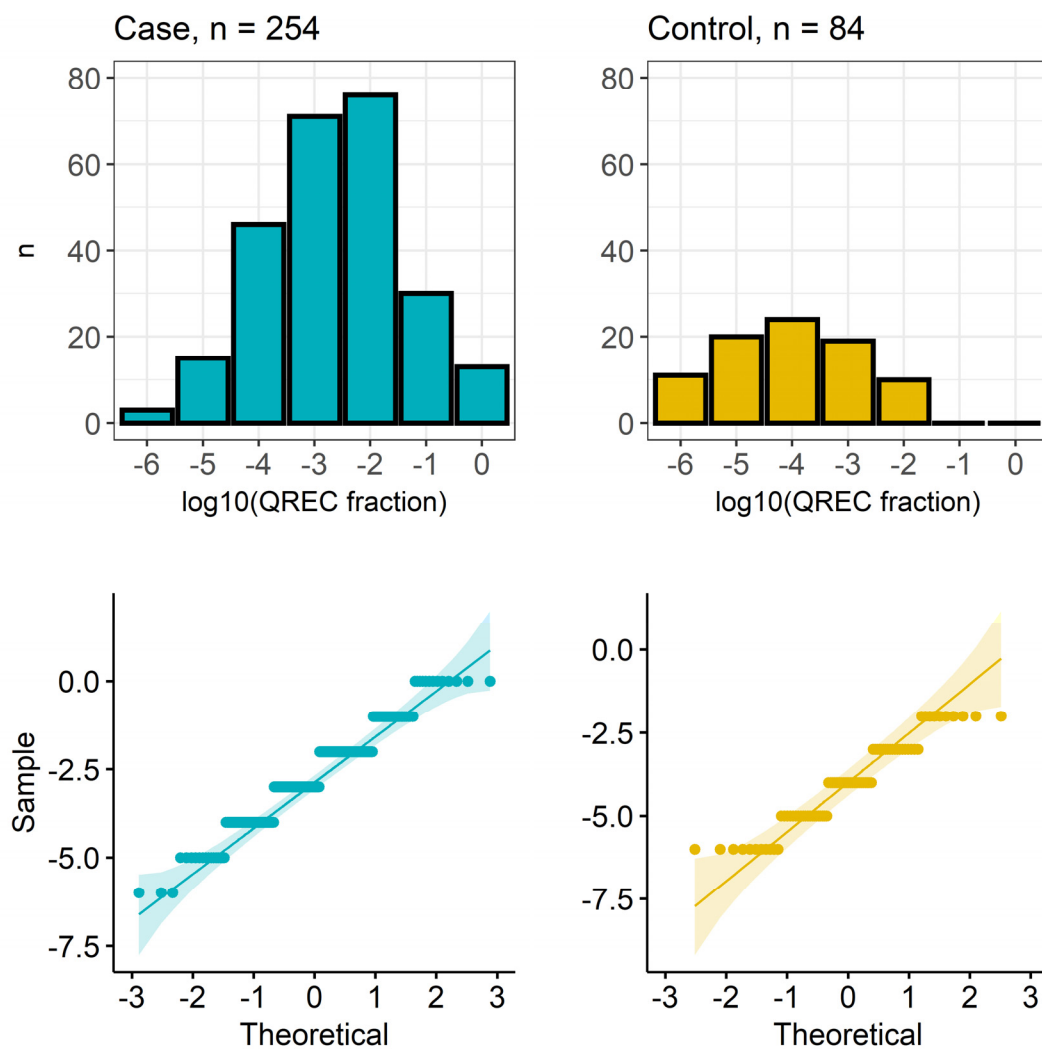


Figure S1. Distribution of the log10-transformed fractions of quinolone resistant *E. coli* (QREC) isolates in the case (blue) and control (yellow) herds, showing a normal distribution.

Table S1. X²-tests for all four age groups, case versus control.

Age group	Number of samples			X ² -value	p-value
	Type	Positive	Negative		
Weaner	Case	72	28	103.96	$p < 0.01$
	Control	3	100		
Fattening pig	Case	25	35	21.068	$p < 0.01$
	Control	7	73		
Gilt	Case	81	20	49.121	$p < 0.01$
	Control	26	62		
Sow	Case	76	26	13.259	$p < 0.01$
	Control	48	49		

Table S2. Resistance patterns among the 130 quinolone resistant *E. coli* isolates with additional resistances in addition to ciprofloxacin and/or nalidixic acid. AMP = ampicillin, CAZ = ceftazidime, CHL = chloramphenicol, CTX = cefotaxime, GEN = gentamicin, SMX = sulfamethoxazole, TET = tetracycline, TGC = tigecycline, TMP = trimethoprim.

Antimicrobial	Number of isolates	Number of resistances
TET	62	1
SMX, TET	36	2
SMX, TMP, AMP	10	3
SMX, TMP, TET, CHL, AMP, GEN	6	6
GEN	4	1
SMX, AMP	3	2
SMX, TET, CHL, AMP, GEN	2	5
TGC	2	1
AMP	1	1
SMX	1	1
SMX, CAZ, CTX,	1	3
SMX, TET, AMP, GEN	1	4
TET, TGC	1	2

Table S3. Overview of the relative amount of bacteria detected if growth at the respective dilution. The numbers were used for both QREC and total *E. coli*.

Dilution	No. of bacteria
Overnight culture	10 ³
10 ⁻¹	10 ⁴
10 ⁻²	10 ⁵
10 ⁻³	10 ⁶
10 ⁻⁴	10 ⁷
10 ⁻⁵	10 ⁸
10 ⁻⁶	10 ⁹

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