

Annex C – Data reported on antimicrobial resistance in indicator commensal *Escherichia coli* from food-producing animals and imported fresh meat

Annex to:

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Table of contents

Annex C – Data reported on antimicrobial resistance in indicator commensal <i>Escherichia coli</i> from food-producing animals and imported fresh meat.....	1
C.1. Antimicrobial resistance in <i>Escherichia coli</i> from food-producing animals.....	2
C.2. Antimicrobial resistance in <i>Escherichia coli</i> from fresh meat sampled at Border Control Posts.....	8

C.1. Antimicrobial resistance in *Escherichia coli* from food-producing animals

Table 1: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from **broilers**, 27 EU MSs, the United Kingdom (Northern Ireland), and 4 non-MSs, 2022

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Austria	174	3.4	0.6	1.1	46.0	0	0	0	0	39.7	41.4	0.6	0	35.1	29.3	23.6	29.3	33.9	0.0	0.0
Belgium	168	13.7	0	23.8	79.2	3.6	3.6	0	1.2	50.0	53.6	3.0	0.6	65.5	50.6	48.2	7.1	67.9	2.4	0.6
Bulgaria	86	7.0	0	16.3	58.1	0	0	0	5.8	65.1	74.4	1.2	3.5	54.7	39.5	46.5	9.3	55.8	0.0	0.0
Croatia	85	8.2	0	7.1	60.0	0	0	0	0	78.8	80.0	1.2	0	38.8	35.3	47.1	8.2	48.2	0.0	0.0
Cyprus	110	3.6	0	31.8	88.2	7.3	7.3	0	0	84.5	94.5	0	8.2	69.1	56.4	78.2	2.7	85.5	7.3	3.6
Czechia	184	4.3	0	6.0	34.8	0	0	0	0	77.7	77.7	0	0	25.5	21.2	17.4	17.4	29.3	0.0	0.0
Denmark	195	3.1	0	0.5	8.7	0	0	0	0	17.9	17.9	0	0	14.4	5.1	5.1	67.2	7.7	0.0	0.0
Estonia	149	2.7	2.0	10.1	35.6	2.0	2.0	0	1.3	50.3	51.0	0.7	0.7	14.1	2.7	24.8	38.9	21.5	1.3	0.7
Finland	170	1.2	0	0	3.5	0	0	0	0	7.6	7.6	0	0	7.1	4.7	10.0	80.0	3.5	0.0	0.0
France	205	3.4	0	5.4	37.6	0	0	0	0	23.4	25.9	0	2.0	37.1	32.7	29.3	43.4	35.1	0.0	0.0
Germany	274	9.9	0	7.3	57.3	1.8	1.5	0	0.4	54.4	56.9	8.0	2.9	55.5	38.7	34.3	17.9	50.4	1.8	0.4
Greece	121	22.3	0	28.9	79.3	0.8	0.8	0	0	79.3	81.8	2.5	0.8	62.8	56.2	54.5	5.0	77.7	0.8	0.0
Hungary	170	3.5	0	13.5	46.5	0.6	0.6	0	1.2	75.3	80.6	2.4	0	22.4	17.1	30.6	14.7	37.1	0.6	0.6
Ireland	170	0	0	10.0	34.7	0.6	0.6	0	0	12.4	12.9	0	0	19.4	18.8	23.5	39.4	15.9	0.6	0.0
Italy	170	4.7	0	8.8	51.2	0	0	0	0.6	36.5	41.8	0	0.6	37.1	25.3	41.8	27.6	40.6	0.0	0.0
Latvia	150	0.7	0	6.0	26.0	0	0	0	0	48.0	47.3	0	0	15.3	19.3	24.0	42.7	25.3	0.0	0.0
Lithuania	100	9.0	0	21.0	78.0	0	0	0	0	76.0	77.0	0	0	73.0	62.0	54.0	7.0	79.0	0.0	0.0
Luxembourg	20	0	0	20.0	50.0	0	0	0	0	25.0	30.0	0	0	35.0	20.0	55.0	20.0	40.0	0.0	0.0
Malta	127	3.2	0.8	23.6	63.0	8.7	8.7	0	3.9	39.4	54.3	11.0	0	46.5	36.2	52.8	20.5	55.9	8.7	2.4
Netherlands	300	3.7	0	3.0	37.0	0.3	0.3	0	0	26.7	28.0	0.7	0	34.0	23.7	18.0	42.3	31.3	0.3	0.3
Poland	184	10.9	0	29.9	82.6	4.9	4.9	0	8.2	76.1	87.0	1.6	4.4	65.8	60.9	71.2	7.1	81.5	4.9	1.6
Portugal	170	8.8	0	10.6	60.0	1.2	1.2	0	1.2	66.5	76.5	5.3	0	54.1	34.7	55.3	6.5	62.9	0.6	0.0
Romania	170	17.1	0	22.9	58.2	4.1	4.1	0	0.6	90.0	94.1	10.6	2.4	49.4	37.6	54.7	2.4	63.5	4.1	3.5
Slovakia	85	7.1	0	23.5	68.2	0	0	0	0	89.4	89.4	0	0	52.9	43.5	55.3	4.7	61.2	0.0	0.0
Slovenia	85	2.4	0	9.4	57.6	0	0	0	1.2	63.5	65.9	1.2	0	30.6	18.8	43.5	14.1	37.6	0.0	0.0
Spain	170	7.6	0	8.2	31.8	0.6	0.6	0	0	54.7	62.9	1.2	0	17.6	10.0	30.0	21.8	28.8	0.6	0.0
Sweden	179	0	0	0	19.0	0	0	0	0	5.0	5.0	0	0	10.6	9.5	6.7	68.7	7.8	0.0	0.0
XI	170	1.2	0	3.5	30.6	0	0	0	0	14.1	14.1	0	0	18.8	12.9	17.6	50.0	15.3	0.0	0.0

Annex C - EUSR on AMR in zoonotic and indicator bacteria from humans, animals and food 2021/2022



Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Total (27 MSs+XI)	4341	5.8	0.1	11.0	46.6	1.3	1.3	0	0.9	48.0	51.4	2.0	0.9	36.5	28.2	34.2	28.5	40.4	1.2	0.5
Median (MS+XI)	–	3.7	0.0	9.7	50.6	0.0	0.0	0.0	0.0	52.4	55.6	0.6	0.0	36.1	27.3	38.0	18.9	38.8	0.0	0.0
Iceland	85	1.2	1.2	0	14.1	0	0	0	0	0	0	0	0	10.6	9.4	10.6	80.0	8.2	0.0	0.0
Norway	363	0	0	0.6	7.4	0	0	0	0.3	8.0	9.1	0	0	4.1	3.3	5.5	79.3	1.9	0.0	0.0
Republic of North Macedonia	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.0	0.0	0.0
Switzerland	229	1.7	0	0.4	14.8	0.4	0.4	0	0	33.6	34.1	0	0	16.2	10.0	8.7	51.1	13.1	0.0	0.0
Total (28 MSs+XI+ 4 non-MSs)	5022	5.1	0.1	9.6	41.8	1.1	1.1	0.0	0.8	43.6	46.7	1.7	0.8	32.8	25.2	30.5	34.1	35.8	1.0	0.4
Median (MSs+XI+ non-MSs)	–	3.5	0.0	8.5	46.2	0.0	0.0	0.0	0.0	49.0	52.3	0.0	0.0	34.5	22.4	30.3	21.1	36.1	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline, NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values. XI: United Kingdom (Northern Ireland)

Table 2: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from caecal samples from **fattening turkeys**, 13 EU MSs and 1 non-MS, 2022

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX applying CBPs (%)
Austria	144	1.4	0.0	5.6	32.6	0.0	0.0	0.0	0.0	18.8	22.2	0.0	0.0	22.2	11.8	35.4	46.5	20.8	0.0	0.0
Belgium	86	1.2	0.0	18.6	66.3	3.5	4.7	0.0	0.0	15.1	25.6	1.2	0.0	45.3	36.0	59.3	20.9	47.7	2.3	1.2
Croatia	80	0.0	0.0	6.3	32.5	0.0	0.0	0.0	0.0	38.8	45.0	0.0	0.0	16.3	8.8	42.5	33.8	20.0	0.0	0.0
France	171	0.6	0.6	3.5	40.4	0.0	0.0	0.0	0.0	6.4	9.9	0.0	0.0	24.6	22.2	31.6	48.5	26.9	0.0	0.0
Germany	230	3.5	0.0	16.1	56.5	2.6	0.4	0.0	0.9	28.3	32.6	0.4	3.5	25.2	17.0	37.0	30.0	32.6	2.6	0.4
Hungary	170	2.4	0.0	24.7	47.6	0.0	0.0	0.0	0.0	40.0	54.1	4.1	0.6	28.2	14.7	54.7	25.9	43.5	0.0	0.0
Ireland	85	1.2	0.0	0.0	45.9	0.0	0.0	0.0	0.0	2.4	7.1	0.0	0.0	15.3	11.8	54.1	42.4	20.0	0.0	0.0
Italy	170	1.2	0.0	9.4	60.6	1.2	0.6	0.6	0.0	16.5	27.1	0.0	0.6	44.1	44.7	47.6	29.4	45.9	1.2	0.0
Poland	178	12.9	0.0	29.8	79.8	3.9	3.4	0.0	6.7	53.4	64.6	2.2	19.1	46.1	41.0	66.9	13.5	69.7	3.4	1.7
Portugal	170	11.2	0.0	24.7	70.6	1.8	1.2	0.0	4.1	58.2	70.0	4.7	11.2	42.9	32.9	77.6	8.8	68.8	1.2	1.2
Romania	85	12.9	0.0	64.7	70.6	0.0	0.0	0.0	2.4	55.3	67.1	17.6	0.0	63.5	23.5	77.6	10.6	75.3	0.0	0.0
Spain	170	1.8	0.0	12.4	68.2	2.9	2.9	0.0	0.0	28.8	53.5	0.0	0.0	22.9	17.1	62.4	18.2	50.6	2.9	1.2
Sweden	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	0.0	0.0	8.8	0.0	11.8	85.3	0.0	0.0	0.0
Total (13 MSs)	1 773	4.2	0.1	17.0	55.8	1.5	1.1	0.1	1.3	30.2	40.0	2.0	3.6	32.2	23.7	52.0	28.3	43.3	1.3	0.5
Median (MS)	–	1.6	0.0	14.2	56.2	0.6	0.2	0.0	0.0	28.5	36.3	0.2	0.0	26.7	19.6	53.1	29.4	43.5	0.0	0.0
Norway	110	0.0	1.8	0.9	14.5	0.9	0.9	0.0	0.0	0.9	0.9	0.0	0.0	3.6	3.6	5.5	79.1	3.6	0.0	0.0
Total (13 MSs+1 non-MSs)	1 883	4.0	0.2	16.0	53.4	1.4	1.1	0.1	1.2	28.5	37.7	1.9	3.3	30.5	22.6	49.3	31.3	41.0	1.2	0.5
Median (MSs+ non-MSs)	–	1.4	0.0	12.4	55.8	0.9	0.4	0.0	0.0	28.3	32.6	0.0	0.0	25.2	17.1	52.0	29.7	38.1	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline, NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values.

Table 3: Occurrence of resistance (%) to selected antimicrobials, using harmonized ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in indicator *Escherichia coli* from **fattening pigs**, 27 EU MSs, the United Kingdom (Northern Ireland), and 3 non-MSs, 2021.

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Austria	175	0.0	0.6	4.0	21.1	1.1	1.1	0.0	0.0	4.6	6.3	1.7	0.0	22.3	14.3	50.9	38.3	16.6	0.6	0.0
Belgium	170	0.0	1.2	15.9	30.0	0.0	0.0	0.0	0.0	3.5	4.1	1.2	0.0	33.5	33.5	40.0	41.8	28.8	0.0	0.0
Bulgaria	100	4.0	0.0	38.0	63.0	1.0	1.0	0.0	0.0	12.0	26.0	4.0	1.0	74.0	41.0	65.0	11.0	64.0	0.0	0.0
Croatia	85	1.2	0.0	12.9	27.1	0.0	0.0	0.0	0.0	10.6	12.9	1.2	0.0	34.1	24.7	50.6	37.6	29.4	0.0	0.0
Cyprus	22	4.5	0.0	31.8	59.1	4.5	4.5	0.0	0.0	9.1	9.1	9.1	0.0	63.6	59.1	77.3	9.1	59.1	0.0	0.0
Czechia	178	0.0	0.0	5.1	35.4	2.2	2.2	0.0	0.0	2.8	4.5	1.7	0.6	27.5	22.5	34.8	46.1	23.6	0.6	0.0
Denmark	65	0.0	0.0	4.6	38.5	1.5	1.5	0.0	0.0	0.0	0.0	4.6	0.0	41.5	30.8	29.2	52.3	33.8	0.0	0.0
Estonia	143	0.0	0.0	2.1	27.3	1.4	0.7	0.0	0.7	2.1	3.5	0.0	0.0	25.9	24.5	35.0	49.7	21.7	0.0	0.0
Finland	170	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	12.4	14.1	77.6	8.2	0.0	0.0
France	232	0.0	0.4	8.6	25.4	0.9	0.9	0.0	0.9	2.6	2.6	1.3	0.0	29.3	21.1	42.2	44.0	23.7	0.9	0.4
Germany	190	2.6	0.0	6.3	28.9	0.0	0.0	0.0	0.0	1.1	1.6	2.6	0.0	29.5	23.7	32.1	49.5	22.6	0.0	0.0
Greece	73	2.7	0.0	53.4	65.8	0.0	0.0	0.0	0.0	6.8	11.0	8.2	0.0	64.4	50.7	71.2	20.5	67.1	0.0	0.0
Hungary	170	3.5	0.0	14.1	45.3	4.7	4.1	0.0	4.7	4.7	7.6	2.4	0.0	31.8	24.7	47.1	30.6	35.3	0.6	0.0
Ireland	170	3.5	0.0	9.4	28.2	0.0	0.0	0.0	0.0	0.6	2.4	0.6	0.0	37.1	36.5	51.8	38.2	32.9	0.0	0.0
Italy	170	4.7	0.0	39.4	57.6	0.6	0.6	0.0	0.0	8.2	17.1	0.0	0.0	48.2	38.2	65.9	22.4	55.3	0.6	0.0
Latvia	152	0.7	0.0	9.9	30.3	1.3	1.3	0.0	0.0	3.9	6.6	2.6	1.3	28.9	21.7	27.6	50.7	25.7	0.0	0.0
Lithuania	100	6.0	1.0	13.0	36.0	1.0	1.0	0.0	0.0	7.0	12.0	2.0	3.0	32.0	18.0	38.0	43.0	26.0	1.0	1.0
Luxembourg	205	0.0	0.0	6.8	25.4	0.0	0.0	0.0	0.0	2.4	4.9	0.0	0.0	22.9	22.0	37.6	50.7	21.0	0.0	0.0
Malta	126	2.4	0.0	20.6	29.4	0.0	0.0	0.0	0.0	4.8	11.1	0.0	0.0	45.2	39.7	59.5	27.8	38.9	0.0	0.0
Netherlands	300	0.7	0.7	9.3	22.3	0.0	0.0	0.0	0.0	0.7	2.0	1.7	0.0	24.0	24.3	31.0	50.7	20.3	0.0	0.0
Poland	212	0.9	0.5	17.5	47.2	1.9	1.9	0.0	0.5	9.0	16.5	0.9	0.0	35.8	30.2	47.2	34.0	39.2	1.4	0.0
Portugal	55	1.8	0.0	49.1	70.9	5.5	5.5	0.0	0.0	10.9	16.4	9.1	1.8	60.0	58.2	72.7	10.9	72.7	1.8	0.0
Romania	169	4.1	0.0	30.8	59.8	4.7	4.7	0.0	0.0	18.3	33.7	3.0	0.6	53.8	33.7	61.5	14.8	55.6	1.8	1.8
Slovakia	85	7.1	0.0	8.2	42.4	0.0	0.0	0.0	0.0	9.4	9.4	1.2	0.0	40.0	27.1	44.7	32.9	34.1	0.0	0.0
Slovenia	85	0.0	0.0	10.6	18.8	2.4	1.2	0.0	4.7	0.0	5.9	0.0	0.0	17.6	17.6	27.1	57.6	23.5	1.2	0.0

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Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Spain	170	4.7	0.0	41.2	83.5	1.2	1.2	0.0	0.0	27.1	50.6	4.7	0.0	58.8	60.0	78.8	6.5	78.8	1.2	0.6
Sweden	173	0.0	0.0	7.5	24.9	0.6	0.6	0.0	0.0	1.7	1.7	0.6	0.0	22.5	19.7	16.8	63.6	19.7	0.0	0.0
United Kingdom (Northern Ireland)	68	0.0	1.5	17.6	41.2	0.0	0.0	0.0	0.0	4.4	4.4	1.5	0.0	64.7	45.6	66.2	17.6	47.1	0.0	0.0
Total (28 MSs)	4 013	1.7	0.2	15.1	36.3	1.1	1.0	0.0	0.4	5.6	9.7	1.8	0.2	34.9	28.7	44.0	39.7	33.1	0.4	0.1
Median (MS)	–	1.1	0.0	11.8	32.8	0.9	0.8	0.0	0.0	4.5	6.4	1.6	0.0	33.8	25.9	45.9	38.3	31.2	0.0	0.0
Iceland	85	0.0	0.0	9.4	25.9	1.2	1.2	0.0	1.2	0.0	0.0	0.0	0.0	32.9	23.5	38.8	44.7	28.2	0.0	0.0
Norway	318	0.0	0.0	0.3	6.6	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0	7.5	6.3	6.0	85.8	3.5	0.0	0.0
Switzerland	170	1.2	0.0	2.9	16.5	0.0	0.0	0.0	0.6	3.5	4.1	0.0	0.0	29.4	14.7	30.0	51.8	14.7	0.0	0.0
Total (28 MSs+ 3 non-MSs)	4 586	1.5	0.2	13.5	33.3	1.0	0.9	0.0	0.4	5.1	8.7	1.5	0.2	32.8	26.5	40.8	43.4	30.3	0.4	0.1
Median (MSs+ non-MSs)	–	0.8	0.0	9.6	29.7	0.7	0.6	0.0	0.0	3.7	5.4	1.2	0.0	32.5	24.6	41.1	41.8	28.8	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline, NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values.

Table 4: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from cattle under one year of age, 11 EU MSs and 2 non-MSs, 2021

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Belgium	173	5.8	1.2	26.0	49.7	1.7	1.2	0.0	5.2	8.1	19.1	4.6	1.2	42.8	41.0	54.9	36.4	49.1	1.2	0.0
Croatia	85	0.0	0.0	12.9	16.5	0.0	0.0	0.0	0.0	4.7	4.7	0.0	0.0	32.9	8.2	43.5	54.1	18.8	0.0	0.0
Denmark	109	0.0	0.0	6.4	8.3	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	12.8	0.9	15.6	83.5	7.3	0.0	0.0
France	181	2.8	0.0	24.3	46.4	1.1	1.1	0.0	0.6	5.0	5.0	9.4	0.0	48.1	32.6	61.3	35.9	44.8	0.0	0.0
Germany	203	3.4	0.0	10.8	38.9	3.4	2.5	0.0	0.5	7.4	11.3	2.5	0.5	29.6	26.1	39.9	52.7	33.0	1.0	0.0
Italy	170	11.2	0.0	35.3	60.6	4.1	3.5	0.0	1.8	17.6	35.9	0.0	0.0	65.3	56.5	74.7	20.6	62.9	2.9	0.6
Netherlands	306	2.3	0.7	16.0	24.5	0.7	0.3	0.0	0.3	2.3	4.9	1.6	0.0	23.5	20.9	44.4	52.3	25.2	0.0	0.0
Portugal	53	0.0	0.0	7.5	9.4	1.9	1.9	0.0	3.8	5.7	3.8	1.9	0.0	11.3	3.8	18.9	77.4	9.4	1.9	1.9
Romania	129	1.6	0.0	4.7	9.3	0.8	0.8	0.0	0.0	3.1	5.4	0.8	0.0	10.9	6.2	16.3	79.8	9.3	0.8	0.0
Spain	170	2.9	0.0	15.3	12.9	0.0	0.0	0.0	0.0	2.4	2.4	0.0	0.0	25.3	7.6	31.8	65.9	18.8	0.0	0.0
Sweden	20	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	95.0	0.0	0.0	0.0
Total (11 MSs)	1 599	3.4	0.3	17.1	30.6	1.4	1.1	0.0	1.1	5.6	9.9	2.3	0.2	31.8	23.4	43.2	52.7	30.6	0.7	0.1
Median (MS)	–	2.5	0.0	14.1	20.5	0.9	0.9	0.0	0.4	4.8	4.9	1.2	0.0	27.4	14.6	41.5	54.1	18.8	0.0	0.0
Norway	288	0.0	0.0	0.3	2.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.3	1.0	95.5	0.7	0.0	0.0
Switzerland	180	6.7	0.0	7.2	26.1	1.1	1.1	0.0	3.3	0.6	0.6	1.1	0.0	27.2	12.2	28.3	62.8	21.7	0.0	0.0
Total (11 MSs+ 2 non-MSs)	2 067	3.2	0.2	13.9	26.3	1.5	1.3	0.0	1.1	4.4	7.7	1.9	0.1	27.3	19.2	36.0	59.5	25.7	0.5	0.1
Median (MSs+ non-MSs)	–	2.3	0.0	10.8	16.5	1.1	1.1	0.0	0.3	3.1	4.7	0.8	0.0	25.3	8.2	31.8	62.8	18.8	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline, NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values.

C.2. Antimicrobial resistance in *Escherichia coli* from fresh meat sampled at Border Control Posts

Table 5: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from **imported fresh broiler meat sampled at Border Control Posts**, 8 EU MSs, 2022

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
France	72	6.9	0.0	5.6	54.2	6.9	6.9	0.0	0.0	15.3	19.4	0.0	0.0	47.2	31.9	36.1	29.2	37.5	4.2	0.0
Germany	28	46.4	0.0	17.9	64.3	57.1	53.6	0.0	0.0	75.0	82.1	0.0	0.0	60.7	39.3	39.3	10.7	75.0	53.6	28.6
Hungary	36	2.8	0.0	8.3	38.9	0.0	0.0	0.0	5.6	97.2	100.0	2.8	5.6	22.2	27.8	63.9	0.0	52.8	0.0	0.0
Ireland	18	11.1	0.0	0.0	33.3	27.8	27.8	0.0	0.0	44.4	44.4	0.0	0.0	33.3	27.8	44.4	22.2	44.4	22.2	16.7
Netherlands	111	11.7	0.0	9.0	51.4	22.5	21.6	0.0	4.5	39.6	41.4	0.9	0.9	38.7	32.4	37.8	27.0	48.6	17.1	12.6
Poland	96	5.2	0.0	7.3	42.7	1.0	1.0	0.0	0.0	82.3	91.7	3.1	4.2	38.5	36.5	47.9	7.3	47.9	1.0	1.0
Romania	6	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	83.3	83.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
Spain	32	28.1	0.0	9.4	46.9	25.0	31.3	0.0	0.0	46.9	43.8	0.0	9.4	56.3	34.4	31.3	18.8	56.3	15.6	3.1
Total (8 MSs)	399	12.0	0.0	8.0	48.6	15.0	15.0	0.0	1.8	54.6	58.6	1.3	2.5	40.9	32.8	42.1	17.8	48.4	11.8	6.8
Median (MS)	–	11.1	0.0	8.0	48.6	15.0	15.0	0.0	0.0	54.6	58.6	0.0	0.9	38.7	32.4	39.3	14.7	48.3	9.9	2.1

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline; NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States.

Table 6: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from **imported fresh turkey meat sampled at Border Control Posts**, 3 EU MSs, 2022

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
France	7	14.3	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	71.4	14.3	0.0	0.0
Netherlands	44	11.4	0.0	20.5	54.5	11.4	6.8	0.0	0.0	34.1	40.9	0.0	0.0	61.4	20.5	75.0	9.1	52.3	11.4	4.5
Romania	3	66.7	0.0	0.0	100.0	0.0	0.0	0.0	0.0	66.7	100.0	0.0	0.0	0.0	33.3	66.7	0.0	66.7	0.0	0.0
Total (3 MSs)	54	14.8	0.0	16.7	53.7	9.3	5.6	0.0	0.0	31.5	38.9	0.0	0.0	50.0	18.5	68.5	16.7	48.1	9.3	3.7
Median (MS)	–	14.3	0.0	0.0	54.5	0.0	0.0	0.0	0.0	34.1	40.9	0.0	0.0	0.0	20.5	66.7	9.1	52.3	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline; NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States;

Table 7: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from **imported fresh pig meat** sampled at Border Control Posts, 4 EU MSs, 2021

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Ireland	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	33.3	33.3	66.7	33.3	0.0	0.0
Italy	3	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	40.0	0.0	0.0	0.0
Sweden	2	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	50.0	50.0	50.0	0.0	0.0
Total (4 MSs)	13	0.0	0.0	7.7	30.8	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	15.4	7.7	38.5	38.5	15.4	0.0	0.0
Median (MS)	–	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	41.7	45.0	16.7	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline, NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values.

Table 8: Occurrence of resistance (%) to selected antimicrobials, using harmonised ECOFFs, complete susceptibility and multiresistance to all antimicrobials tested and co-resistance to (fluoro)quinolones and third-generation cephalosporins, in *Escherichia coli* from **imported fresh cattle meat sampled at Border Control Posts**, 6 EU MSs, 2021

Country	N	GEN (%)	AMK (%)	CHL (%)	AMP (%)	CTX (%)	CAZ (%)	MEM (%)	TGC (%)	NAL (%)	CIP (%)	AZM (%)	COL (%)	SMX (%)	TMP (%)	TET (%)	CS (%)	MDR (%)	CIP+CTX, applying ECOFFs (%)	CIP+CTX, applying CBPs (%)
Finland	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Germany	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0
Italy	21	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.0	4.8	90.5	0.0	0.0	0.0
Netherlands	79	1.3	0.0	3.8	5.1	1.3	1.3	0.0	1.3	1.3	1.3	1.3	0.0	7.6	3.8	11.4	84.8	5.1	1.3	1.3
Spain	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Sweden	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Total (6 MSs)	110	0.9	0.0	2.7	4.5	0.9	0.9	0.0	0.9	1.8	1.8	0.9	0.0	5.5	2.7	10.9	85.5	3.6	0.9	0.9
Median (MS)	–	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	95.2	0.0	0.0	0.0

N: total number of isolates tested; %: percentage of isolates with this phenotype from the total tested; GEN: gentamicin; AMK: amikacin; CHL: chloramphenicol; AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; MEM: meropenem; TGC: tigecycline; NAL: nalidixic acid; CIP: ciprofloxacin; AZM: azithromycin; COL: colistin; SMX: sulfamethoxazole; TMP: trimethoprim; TET: tetracycline. CS: percentage of isolates showing complete susceptibility to all antimicrobial classes of the harmonised panel for *E.coli*; MDR: percentage of isolates showing resistance to at least three antimicrobial classes of the harmonised panel for *E.coli*. MSs: Member States; ECOFFs: epidemiological cut-off values.