Antimicrobial Resistance Surveillance in Food Animals

Pigs

	2021	2022	2023	2024
				(Jan – Jun)
Number of samples ¹ collected	204	195	186	90
Samples positive for suspected extended spectrum	4	6	8	2
beta-lactamase (ESBL)-producing ² E. coli	(2.0%)	(3.1%)	(4.3%)	(2.2%)
Samples positive for carbapenem-resistant ³ E. coli	0 (0%)	1 (0.5%)	0 (0%)	0 (0%)
Samples positive for vancomycin-resistant Enterococcus (VRE) ⁴	0 (0%)	0 (0%)	0 (0%)	0 (0%)

¹Samples collected were faecal samples and cultured on non-selective media

²Suspected ESBL is determined by resistance to ceftiofur (3rd generation cephalosporin)

³Carbapenem-resistance is determined by resistance to meropenem

⁴Culturing of Enterococcus was performed using enrichment medium.

Chickens

	2021	2022	2023	2024
				(Jan – Jun)
Number of samples ¹ collected	207	195	189	78
Samples positive for suspected extended spectrum	50	38	34	18
beta-lactamase (ESBL)-producing ² E. coli	(24.2%)	(19.5%)	(18.0%)	(23.1%)
Samples positive for carbapenem-resistant ³ E. coli	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Samples positive for vancomycin-resistant Enterococcus (VRE) ⁴	0 (0%)	0 (0%)	0 (0%)	0 (0%)

¹Samples collected were cloacal swabs and faecal samples, and cultured on non-selective media

²Suspected ESBL is determined by resistance to ceftiofur (3rd generation cephalosporin)

³Carbapenem-resistance is determined by resistance to meropenem

⁴Culturing of Enterococcus was performed using enrichment medium.

Marine Fish

	2021	2022	2023	2024
Number of samples ¹ collected	89	65	65	102
Samples positive for suspected extended spectrum beta-lactamase (ESBL)-producing ²	0 (0%)	1 (1.5%)	0 (0%)	0 (0%)
<i>Vibrio</i> spp. ³				
Samples positive for carbapenem-resistant <i>Vibrio</i> spp. ³	0 (0%)	0 (0%)	0 (0%)	0 (0%)

¹Samples collected were fish slime samples and cultured on differential media to isolate *Vibrio spp*.

²Suspected ESBL is determined by resistance to ceftazidime (3rd generation cephalosporin)

³Only *Vibrio* spp. is shown as there are no available breakpoints to determine susceptibility of *Photobacterium* spp.

Pond Fish

	2021	2022	2023	2024
Number of samples ¹ collected	44	50	45	60
Samples positive for suspected extended spectrum beta-lactamase (ESBL)-producing ² <i>Aeromonas</i> spp.	0 (0%)	0 (0%)	1 (2.2%)	0 (0%)
Samples positive for carbapenem-resistant	2	0 (0%)	0 (0%)	0 (0%)
Aeromonas spp.	(4.5%)			

¹Samples collected were fish slime samples and cultured on differential media to isolate Aeromonas spp.

²Suspected ESBL is determined by resistance to ceftazidime (3rd generation cephalosporin)