

Table 1. Summary of EARS-Net data by pathogen and year
(data correct as of **31/07/2023**)

National Data						% Trends, 2018-2022
Pathogen	2018	2019	Year 2020	2021‡	2022‡	
Number laboratories by year-end	37	39	38	37	36	Sparkline
%Coverage of population	97%	99%	100%	98%	97%	
Not all tested						
<i>E. coli</i>						
Number of isolates	3240	3439	3032	3012	3181	Sparkline
%Ampicillin-R*	67.6%	68.1%	65.2%	63.2%	62.1%	
%Amoxicillin-clavulanic acid-R*	49.8%	51.1%	49.1%	49.0%	45.1%	↓
%Piperacillin/tazobactam-R*	12.6%	13.2%	13.2%	12.6%	11.6%	
%Cefoxitin-R*	6.9%	7.4%	6.5%	4.7%	4.8%	↓
%3GC-R*	12.9%	12.4%	11.9%	10.2%	9.7%	
%Cefotaxime/ceftriaxone-R*	12.7%	12.2%	11.2%	9.1%	10.0%	↓
%Ceftazidime-R*	11.8%	10.0%	10.8%	10.1%	8.3%	
%ESBL-producers*	11.6%	11.3%	9.9%	7.8%	9.1%	↓
%Ciprofloxacin-R*	24.1%	20.6%	18.8%	16.2%	15.7%	
%Gentamicin-R*	10.5%	10.7%	9.3%	8.7%	7.7%	↓
%Gentamicin/Amikacin/Tobramycin-R*	11.8%	12.3%	10.8%	9.9%	9.1%	
%Carbapenem†-R*	0.1%	0.0%	0.3%	0.1%	0.3%	↓
Number Carbapenemase-producers	4	0	3	0	4	
%MDR*	6.2%	6.0%	4.8%	4.2%	3.7%	
<i>S. aureus</i>						
Number of isolates	1188	1186	1081	1238	1250	Sparkline
Number Meticillin-R (or MRSA)	147	144	126	132	132	
%Meticillin-R (or MRSA)	12.4%	12.1%	11.7%	10.7%	10.6%	
<i>K. pneumoniae</i>						
Number of isolates	483	543	512	512	492	Sparkline
%Ampicillin-R*	98.6%	98.9%	99.2%	99.8%	100.0%	
%Amoxicillin-clavulanic acid-R*	29.3%	27.6%	32.2%	32.7%	29.3%	↓
%Piperacillin/tazobactam-R*	17.4%	22.3%	20.5%	21.4%	21.9%	
%Cefoxitin-R*	8.0%	5.2%	6.5%	5.9%	5.7%	-
%3GC-R*	14.5%	17.2%	18.4%	15.6%	13.2%	
%Cefotaxime/ceftriaxone-R*	14.2%	15.5%	16.9%	15.0%	11.2%	-
%Ceftazidime-R*	12.6%	14.0%	18.4%	16.2%	12.8%	
%ESBL-producers*	14.5%	14.2%	14.3%	14.5%	10.8%	↓
%Ciprofloxacin-R*	18.6%	17.5%	17.0%	16.3%	9.6%	
%Gentamicin-R*	11.8%	10.3%	9.1%	9.4%	7.3%	↓
%Gentamicin/Amikacin/Tobramycin-R*	13.0%	11.2%	11.8%	11.1%	7.5%	
%Carbapenem†-R*	0.6%	1.1%	1.8%	2.0%	1.2%	↓
Number Carbapenemase-producers	4	6	5	8	5	
%MDR*	8.5%	5.9%	7.9%	8.0%	3.3%	
<i>E. faecium</i>						
Number of isolates	419	459	499	608	633	Sparkline
%Vancomycin-R (VREfm)	40.2%	38.6%	35.7%	27.5%	27.7%	
%Ampicillin-R*	95.2%	94.5%	95.4%	94.7%	96.6%	↓
%HLG-R*	67.1%	63.8%	59.2%	60.2%	60.8%	
%Linezolid-R*	0.5%	0.4%	1.1%	0.3%	0.6%	-
%MDR*	30.1%	27.9%	25.3%	18.2%	17.2%	
<i>E. faecalis</i>						
Number of isolates	332	310	330	358	375	Sparkline
%Vancomycin-R (VREfa)	0.6%	0.3%	0.9%	0.3%	1.3%	
%Ampicillin-R*	0.9%	0.0%	0.9%	0.8%	1.1%	↓
%HLG-R*	23.6%	23.0%	16.0%	16.7%	16.4%	
%Linezolid-R*	0.0%	0.0%	0.0%	0.6%	0.0%	

* Not all isolates tested; † Carbapenems include imipenem, meropenem and ertapenem

‡ No 2022 data from 1 laboratory due to resource issues

Number of isolates presented in **bold**; proportions (%) presented in *italics*

R, Resistant; MRSA, Meticillin-Resistant *S. aureus*; VREfm, Vancomycin-Resistant *E. faecium*

MRSA, Meticillin-Resistant *S. aureus*; VREfm, Vancomycin-Resistant *E. faecium*

HLG, High-Level Gentamicin; 3GC, 3rd-Generation Cephalosporin (includes cefotaxime, ceftriaxone, ceftazidime)

ESBL, Extended-Spectrum Beta-Lactamase; MDR, Multi-Drug Resistant (see definition for each pathogen)

↓ ↑ indicate significant downward and upward trends

Table 1 (continued). Summary of EARS-Net data by pathogen and year
(data correct as of **07/07/2022**)

National Data						% Trends, 2018-2022
Pathogen	Year					
	2018	2019	2020	2021‡	2022‡	Sparkline
Number laboratories by year-end	37	39	38	37	36	
%Coverage of population	97%	99%	100%	98%	97%	
S. pneumoniae						
Number of isolates	455	372	189	174	305	
of which notified to public health	453	369	179	168	**	
Number serotyped	404	349	170	151	275	
% serotyped	88.8%	93.8%	89.9%	86.8%	90.2%	
Number Penicillin-Non-WT	94	52	31	34	70	
%Penicillin-Non-WT*	20.7%	14.0%	16.6%	19.5%	23.4%	
of which: %R	1.3%	0.8%	0.0%	1.1%	2.0%	
%I	19.3%	13.2%	16.4%	18.4%	21.0%	
%Erythromycin-R*	13.6%	12.5%	13.2%	12.6%	16.5%	
%Penicillin-NWT/Erythromycin-R*	9.1%	7.2%	9.4%	7.1%	10.8%	
P. aeruginosa						
Number of isolates	273	289	271	288	319	
%Piperacillin/tazobactam-R*	8.1%	11.2%	13.0%	14.9%	9.9%	
%Ceftazidime-R*	8.4%	9.1%	10.5%	10.9%	9.1%	
%Imipenem/meropenem-R*	6.6%	5.9%	7.5%	8.0%	8.2%	
%Ciprofloxacin-R*	9.2%	10.1%	14.7%	9.5%	8.6%	
%Tobramycin-R*	2.0%	3.1%	2.4%	3.2%	2.1%	
%MDR*	2.8%	5.0%	2.1%	6.1%	5.2%	
Acinetobacter spp.						
Number of isolates	62	67	53	72	80	
%Ciprofloxacin-R*	1.6%	9.1%	7.3%	3.1%	1.4%	
%Gentamicin-R*	3.6%	1.7%	2.2%	3.1%	1.6%	
%Gentamicin/Amikacin/Tobramycin-R*	3.6%	3.4%	2.2%	3.0%	1.5%	
%Imipenem/meropenem-R*	1.7%	1.6%	0.0%	1.5%	2.5%	
%MDR*	0.0%	1.9%	0.0%	0.0%	0.0%	
TOTAL EARS-NET PATHOGENS	6452	6665	5967	6262	6635	
Group A streptococci						
Number of isolates	110	85	35	26	71	
of which notified to public health	102	84	32	24	**	
Number emm-typed	95	77	28	22	32	
% emm-typed	86.4%	90.6%	80.0%	84.6%	45.1%	
%Erythromycin-R*	2.9%	4.9%	17.1%	16.7%	9.2%	
Group B streptococci (from 1st January 2019)						
Number of isolates			176	119	137	
%Erythromycin-R*			41.9%	26.7%	44.3%	
Candida spp. (Yeasts)						
	Number of isolates					
<i>C. auris</i>	0	0	0	0	0	
<i>C. albicans</i>	97	118	85	124	129	
<i>C. glabrata</i>	41	70	53	77	84	
<i>C. parapsilosis</i>	33	44	57	51	49	
<i>C. tropicalis</i>	5	9	4	17	9	
<i>C. dubliniensis</i>	4	6	5	10	4	
<i>C. guilliermondii</i>	1	5	5	2	4	
<i>C. lusitaniae</i>	6	3	1	1	3	
<i>C. krusei</i>	4	2	0	6	1	
<i>C. lipolytica</i>	0	1	0	1	0	
<i>C. pelliculosa</i>	0	1	0	0	0	
<i>C. orthopsilosis</i>	0	0	0	1	0	
<i>C. haemulonii</i>	1	0	0	0	0	
<i>C. metapsilosis</i>	0	0	0	0	1	
<i>Candida</i> spp. (unspeciated)	4	4	11	0	1	
Total Candida spp	197	263	221	290	285	
TOTAL ALL PATHOGENS	6759	7013	6223	6578	7128	

* Not all isolates tested

**Reconciliation with CIDR data not done for 2022 data due to resource issues at HPSC

‡ No 2022 data from 1 laboratory due to resource issues

Number of isolates presented in **bold**; proportions (%) presented in *italics*

R, Resistant; Non-WT, Non-Wild Type [includes isolates that are **Susceptible, increased exposure (I)** and **Resistant (R)**]

MDR, Multi-Drug Resistant (see definition for each pathogen; note: new definition for *P. aeruginosa*)

↓↑ indicate significant downward and upward trends