Antimicrobial Susceptibility Rates of *Neisseria gonorrhoeae* Strains Isolated in Japan in 2000–2015

Antimicrobial agent	Parameter	2000 (n=57)		2001 (n=120)		2002 (n=219)		2003 (n=179)		2004 (n=164)		2005 (n=93)		2006 (n=70)		2007 (n=35)		2008 (n=71)		2009 (n=83)		2010 (n=178)		2011 (n=224)		2012 (n=273)		2013 (n=241)		2014 (n=192)		2015 (n=272)	
Penicillin G	Susceptible (≦0.06) (n, %)	1	1.8	0	0	1	0.5	4	2.2	2	1.2	0	0	1	1.4	0	0	1	1.4	0	0	0	0	0	0	2	0.7	5	2.1	0	0	4	1.4
	Intermediate (0.125-1) (n, %)	26	45.6	37	30.8	57	26	48	26.8	49	29.9	17	18.3	15	21.4	7	20	26	36.6	25	30.1	61	34.3	61	27.2	90	33	93	38.6	82	42.7	119	43.8
	Resistant (2≦) (n, %)	30	52.6	83	69.2	161	73.5	127	71	113	68.9	76	81.7	54	77.2	28	80	44	62	58	69.9	117	65.7	163	72.8	181	66.3	143	59.3	110	57.3	149	54.8
	MIC range (mg/L)	0.06-16		0.125-16		0.06-64		0.03-16		0.03-512<		0.25-512<		0.06-256		0.25-8		0.06-512<		0.25-128		0.125-128		0.25-512<		0.03-128		0.015-256		0.125-256		0.03-128	
Cefixime	Susceptible (≦0.25) (n, %)	46	80.7	82	68.3	154	70.3	117	65.4	129	78.7	76	81.7	52	74.3	20	57.1	47	66.2	57	68.7	112	62.9	146	65.2	229	83.9	197	81.7	140	72.9	196	72.1
	Not susceptible (0.5≦) (n, %)	11	19.3	38	31.7	65	29.7	62	34.6	35	21.3	17	18.3	18	25.7	15	42.9	24	33.8	26	31.3	66	37.1	78	34.8	44	16.1	44	19.3	52	27.1	76	27.9
	MIC range (mg/L)	0.004-1		0.008-2		<0.001-2		0.002-2		0.004-1		0.004-1		0.004-0.5		0.008-1		0.004-4		≦0.001-1		0.004-4		0.004-1		0.004-0.5		≦0.001-1		0.004-2		≦0.001-1	
Ceftriaxone	EUCAST																																
	Susceptible (≦0.125) (n, %)	57	100	112	93.3	205	93.6	160	89.4	154	93.9	91	97.8	61	87.1	28	80	67	94.4	73	88	148	83.1	174	77.7	258	94.5	226	93.8	178	92.7	237	87.1
	Resistant (0.25≦) (n, %)	0	0	8	6.7	14	6.4	19	10.6	10	6.1	2	2.2	9	12.9	7	20	4	5.6	10	12	30	16.9	50	22.3	15	5.5	15	6.2	14	7.3	35	12.9
	CLSI																																
	Susceptible (≦0.25) (n, %)	57	100	120	100	219	100	178	99.5	164	100	93	100	90	100	35	100	71	100	83	100	179	100	221	98.7	273	100	241	100	191	95.5	271	99.6
	Not susceptible (0.5≦) (n, %)	0	0	0	0	0	0	1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1.3	0	0	0	0	1	0.5	1	0.4
	MIC range (mg/L)	≤0.001-0.125		0.004-0.25		≤0.001-0.25		≤0.001-0.5		≤0.001-0.25		0.002-0.25		≤0.001-0.25		0.004-0.25		≤0.001-0.25		≤0.001-0.25		0.004-0.25		0.004-0.5		0.002-0.25		≤0.001-0.25		≤0.001-0.5		≤0.001-0.5	
Tetracycline	Susceptible (≦0.25) (n, %)	8	14	14	11.7	22	10	26	14.5	19	11.6	5	5.4	8	11.4	1	2.9	14	19.7	6	7.2	30	16.9	23	10.3	48	17.6	44	18.3	49	25.5	77	28.3
	Intermediate (0.5-1) (n, %)	26	45.6	26	21.6	46	21	35	19.5	25	15.2	12	12.9	10	14.3	6	17.1	8	11.3	20	24.1	29	16.3	35	15.6	49	17.9	61	25.3	55	28.7	72	26.5
	Resistant (2≦) (n, %)	23	40.4	80	66.7	151	69	118	66	120	73.2	76	81.7	52	74.3	28	80	49	69	57	68.7	119	66.8	166	74.1	176	64.5	136	56.4	88	45.8	123	45.2
	MIC range (mg/L)	0.125-4		0.125-64		0.125-32		0.06-64		0.004-32		0.25-32		0.125-32		0.25-16		0.125-128		0.125-16		0.06-32		0.125-64		0.125-64		0.125-32		0.125-32		0.125-128	
Spectinomycin	Susceptible (≦32) (n, %)	57	100	118	98.4	213	97.3	179	100	161	98.2	92	98.9	70	100	35	100	70	98.6	83	100	172	96.6	223	99.6	273	100	241	100	192	100	272	100
	Intermediate (64) (n, %)	0	0	1	0.8	5	2.3	0	0	3	1.8	1	1.1	0	0	0	0	1	1.4	0	0	6	3.4	1	0.4	0	0	0	0	0	0	0	0
	Resistant (128≦) (n, %)	0	0	1	0.8	1	0.4	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
	MIC range (mg/L)	8-32		4-256		4-256		4-32		8-64		16-64		16-32		32		16-64		16-32		4-64		16-64		16-32		8-32		16-32		8-32	
Azithromycin[1]	Susceptible (≦0.25) (n, %)					214	97.7	165	92.2	66	40.2	26	27.9	23	32.9	8	22.8	31	43.7	40	48.2	112	62.9	108	48.2	170	62.3	101	41.9	89	46.3	129	47.4
	Intermediate (0.5) (n, %)					2	0.9	12	6.7	59	36	38	40.9	33	47.1	17	48.6	21	29.6	28	33.7	52	29.2	79	35.3	73	26.7	86	35.7	76	39.6	92	33.8
	Resistant (1≦) (n, %)					3	1.4	2	1.1	39	23.8	29	31.2	14	20	10	28.6	19	26.7	15	18.1	14	7.9	37	16.5	30	11	54	22.4	27	14.1	51	18.8
	MIC range (mg/L)					0.015-8		0.015-4		0.06-4		0.06-1		0.06-1		0.06-1		0.03-8		0.06-4		0.03-1		0.03-16		0.03-16		0.015-32		0.03-16		0.06-16	
Levofloxacin	Susceptible (≦0.125) (n, %)	16	28.1	19	15.8	33	15.1	34	19	32	19.5	7	7.5	10	14.3	2	5.7	15	21.1	17	20.5	40	22.5	47	21	61	22.3	72	29.9	56	29.2	75	27.6
	Intermediate (0.25-0.5) (n, %)	19	33.3	23	19.2	15	6.8	4	2.2	6	3.7	0	0	0	0	0	0	0	0	3	3.6	2	1.1	0	0	0	0	0	0	0	0	1	0.4
	Resistant (1≦) (n, %)	22	38.6	78	65	171	78.1	141	78.8	126	76.8	86	82.5	60	85.7	33	94.3	56	78.9	63	75.9	136	76.4	177	79	212	77.7	169	70.1	136	70.8	196	72
	MIC range (mg/L)	0.004-16		0.004-32		0.008-64		0.008-32		0.004-32		0.015-32		0.015-32		0.015-32		0.008-32		0.03-32		0.008-32		0.008-32		0.008-32		0.008-32		0.008-16		0.008-32	

[1] Antimicrobial susceptibility testing against azithromycin was started from 2002.