

# Susceptibility Reporting Outside of GISP

During 2005-2006, Association of Public Health Laboratories (APHL) and other public health laboratories were surveyed to identify state or city public health laboratories which routinely performed antimicrobial susceptibility testing of *N. gonorrhoeae*. Data from the survey revealed 24 laboratories which performed antimicrobial susceptibility testing and the results are presented in **Table 1**.

**Table 1. Non-GISP antimicrobial susceptibility testing of *N. gonorrhoeae* during 2005**

STD Project Area	Total # Isolates Tested	Cip S	Cip I	Cip R	Spc S	Spc R	Cfx S	Cfx DS	Cpd S	Cpd DS	Cro S	Cro DS	Azi S	Azi DS
AZ	53 (m)	53	0	0	-	-	-	-	-	-	53	0	-	-
	68 (f)	68	0	0	-	-	-	-	-	-	68	0	-	-
CA (San Diego) <sup>b</sup>	27	23	0	4	-	-	-	-	-	-	27	0	-	-
CO	1 (f)	1	0	0	-	-	-	-	-	-	1	0	-	-
FL	35	23	0	12	-	-	-	-	-	-	35	0	-	-
HI	309	269	0	40	309	0	-	-	309	0	309	0	307	2
IN	1123 (m)	1070	0	53	-	-	-	-	-	-	1123	0	-	-
	488 (f)	486	0	2	-	-	-	-	-	-	488	0	-	-
MA	233 (m)	157	0	76	233	0	233	0	233	0	233	0	201	32
	41 (f)	38	0	3	41	0	41	0	41	0	41	0	40	1
MD	69	69	0	0	69	0	69	0	-	-	69	0	-	-
MI	782	736	4	42	782	0	-	-	782	0	782	0	-	-
MN	88	84	0	4	88	0	88	0	-	-	88	0	88	0
MS	214	214	0	0	-	-	-	-	-	-	214	0	-	-
MT	4 (m)	3	0	1	4	0	4	0	-	-	4	0	3	1
	8 (f)	8	0	0	8	0	8	0	-	-	8	0	8	0
NH	7 (m)	5	0	2	7	0	-	-	-	-	7	0	-	-
	10 (f)	10	0	0	10	0	-	-	-	-	10	0	-	-
NJ <sup>c</sup>	79 (m)	77	0	2	79	0	79	0	-	-	79	0	-	-
	9 (f)	9	0	0	9	0	9	0	0	0	9	0	-	-
NYC	402 (m)	365	0	37	-	-	402	0	-	-	402	0	401	1
	77 (f)	75	0	2	-	-	77	0	-	-	77	0	77	0
NY (Erie County)	51 (m)	49	2	0	51	0	51	0	-	-	51	0	50	1
	106 (f)	106	0	0	106	0	106	0	-	-	106	0	106	0
NY State (Wadsworth)	149	142	0	7	149	0	-	-	-	-	149	0	149	0
OR <sup>d</sup>	132 (m)	94	0	38	-	-	52	0	-	-	52	0	52	0
	92 (f)	89	0	3	-	-	8	0	-	-	8	0	8	0
PR	3 (m)	3	0	0	3	0	0	-	-	-	-	-	-	-
TX	13	13	0	0	-	-	-	-	-	-	13	0	-	-
UT	96 (m)	88	0	8	-	-	-	-	-	-	96	0	-	-
	39 (f)	37	0	2	-	-	-	-	-	-	39	0	-	-
VA	2	1	0	1	2	0	-	-	-	-	2	0	-	-
WA (Seattle) <sup>d</sup>	280 (m)	228	0	52	-	-	60	0	-	-	60	0	59	0
	122 (f)	119	0	3	-	-	15	0	-	-	15	0	15	0
WI (Milwaukee)	758	736	15	7	758	0	-	-	-	-	758	0	747	11
<b>TOTAL</b>	<b>5970</b>	<b>5548</b>	<b>21</b>	<b>401</b>	<b>2708</b>	<b>0</b>	<b>1302</b>	<b>0</b>	<b>1365</b>	<b>0</b>	<b>5476</b>	<b>0</b>	<b>2311</b>	<b>49</b>

## Key:

- m = male; f = female
- Cip=ciprofloxacin; Spc=spectinomycin; Cfx=cefixime; Cpd=cefepodoxime; Cro=ceftriaxone; Azi=azithromycin
- S=susceptible; DS=decreased susceptibility; I=intermediate resistant; R=resistant
- Cells containing only "-" indicate that the antimicrobial for that column was not tested
- <sup>a</sup> For this table, AziDS is defined as an isolate with azithromycin disk inhibition zone size ≤ 30mm or minimum inhibitory concentration (MIC) ≥ 1.0 µg/ml.
- <sup>b</sup> San Diego tested all isolates against ofloxacin, rather than against ciprofloxacin.
- <sup>c</sup> For New Jersey data, due to complications with media preparation, susceptibility testing results were only available from January to June 2005.
- <sup>d</sup> For Oregon and Washington data, cephalosporins and azithromycin susceptibility testing were performed only on a subset of isolates, generally those isolates found to be ciprofloxacin-resistant.

## Observation

In 2005-2006, Association of Public Health Laboratories (APHL) and other public health laboratories were surveyed to determine the number of state and city public health laboratories that routinely performed antimicrobial susceptibility testing of *N. gonorrhoeae*. These isolates are not representative of the gonorrhea patient population but rather a convenience sample of patients who happen to undergo culture rather than non-culture testing.

Testing methodology used by the labs for susceptibility testing was either disk diffusion or E-test. The survey was distributed to 66 labs to which 60 responded, revealing that 24 of the 60 labs performed GC susceptibility testing and 36 did not. Data from 5,970 isolates were collected from these 24 labs. In addition, in contrast to GISP,

multiple non-GISP isolates from various anatomic sites may be submitted from a single patient, so the 5,970 non-GISP isolates are likely to represent fewer than 5,970 patients. Furthermore, the laboratories did not always test for resistance to the same antibiotic panel used in GISP.

The survey revealed that 6.7% (401/5,970) of non-GISP isolates were resistant to ciprofloxacin or ofloxacin. Gender information was available for 3,524 (59.0%) of the 5,970 isolates. Of those, 70% (2,463/3,524) were male and 30% (1,061/3,524) female. QRNG was found among 10.9% (269/2,463) of males and 1.4% (15/1,061) of females. In addition, 2.1% (49/2,360) of isolates had decreased susceptibility to azithromycin. No resistance was reported to spectinomycin, cefixime, or ceftriaxone.

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