

## SUSCEPTIBILITY REPORTING OUTSIDE OF GISP

During 2003-2004, Association of Public Health Laboratories (APHL) and STD project areas were informally surveyed to identify city or state public health laboratories which routinely performed antimicrobial susceptibility testing of *N. gonorrhoeae*. Data from 21 project areas and other laboratories which performed antimicrobial susceptibility testing are presented in **Table 1**.

**Table 1. Non-GISP antimicrobial susceptibility testing of *N. gonorrhoeae* during 2003.**

Reporting Areas	Total # Isolates Tested	Cip S	Cip I	Cip R	Spc S	Spc R	Cfx S	Cfx DS	Cro S	Cro DS	Azi S	Azi DS <sup>a</sup>
AZ	22	22 <sup>b</sup>	0	0	-	-	-	-	22 <sup>b</sup>	0	0	0
CA San Diego	193	158	0	35 <sup>c</sup>	-	-	-	-	193	0	-	-
FL	31	31 <sup>d</sup>	0	0	-	-	-	-	31	0	31	0
Guam <sup>e</sup>	5	4	0	1	-	-	-	-	5	0	-	-
HI	380	358	1	21	380	0	377	3	380	0	380	0
IL Chicago	85	83	0	2 <sup>d</sup>	-	-	83	2	-	-	-	-
IN Indianapolis	491	488	1	2	-	-	-	-	491	0	-	-
MA	402	346	0	56 <sup>f</sup>	-	-	-	-	402	0	-	-
MI	582	564	1	17	582	0	582	0	582	0	-	-
MN	146	146	0	0	146	0	146	0	146	0	141	5
MS <sup>g</sup>	748	748	0	0	-	-	-	-	17	0	-	-
MT	13	13	0	0	-	-	13	0	13	0	13	0
NH	21	14	1	6	21	0	-	-	21	0	-	-
NJ	209	209 <sup>h</sup>	0	0	209	0	209	0	209	0	-	-
NY	29	28	0	1 <sup>i</sup>	29	0	28	1	29	0	25	4
NYC	1026	995	1	30 <sup>c</sup>	1026	0	-	-	1026	0	-	-
TX	49	49	0	0	-	-	-	-	49	0	-	-
UT	98	97 <sup>j</sup>	0	1	-	-	-	-	98	0	-	-
VA	2	2	0	0	2	0	-	-	2	0	-	-
WA Seattle <sup>k</sup>	269	252	1	16	-	-	128 <sup>k</sup>	0	-	-	-	-
WI Milwaukee <sup>l</sup>	386	384	0	2	386	0	-	-	386	0	384	2
Total	5187	4991	6	190	2781	0	1566	6	4102	0	974	11

Note:

- Cip=ciprofloxacin; Spc=spectinomycin; Cfx=cefixime; 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.
- The testing methodology for all sites except Florida, Hawaii, Indianapolis, Montana, and Texas was by disk diffusion; Florida, Hawaii, Indianapolis, Montana, and Texas used the E-test method.

<sup>a</sup>For this table, AziDS is defined as an isolate with azithromycin disk inhibition zone size  $\leq 30$ mm or minimum inhibitory concentration (MIC)  $\geq 1.0 \mu\text{g/ml}$ .

<sup>b</sup>Arizona tested isolates against ciprofloxacin and ceftriaxone from September until December 2003.

<sup>c</sup>New York City and San Diego tested all isolates against ofloxacin, rather than against ciprofloxacin. The 35 isolates reported from San Diego were resistant to ofloxacin. The 30 isolates reported from NYC were resistant to ofloxacin and tested against ciprofloxacin at the CDC.

<sup>d</sup>Florida tested all isolates against levofloxacin, gatafloxacin, and ciprofloxacin.

<sup>e</sup>Data from Guam reflects isolates tested from January to June 2003.

<sup>f</sup>Massachusetts tested all isolates against norfloxacin, ofloxacin, ciprofloxacin, cefotaxime, and cefoxitin.

<sup>g</sup>Mississippi tested 748 isolates against ciprofloxacin only; 17 isolates were screened for penicillin, ciprofloxacin, ceftriaxone, and tetracycline resistance.

<sup>h</sup>New Jersey tested all isolates against ofloxacin.

<sup>i</sup>New York state tested all 29 isolates against ofloxacin and 20/29 isolates against ciprofloxacin.

<sup>j</sup>Utah tested all isolates against ofloxacin and ciprofloxacin

<sup>k</sup>Data from Seattle, WA came from the University of Washington and reflects isolates tested from June until December 2003; Seattle, WA tested 128 isolates against cefixime, cefuroxime, and cefpodoxime.

<sup>l</sup>Data from Milwaukee, WI came from Milwaukee Health Department Laboratories and does not reflect GC resistance testing procedures of Wisconsin State Laboratory of Hygiene.

## Discussion

Susceptibility data from a total of 5187 non-GISP isolates were available. Non-GISP isolates from most STD project areas do not consist of a representative or systematic sample of patients with gonorrhea but rather a convenience sample of patients who happen to undergo culture rather than non-culture testing. In addition, in contrast to GISP, multiple non-GISP isolates from various anatomic sites may be submitted from a single patient, so the 5187 non-GISP isolates are likely to represent fewer than 5187 patients with gonorrhea.

These data reveal that 3.7% (190/5187) of non-GISP isolates were resistant to ciprofloxacin or ofloxacin, which is comparable to the 4.1 % (270/6552) identified for GISP isolates in 2003. Fluoroquinolone-resistant isolates were identified in San Diego, California (35/193, 18.1%); Guam (1/5, 20%); Hawaii (21/380, 5.5%); Chicago, Illinois (2/85, 2.4%); Indianapolis, Indiana (2/491, 0.4%); Massachusetts (56/402, 13.9%); Michigan (17/582, 2.9%); New Hampshire (6/21, 28.6%); New York State (1/29, 3.4%); New York City (30/1026, 2.9%); Seattle, Washington (16/269; 5.9%), Utah (1/98, 1%); and Milwaukee, Wisconsin (2/386; 0.5%).

## 2003-2004 Survey results

During 2003-2004, 66 STD project areas and APHL laboratories were surveyed to determine the extent of antimicrobial susceptibility testing. Of the 66 laboratories surveyed, 25 reported performing susceptibility testing, while 35 did not perform such testing. Six sites did not respond to the survey.

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