

**Sexually
Transmitted
Disease
Surveillance
2022:
Enhanced Gonococcal Isolate
Surveillance Project Profiles**

**Division of STD Prevention
April 2024**

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HIV, VIRAL HEPATITIS, STD, AND TB PREVENTION
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Acknowledgments

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Web Site

The online version of this report is available at <https://www.cdc.gov/std/statistics/gisp-profiles/default.htm>.

Technical Note

Antimicrobial susceptibility data presented in this report are based on criteria established by the Clinical & Laboratory Standards Institute (CLSI).

2022 Enhanced Gonococcal Isolate Surveillance Project
Clinical Sites and Years Participated

Columbus, Ohio <i>(2018–2022)</i>	Philadelphia, Pennsylvania <i>(2018–2022)</i>
Las Vegas, Nevada <i>(2018–2022)</i>	Phoenix, Arizona <i>(2020–2022)</i>
New Orleans, Louisiana <i>(2018–2022)</i>	Pontiac, Michigan <i>(2018–2022)</i>
Orange County, California <i>(2018–2022)</i>	San Diego, California <i>(2018–2022)</i>

2022 Enhanced Gonococcal Isolate Surveillance Project
Regional Laboratories

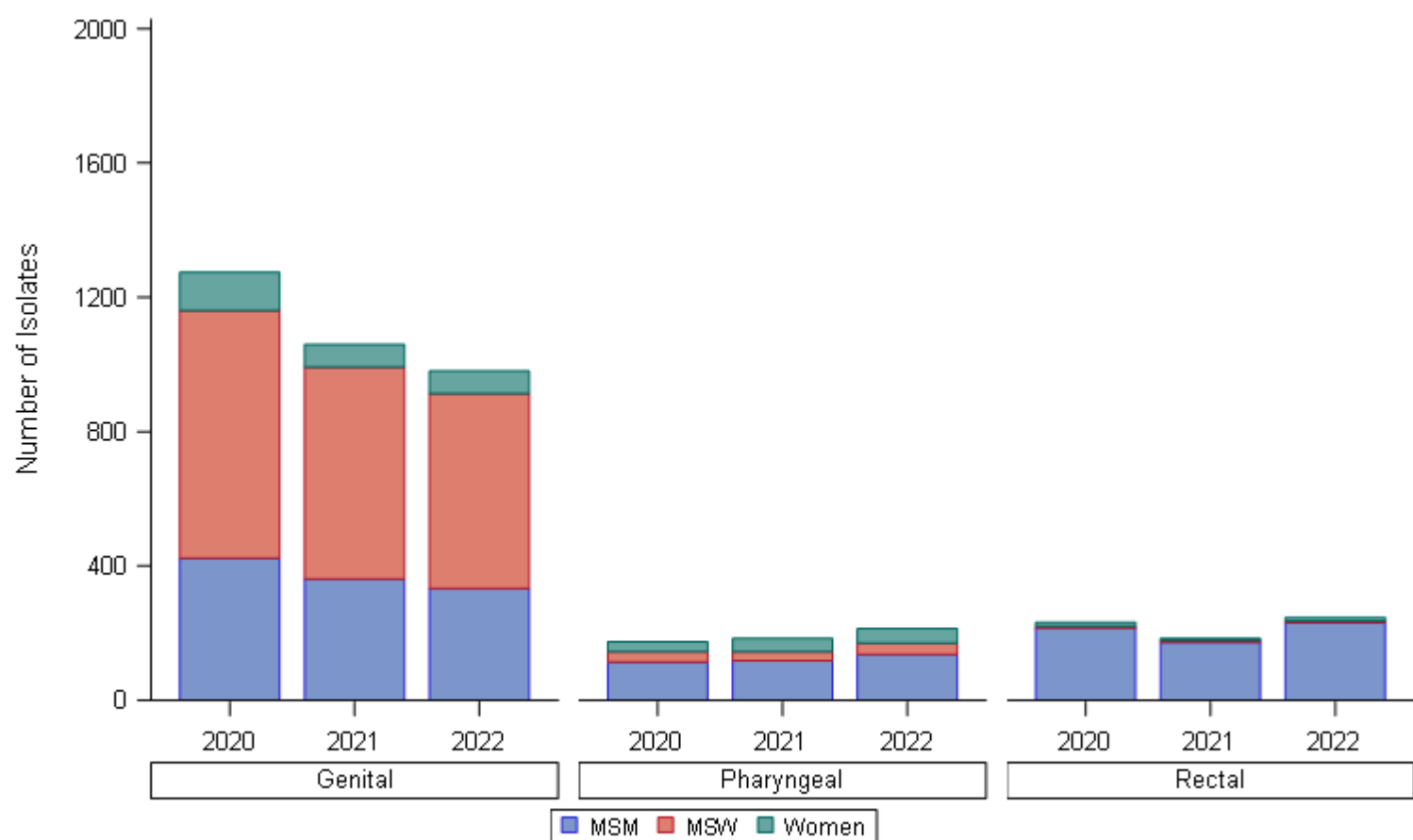
Maryland Department of Health and Mental Hygiene <i>Baltimore, Maryland</i>
Tennessee Department of Health <i>Nashville, Tennessee</i>
Utah Department of Health <i>Salt Lake City, Utah</i>
Washington State Department of Health <i>Seattle, Washington</i>

2022 Enhanced Gonococcal Isolate Surveillance Project Profiles

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Figure 1. Number of *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022

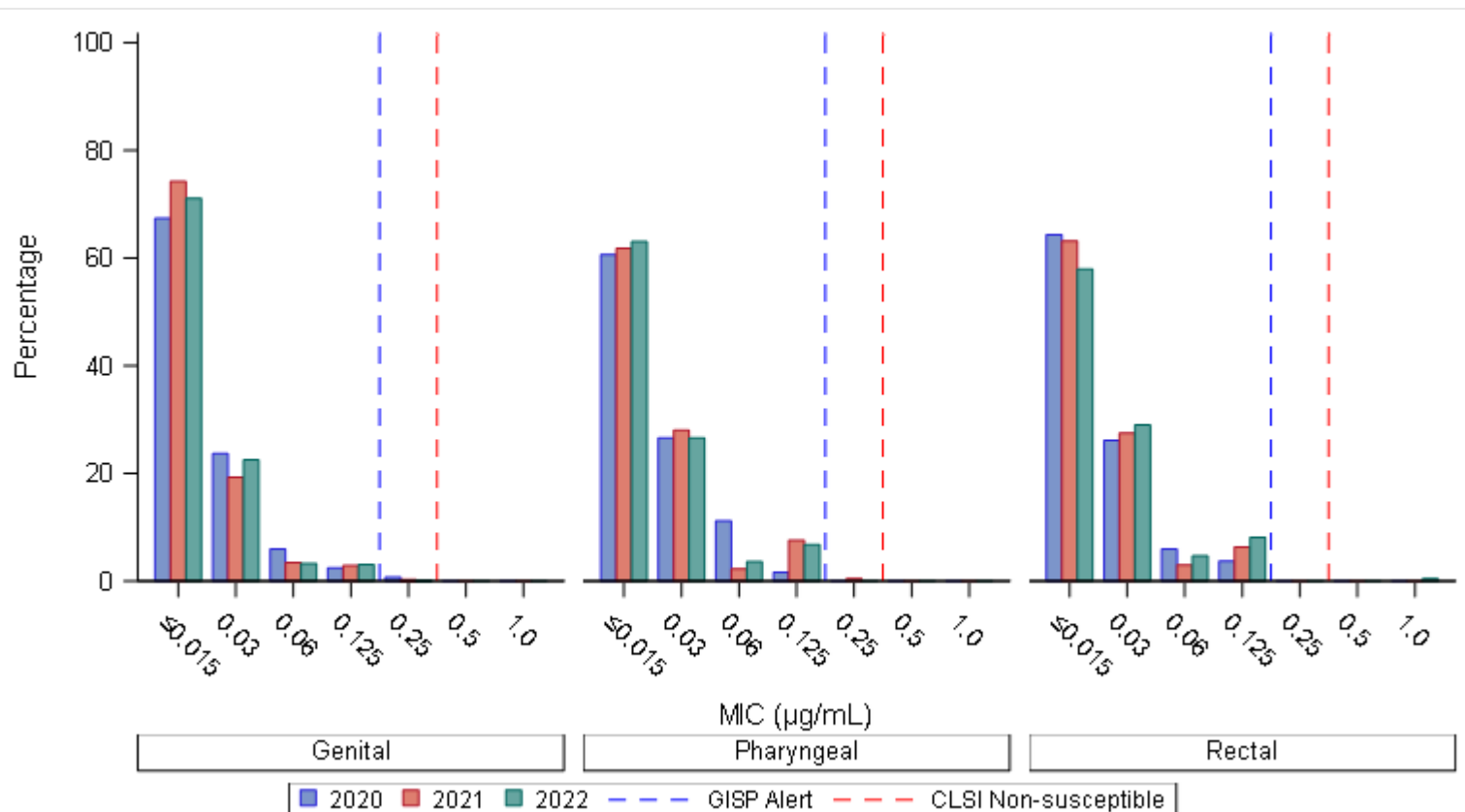


Site of Infection	Year	MSM	MSW	Women	Total
Genital	2020	422	739	113	1274
Genital	2021	361	631	67	1059
Genital	2022	333	580	67	980
Pharyngeal	2020	113	32	29	174
Pharyngeal	2021	118	26	40	184
Pharyngeal	2022	136	34	43	213
Rectal	2020	216	4	12	232
Rectal	2021	173	5	6	184
Rectal	2022	233	3	10	246

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 2. Distribution of Cefixime Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	≤0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
Genital	2020	877 (67.4)	308 (23.7)	77 (5.9)	31 (2.4)	9 (0.7)	0 (0.0)	0 (0.0)	1302
Genital	2021	853 (74.2)	221 (19.2)	39 (3.4)	33 (2.9)	3 (0.3)	0 (0.0)	0 (0.0)	1149
Genital	2022	705 (71.1)	223 (22.5)	32 (3.2)	30 (3.0)	2 (0.2)	0 (0.0)	0 (0.0)	992
Pharyngeal	2020	114 (60.6)	50 (26.6)	21 (11.2)	3 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	188
Pharyngeal	2021	139 (61.8)	63 (28.0)	5 (2.2)	17 (7.6)	1 (0.4)	0 (0.0)	0 (0.0)	225
Pharyngeal	2022	140 (63.1)	59 (26.6)	8 (3.6)	15 (6.8)	0 (0.0)	0 (0.0)	0 (0.0)	222
Rectal	2020	175 (64.3)	71 (26.1)	16 (5.9)	10 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	272
Rectal	2021	170 (63.2)	74 (27.5)	8 (3.0)	17 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)	269
Rectal	2022	150 (57.9)	75 (29.0)	12 (4.6)	21 (8.1)	0 (0.0)	0 (0.0)	1 (0.4)	259

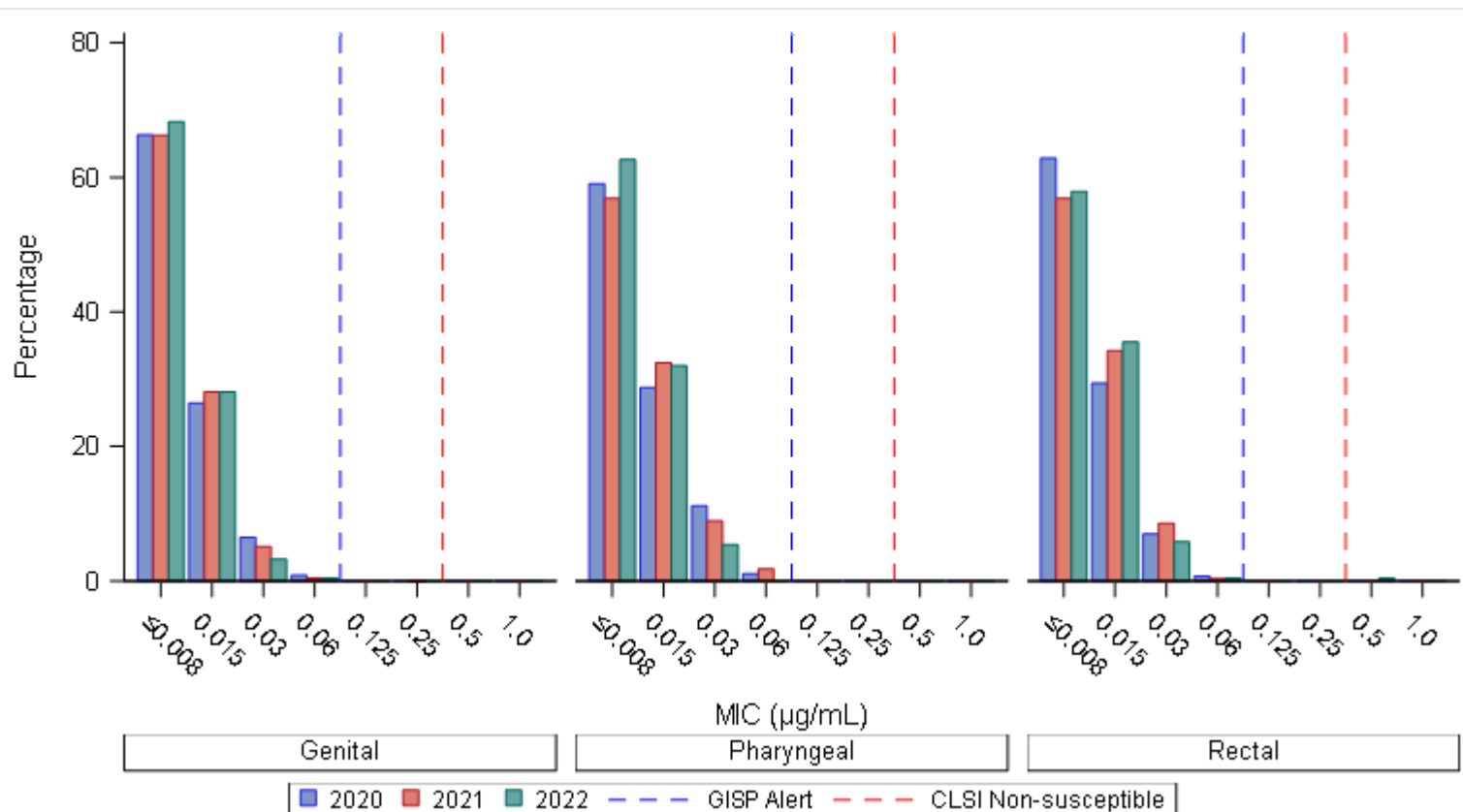
GISP Alert Value = cefixime MIC ≥0.25 µg/mL; CLSI Non-susceptible = cefixime MIC ≥0.5 µg/mL.

CLSI = Clinical & Laboratory Standards Institute.

Non-susceptible = Category used for isolates when only a susceptible breakpoint has been designated and the MIC is above the susceptible breakpoint.

As of the end of 2022, the CLSI has not established a cefixime resistance breakpoint for *N. gonorrhoeae*.

Figure 3. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	≤0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
Genital	2020	863 (66.3)	344 (26.4)	84 (6.5)	11 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1302
Genital	2021	761 (66.2)	323 (28.1)	59 (5.1)	5 (0.4)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	1149
Genital	2022	677 (68.2)	279 (28.1)	32 (3.2)	4 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	992
Pharyngeal	2020	111 (59.0)	54 (28.7)	21 (11.2)	2 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	188
Pharyngeal	2021	128 (56.9)	73 (32.4)	20 (8.9)	4 (1.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	225
Pharyngeal	2022	139 (62.6)	71 (32.0)	12 (5.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	222
Rectal	2020	171 (62.9)	80 (29.4)	19 (7.0)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	272
Rectal	2021	153 (56.9)	92 (34.2)	23 (8.6)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	269
Rectal	2022	150 (57.9)	92 (35.5)	15 (5.8)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	259

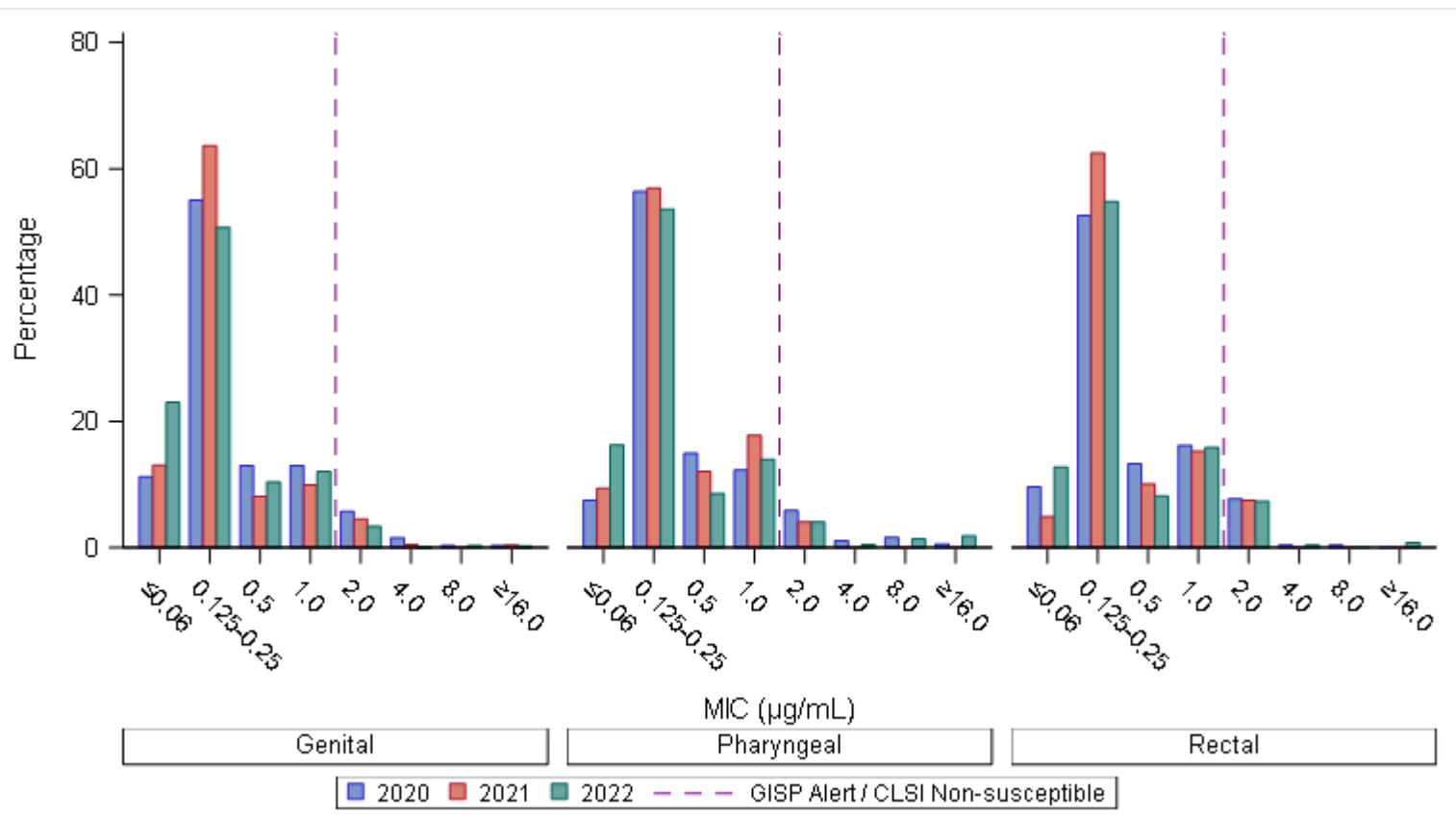
GISP Alert Value = ceftriaxone MIC ≥0.125 µg/mL; CLSI Non-susceptible = ceftriaxone MIC ≥0.5 µg/mL.

CLSI = Clinical & Laboratory Standards Institute.

Non-susceptible = Category used for isolates when only a susceptible breakpoint has been designated and the MIC is above the susceptible breakpoint.

As of the end of 2022, the CLSI has not established a ceftriaxone resistance breakpoint for *N. gonorrhoeae*.

Figure 4. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



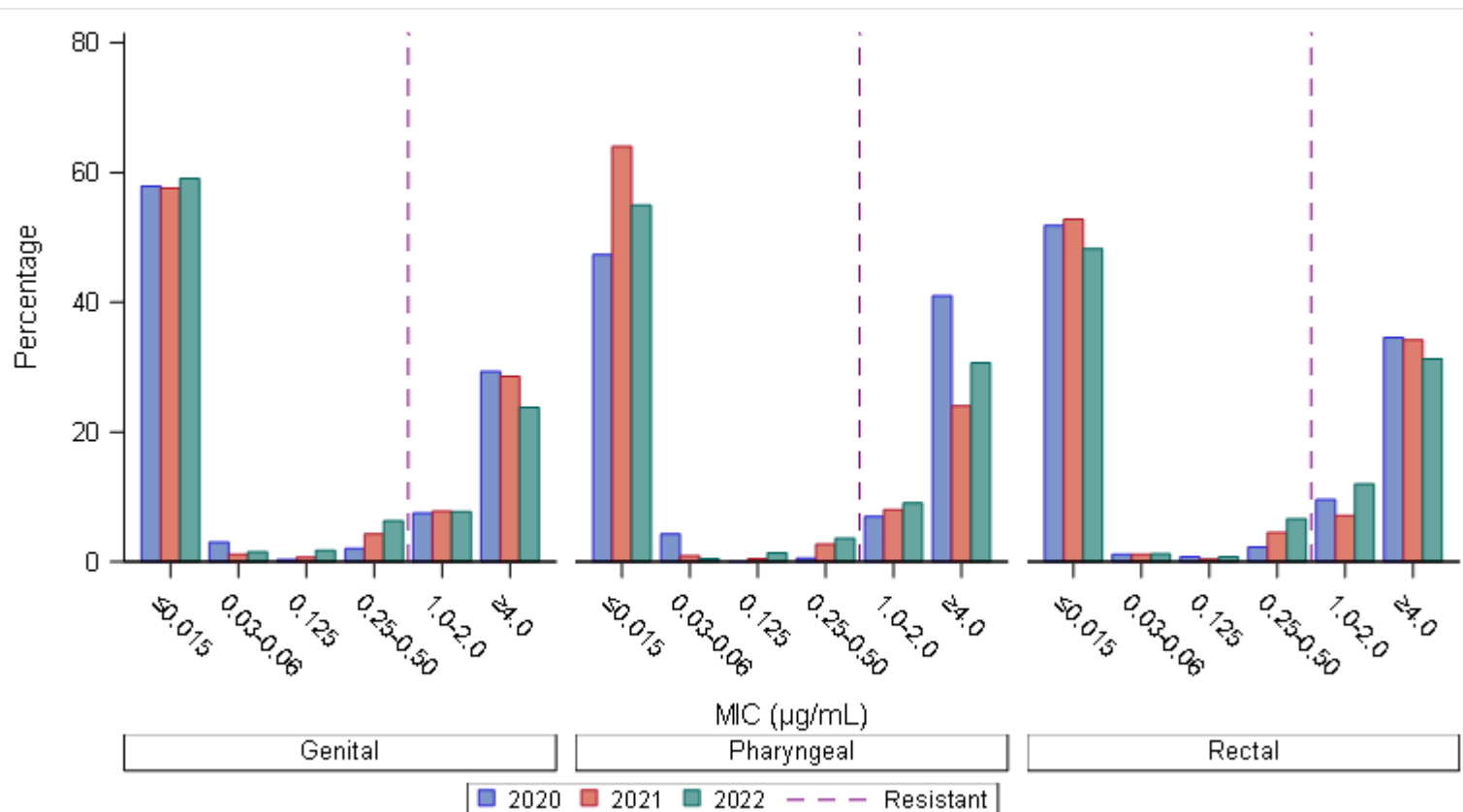
Site of Infection	Year	≤0.06 n (%)	0.125-0.25 n (%)	0.5 n (%)	1.0 n (%)	2.0 n (%)	4.0 n (%)	8.0 n (%)	≥16.0 n (%)	Total
Genital	2020	146 (11.2)	716 (55.0)	169 (13.0)	169 (13.0)	74 (5.7)	20 (1.5)	4 (0.3)	4 (0.3)	1302
Genital	2021	150 (13.1)	731 (63.6)	93 (8.1)	114 (9.9)	52 (4.5)	5 (0.4)	0 (0.0)	4 (0.3)	1149
Genital	2022	228 (23.0)	503 (50.7)	103 (10.4)	119 (12.0)	33 (3.3)	1 (0.1)	3 (0.3)	2 (0.2)	992
Pharyngeal	2020	14 (7.4)	106 (56.4)	28 (14.9)	23 (12.2)	11 (5.9)	2 (1.1)	3 (1.6)	1 (0.5)	188
Pharyngeal	2021	21 (9.3)	128 (56.9)	27 (12.0)	40 (17.8)	9 (4.0)	0 (0.0)	0 (0.0)	0 (0.0)	225
Pharyngeal	2022	36 (16.2)	119 (53.6)	19 (8.6)	31 (14.0)	9 (4.1)	1 (0.5)	3 (1.4)	4 (1.8)	222
Rectal	2020	26 (9.6)	143 (52.6)	36 (13.2)	44 (16.2)	21 (7.7)	1 (0.4)	1 (0.4)	0 (0.0)	272
Rectal	2021	13 (4.8)	168 (62.5)	27 (10.0)	41 (15.2)	20 (7.4)	0 (0.0)	0 (0.0)	0 (0.0)	269
Rectal	2022	33 (12.7)	142 (54.8)	21 (8.1)	41 (15.8)	19 (7.3)	1 (0.4)	0 (0.0)	2 (0.8)	259

GISP Alert Value: azithromycin MIC ≥2.0 µg/mL; CLSI Non-susceptible = azithromycin MIC ≥2.0 µg/mL.

CLSI = Clinical & Laboratory Standards Institute.

Non-susceptible = Category used for isolates when only a susceptible breakpoint has been designated and the MIC is above the susceptible breakpoint. As of the end of 2022, the CLSI has not established an azithromycin resistance breakpoint for *N. gonorrhoeae*.

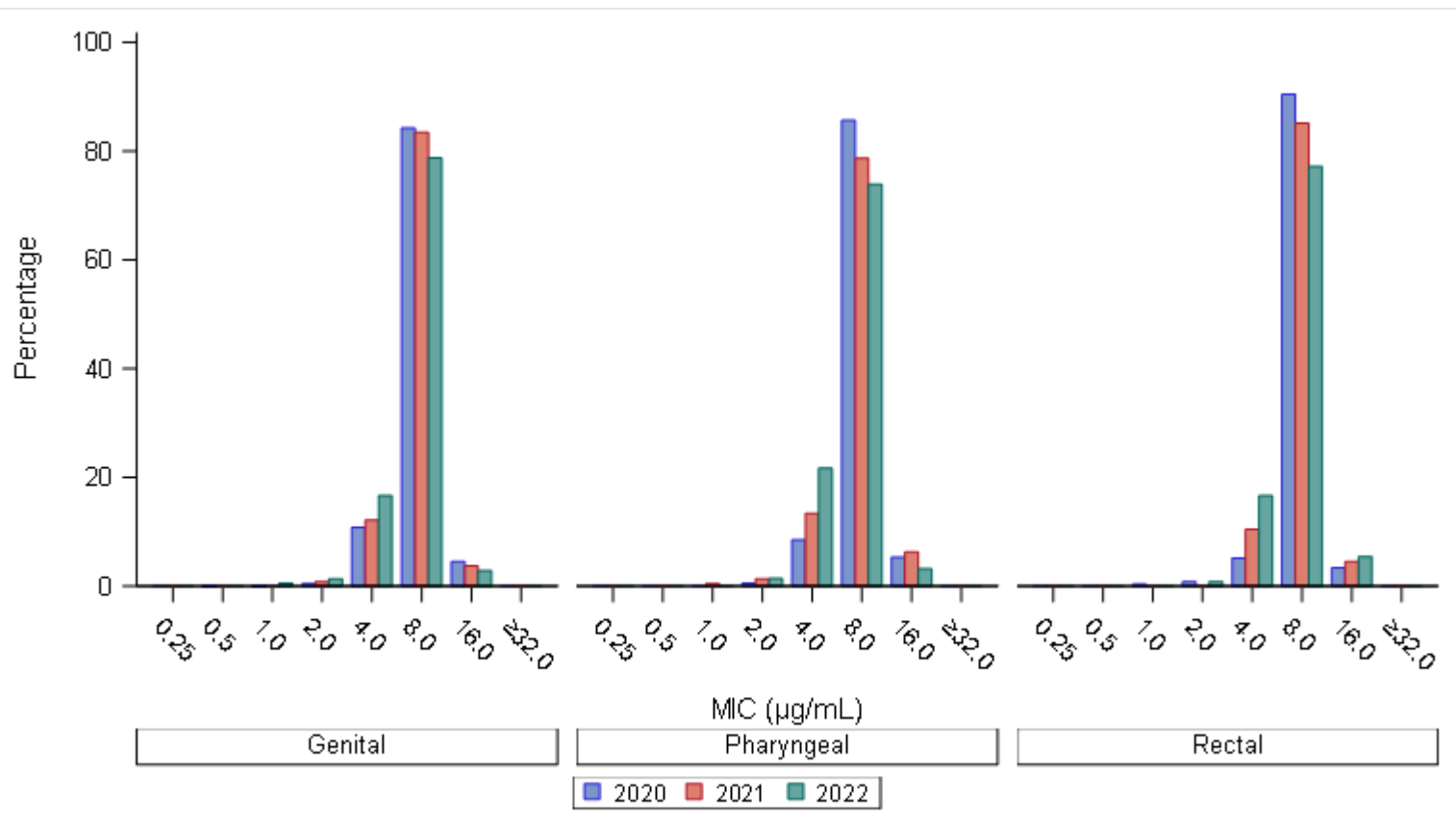
Figure 5. Distribution of Ciprofloxacin Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	≤0.015 n (%)	0.03-0.06 n (%)	0.125 n (%)	0.25-0.50 n (%)	1.0-2.0 n (%)	≥4.0 n (%)	Total
Genital	2020	754 (57.9)	39 (3.0)	4 (0.3)	26 (2.0)	97 (7.5)	382 (29.3)	1302
Genital	2021	662 (57.6)	13 (1.1)	8 (0.7)	49 (4.3)	89 (7.7)	328 (28.5)	1149
Genital	2022	586 (59.1)	15 (1.5)	17 (1.7)	62 (6.3)	76 (7.7)	236 (23.8)	992
Pharyngeal	2020	89 (47.3)	8 (4.3)	0 (0.0)	1 (0.5)	13 (6.9)	77 (41.0)	188
Pharyngeal	2021	144 (64.0)	2 (0.9)	1 (0.4)	6 (2.7)	18 (8.0)	54 (24.0)	225
Pharyngeal	2022	122 (55.0)	1 (0.5)	3 (1.4)	8 (3.6)	20 (9.0)	68 (30.6)	222
Rectal	2020	141 (51.8)	3 (1.1)	2 (0.7)	6 (2.2)	26 (9.6)	94 (34.6)	272
Rectal	2021	142 (52.8)	3 (1.1)	1 (0.4)	12 (4.5)	19 (7.1)	92 (34.2)	269
Rectal	2022	125 (48.3)	3 (1.2)	2 (0.8)	17 (6.6)	31 (12.0)	81 (31.3)	259

Ciprofloxacin resistance MIC ≥1.0 µg/mL.

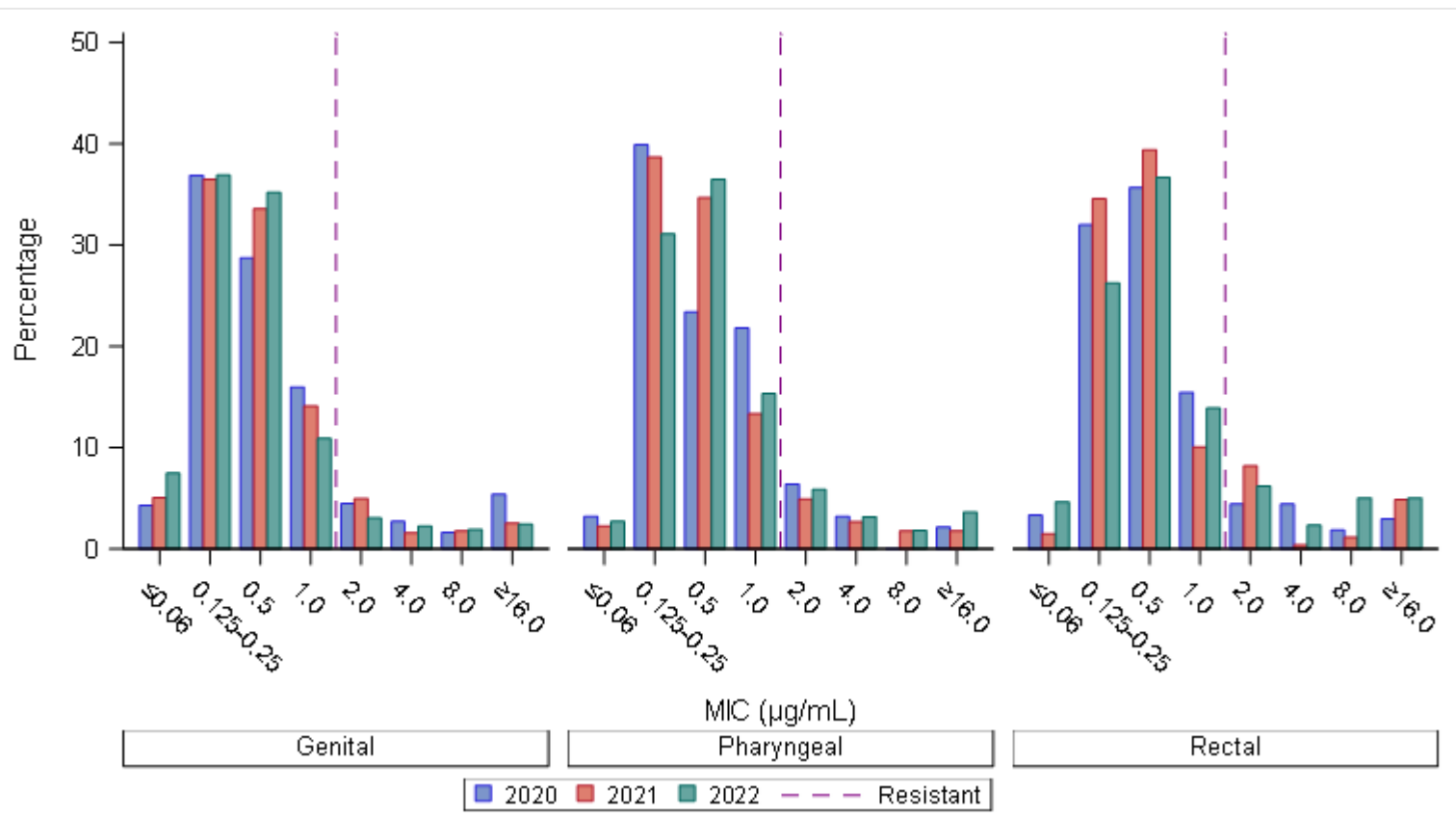
Figure 6. Distribution of Gentamicin Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	0.25 n (%)	0.5 n (%)	1.0 n (%)	2.0 n (%)	4.0 n (%)	8.0 n (%)	16.0 n (%)	≥32.0 n (%)	Total
Genital	2020	0 (0.0)	1 (0.1)	1 (0.1)	5 (0.4)	140 (10.8)	1097 (84.3)	58 (4.5)	0 (0.0)	1302
Genital	2021	0 (0.0)	0 (0.0)	0 (0.0)	9 (0.8)	139 (12.1)	959 (83.5)	42 (3.7)	0 (0.0)	1149
Genital	2022	0 (0.0)	0 (0.0)	5 (0.5)	13 (1.3)	165 (16.6)	781 (78.7)	28 (2.8)	0 (0.0)	992
Pharyngeal	2020	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	16 (8.5)	161 (85.6)	10 (5.3)	0 (0.0)	188
Pharyngeal	2021	0 (0.0)	0 (0.0)	1 (0.4)	3 (1.3)	30 (13.3)	177 (78.7)	14 (6.2)	0 (0.0)	225
Pharyngeal	2022	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.4)	48 (21.6)	164 (73.9)	7 (3.2)	0 (0.0)	222
Rectal	2020	0 (0.0)	0 (0.0)	1 (0.4)	2 (0.7)	14 (5.1)	246 (90.4)	9 (3.3)	0 (0.0)	272
Rectal	2021	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	28 (10.4)	229 (85.1)	12 (4.5)	0 (0.0)	269
Rectal	2022	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.8)	43 (16.6)	200 (77.2)	14 (5.4)	0 (0.0)	259

As of the end of 2022, the Clinical & Laboratory Standards Institute (CLSI) criteria for susceptibility and resistance to gentamicin have not been established for *N. gonorrhoeae*. A GISP alert value for gentamicin has not been determined.

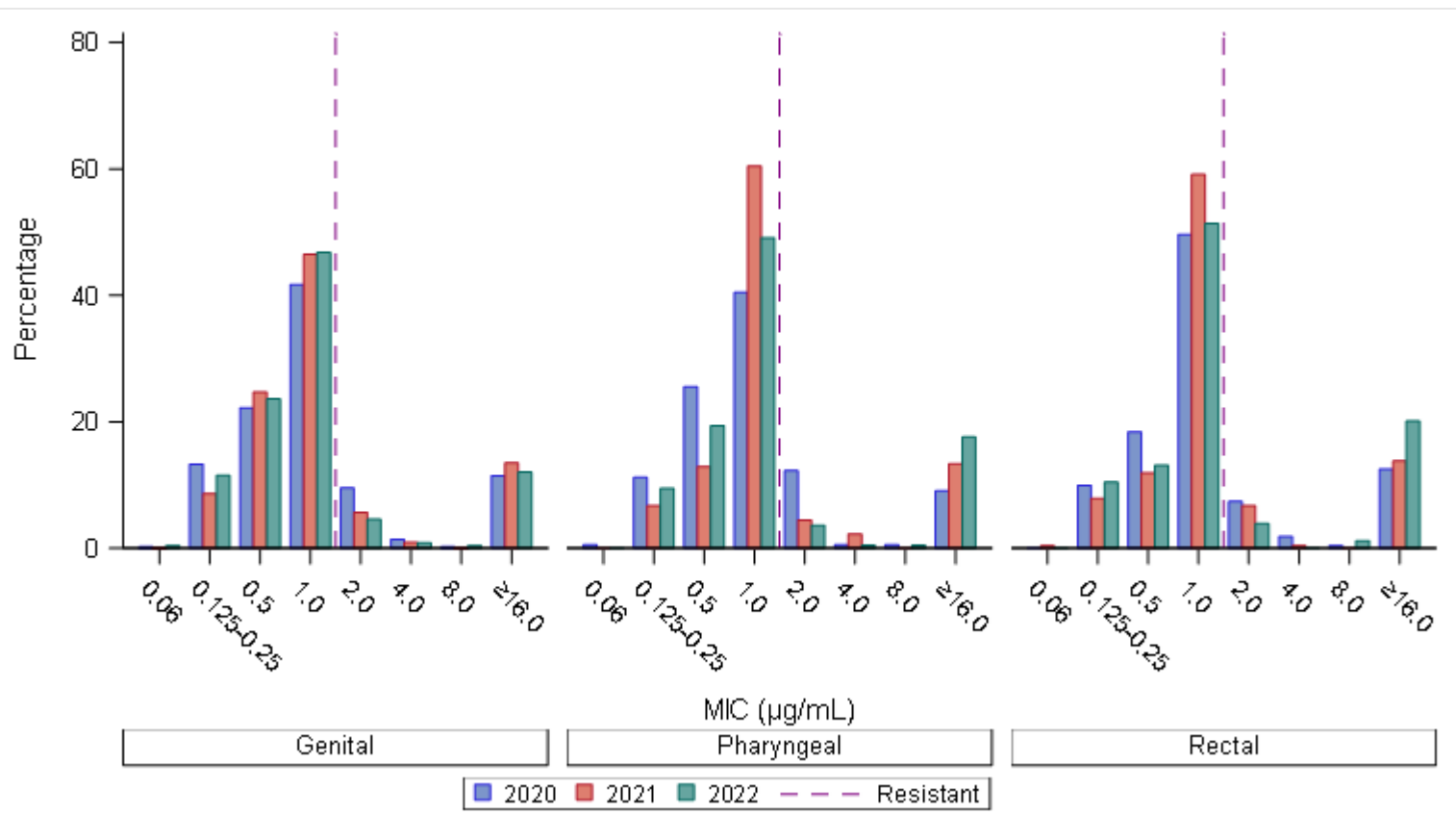
Figure 7. Distribution of Penicillin Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	≤0.06 n (%)	0.125-0.25 n (%)	0.5 n (%)	1.0 n (%)	2.0 n (%)	4.0 n (%)	8.0 n (%)	≥16.0 n (%)	Total
Genital	2020	56 (4.3)	480 (36.9)	374 (28.7)	208 (16.0)	58 (4.5)	35 (2.7)	21 (1.6)	70 (5.4)	1302
Genital	2021	58 (5.0)	419 (36.5)	386 (33.6)	162 (14.1)	57 (5.0)	18 (1.6)	20 (1.7)	29 (2.5)	1149
Genital	2022	74 (7.5)	366 (36.9)	349 (35.2)	108 (10.9)	30 (3.0)	22 (2.2)	19 (1.9)	24 (2.4)	992
Pharyngeal	2020	6 (3.2)	75 (39.9)	44 (23.4)	41 (21.8)	12 (6.4)	6 (3.2)	0 (0.0)	4 (2.1)	188
Pharyngeal	2021	5 (2.2)	87 (38.7)	78 (34.7)	30 (13.3)	11 (4.9)	6 (2.7)	4 (1.8)	4 (1.8)	225
Pharyngeal	2022	6 (2.7)	69 (31.1)	81 (36.5)	34 (15.3)	13 (5.9)	7 (3.2)	4 (1.8)	8 (3.6)	222
Rectal	2020	9 (3.3)	87 (32.0)	97 (35.7)	42 (15.4)	12 (4.4)	12 (4.4)	5 (1.8)	8 (2.9)	272
Rectal	2021	4 (1.5)	93 (34.6)	106 (39.4)	27 (10.0)	22 (8.2)	1 (0.4)	3 (1.1)	13 (4.8)	269
Rectal	2022	12 (4.6)	68 (26.3)	95 (36.7)	36 (13.9)	16 (6.2)	6 (2.3)	13 (5.0)	13 (5.0)	259

Penicillin resistance based on Clinical & Laboratory Standards Institute (CLSI) MIC criteria only (MIC ≥2.0 µg/mL). Additional data on β-lactamase positivity are not depicted.

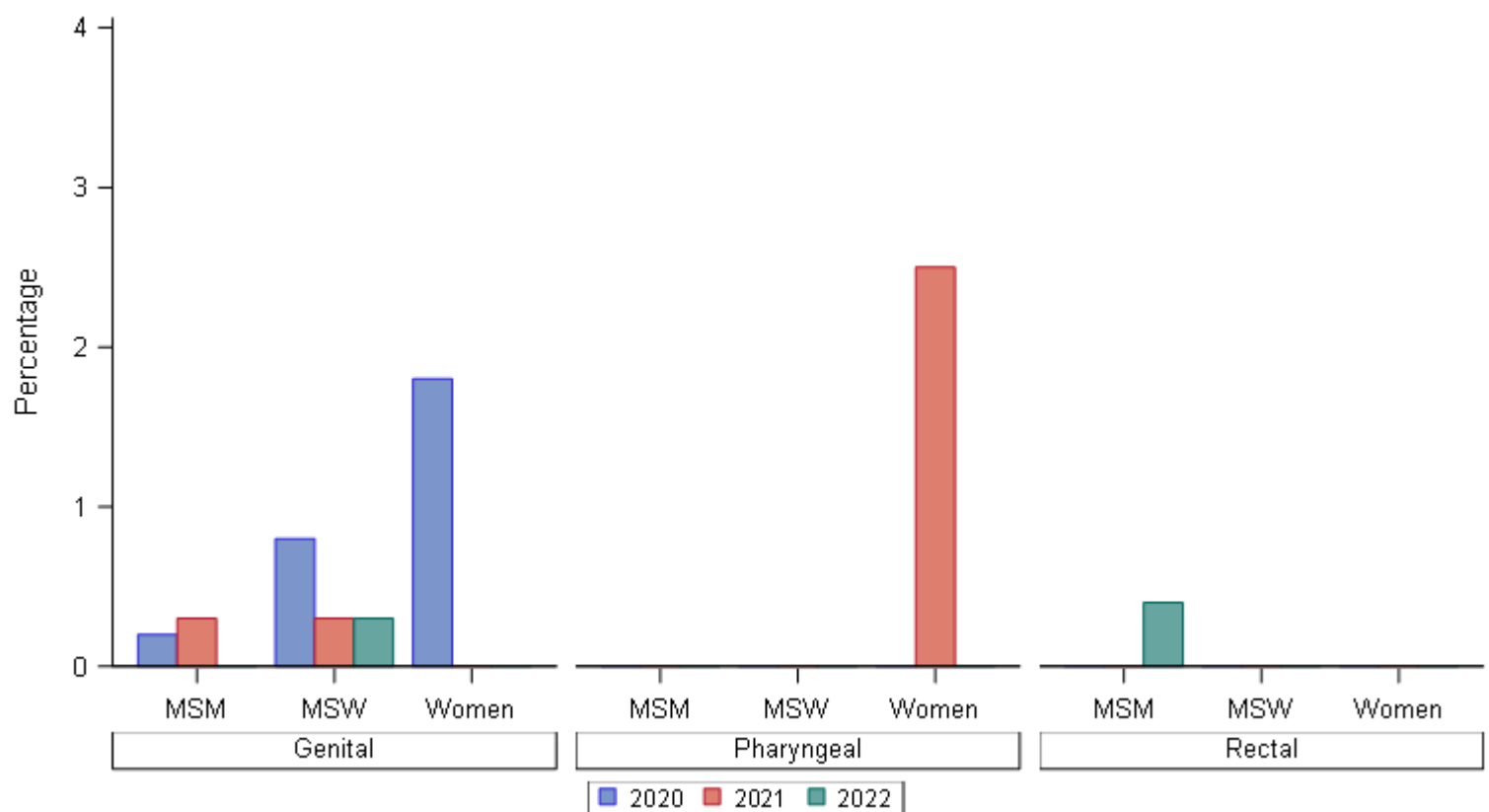
Figure 8. Distribution of Tetracycline Minimum Inhibitory Concentrations (MICs) Among *Neisseria gonorrhoeae* Isolates by Anatomic Site of Infection, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	0.06 n (%)	0.125-0.25 n (%)	0.5 n (%)	1.0 n (%)	2.0 n (%)	4.0 n (%)	8.0 n (%)	≥16.0 n (%)	Total
Genital	2020	3 (0.2)	173 (13.3)	289 (22.2)	543 (41.7)	124 (9.5)	18 (1.4)	3 (0.2)	149 (11.4)	1302
Genital	2021	1 (0.1)	99 (8.6)	284 (24.7)	534 (46.5)	65 (5.7)	10 (0.9)	1 (0.1)	155 (13.5)	1149
Genital	2022	4 (0.4)	114 (11.5)	234 (23.6)	464 (46.8)	45 (4.5)	8 (0.8)	4 (0.4)	119 (12.0)	992
Pharyngeal	2020	1 (0.5)	21 (11.2)	48 (25.5)	76 (40.4)	23 (12.2)	1 (0.5)	1 (0.5)	17 (9.0)	188
Pharyngeal	2021	0 (0.0)	15 (6.7)	29 (12.9)	136 (60.4)	10 (4.4)	5 (2.2)	0 (0.0)	30 (13.3)	225
Pharyngeal	2022	0 (0.0)	21 (9.5)	43 (19.4)	109 (49.1)	8 (3.6)	1 (0.5)	1 (0.5)	39 (17.6)	222
Rectal	2020	0 (0.0)	27 (9.9)	50 (18.4)	135 (49.6)	20 (7.4)	5 (1.8)	1 (0.4)	34 (12.5)	272
Rectal	2021	1 (0.4)	21 (7.8)	32 (11.9)	159 (59.1)	18 (6.7)	1 (0.4)	0 (0.0)	37 (13.8)	269
Rectal	2022	0 (0.0)	27 (10.4)	34 (13.1)	133 (51.4)	10 (3.9)	0 (0.0)	3 (1.2)	52 (20.1)	259

Tetracycline resistance MIC ≥2.0 µg/mL.

Figure 9. Percentage of *Neisseria gonorrhoeae* Isolates with an Elevated Minimum Inhibitory Concentration (MIC) to Cefixime by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022

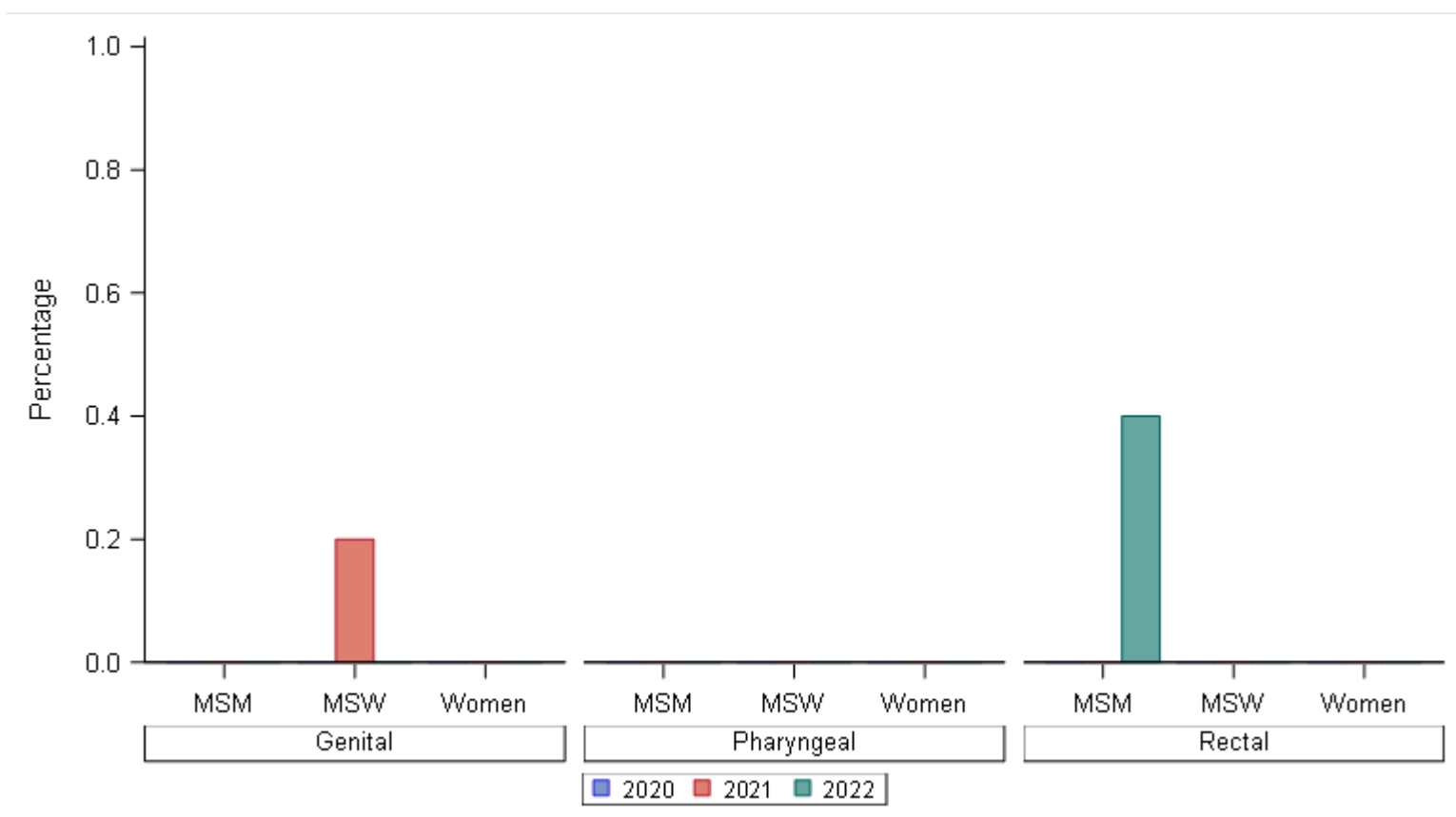


Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	1 (0.2)	6 (0.8)	2 (1.8)	9
Genital	2021	1 (0.3)	2 (0.3)	0 (0.0)	3
Genital	2022	0 (0.0)	2 (0.3)	0 (0.0)	2
Pharyngeal	2020	0 (0.0)	0 (0.0)	0 (0.0)	0
Pharyngeal	2021	0 (0.0)	0 (0.0)	1 (2.5)	1
Pharyngeal	2022	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2020	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2021	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2022	1 (0.4)	0 (0.0)	0 (0.0)	1

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.
Cefixime elevated MIC ≥ 0.25 $\mu\text{g/mL}$.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 10. Percentage of *Neisseria gonorrhoeae* Isolates with an Elevated Minimum Inhibitory Concentration (MIC) to Ceftriaxone by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



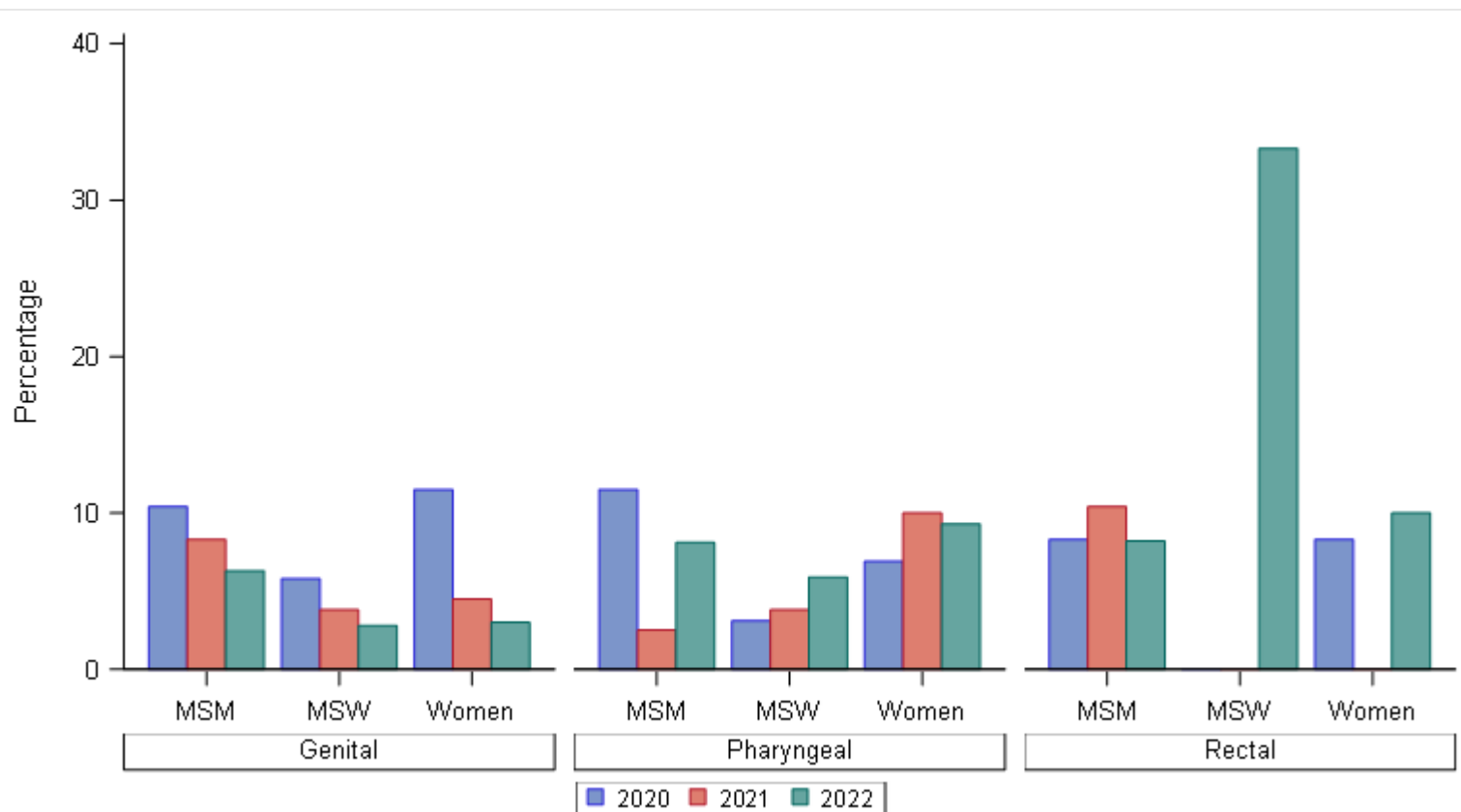
Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	0 (0.0)	0 (0.0)	0 (0.0)	0
Genital	2021	0 (0.0)	1 (0.2)	0 (0.0)	1
Genital	2022	0 (0.0)	0 (0.0)	0 (0.0)	0
Pharyngeal	2020	0 (0.0)	0 (0.0)	0 (0.0)	0
Pharyngeal	2021	0 (0.0)	0 (0.0)	0 (0.0)	0
Pharyngeal	2022	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2020	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2021	0 (0.0)	0 (0.0)	0 (0.0)	0
Rectal	2022	1 (0.4)	0 (0.0)	0 (0.0)	1

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.

Ceftriaxone elevated MIC ≥ 0.125 $\mu\text{g/mL}$.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 11. Percentage of *Neisseria gonorrhoeae* Isolates with an Elevated Minimum Inhibitory Concentration (MIC) to Azithromycin by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



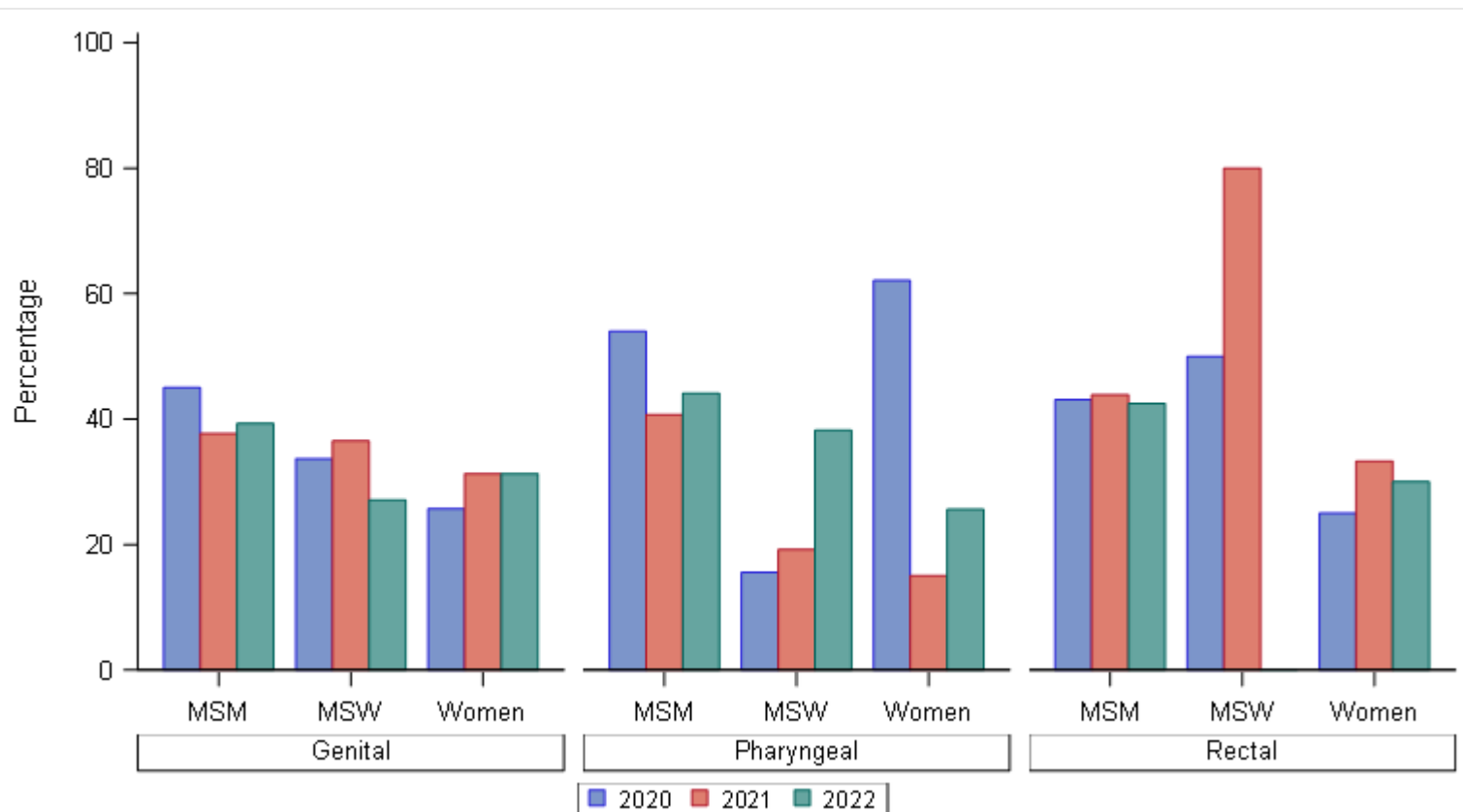
Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	44 (10.4)	43 (5.8)	13 (11.5)	100
Genital	2021	30 (8.3)	24 (3.8)	3 (4.5)	57
Genital	2022	21 (6.3)	16 (2.8)	2 (3.0)	39
Pharyngeal	2020	13 (11.5)	1 (3.1)	2 (6.9)	16
Pharyngeal	2021	3 (2.5)	1 (3.8)	4 (10.0)	8
Pharyngeal	2022	11 (8.1)	2 (5.9)	4 (9.3)	17
Rectal	2020	18 (8.3)	0 (0.0)	1 (8.3)	19
Rectal	2021	18 (10.4)	0 (0.0)	0 (0.0)	18
Rectal	2022	19 (8.2)	1 (33.3)	1 (10.0)	21

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.

Azithromycin elevated MIC ≥ 2.0 $\mu\text{g/mL}$.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 12. Percentage of *Neisseria gonorrhoeae* Isolates with Resistance to Ciprofloxacin by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



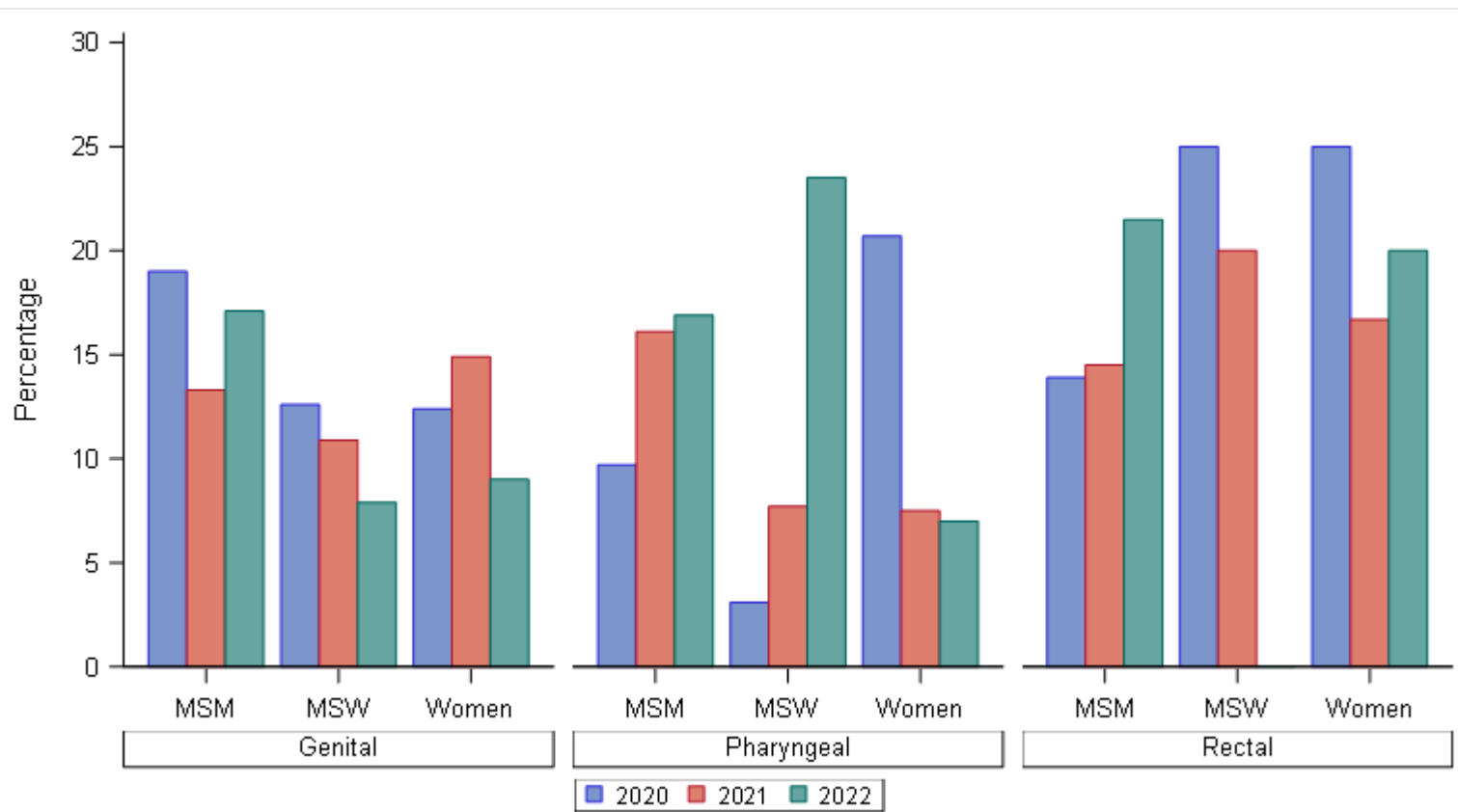
Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	190 (45.0)	249 (33.7)	29 (25.7)	468
Genital	2021	136 (37.7)	230 (36.5)	21 (31.3)	387
Genital	2022	131 (39.3)	157 (27.1)	21 (31.3)	309
Pharyngeal	2020	61 (54.0)	5 (15.6)	18 (62.1)	84
Pharyngeal	2021	48 (40.7)	5 (19.2)	6 (15.0)	59
Pharyngeal	2022	60 (44.1)	13 (38.2)	11 (25.6)	84
Rectal	2020	93 (43.1)	2 (50.0)	3 (25.0)	98
Rectal	2021	76 (43.9)	4 (80.0)	2 (33.3)	82
Rectal	2022	99 (42.5)	0 (0.0)	3 (30.0)	102

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.

Ciprofloxacin resistance = MIC $\geq$ 1.0 μ g/mL.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 13. Percentage of *Neisseria gonorrhoeae* Isolates with Resistance to Penicillin by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022

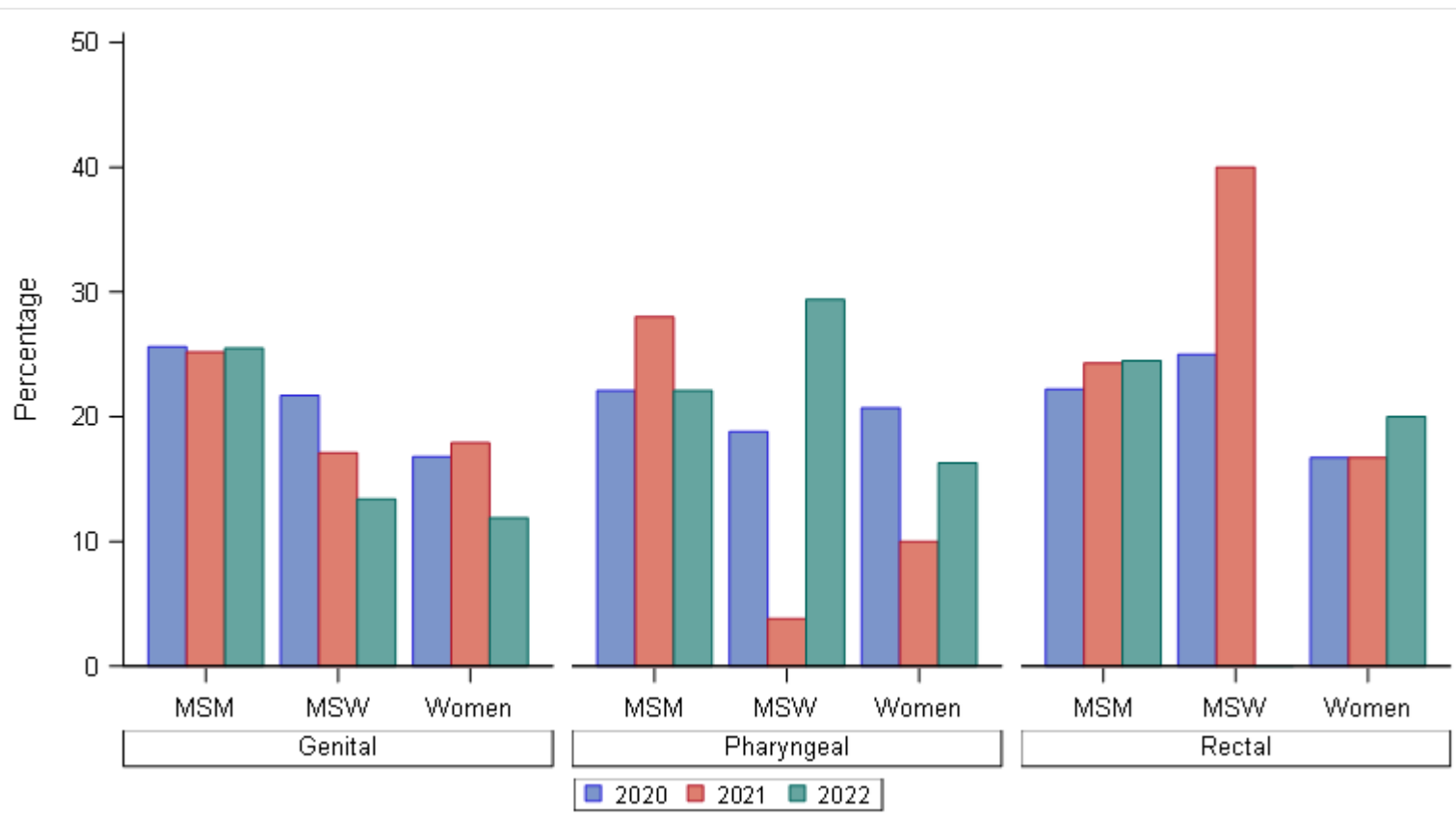


Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	80 (19.0)	93 (12.6)	14 (12.4)	187
Genital	2021	48 (13.3)	69 (10.9)	10 (14.9)	127
Genital	2022	57 (17.1)	46 (7.9)	6 (9.0)	109
Pharyngeal	2020	11 (9.7)	1 (3.1)	6 (20.7)	18
Pharyngeal	2021	19 (16.1)	2 (7.7)	3 (7.5)	24
Pharyngeal	2022	23 (16.9)	8 (23.5)	3 (7.0)	34
Rectal	2020	30 (13.9)	1 (25.0)	3 (25.0)	34
Rectal	2021	25 (14.5)	1 (20.0)	1 (16.7)	27
Rectal	2022	50 (21.5)	0 (0.0)	2 (20.0)	52

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.
Penicillin resistance ≥ 2.0 $\mu\text{g/mL}$ or β -lactamase positive.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.

Figure 14. Percentage of *Neisseria gonorrhoeae* Isolates with Resistance to Tetracycline by Site of Infection and by Gender and Gender of Sex Partners, Enhanced Gonococcal Isolate Surveillance Project (eGISP), 2020-2022



Site of Infection	Year	MSM n (%)	MSW n (%)	Women n (%)	Total
Genital	2020	108 (25.6)	160 (21.7)	19 (16.8)	287
Genital	2021	91 (25.2)	108 (17.1)	12 (17.9)	211
Genital	2022	85 (25.5)	78 (13.4)	8 (11.9)	171
Pharyngeal	2020	25 (22.1)	6 (18.8)	6 (20.7)	37
Pharyngeal	2021	33 (28.0)	1 (3.8)	4 (10.0)	38
Pharyngeal	2022	30 (22.1)	10 (29.4)	7 (16.3)	47
Rectal	2020	48 (22.2)	1 (25.0)	2 (16.7)	51
Rectal	2021	42 (24.3)	2 (40.0)	1 (16.7)	45
Rectal	2022	57 (24.5)	0 (0.0)	2 (20.0)	59

MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.
Tetracycline resistance ≥ 2.0 $\mu\text{g/mL}$.

Data presented do not include isolates collected from participants identifying as transgender, nonbinary, or unknown/missing gender of sex partner.