

**Sexually
Transmitted
Disease
Surveillance
2020:
Gonococcal Isolate Surveillance Project
Site-Specific Profiles**

**Division of STD Prevention
August 2022**

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HIV, VIRAL HEPATITIS, STD, AND TB PREVENTION
DIVISION OF STD PREVENTION
ATLANTA, GEORGIA 30329-4027**

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Web Site

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

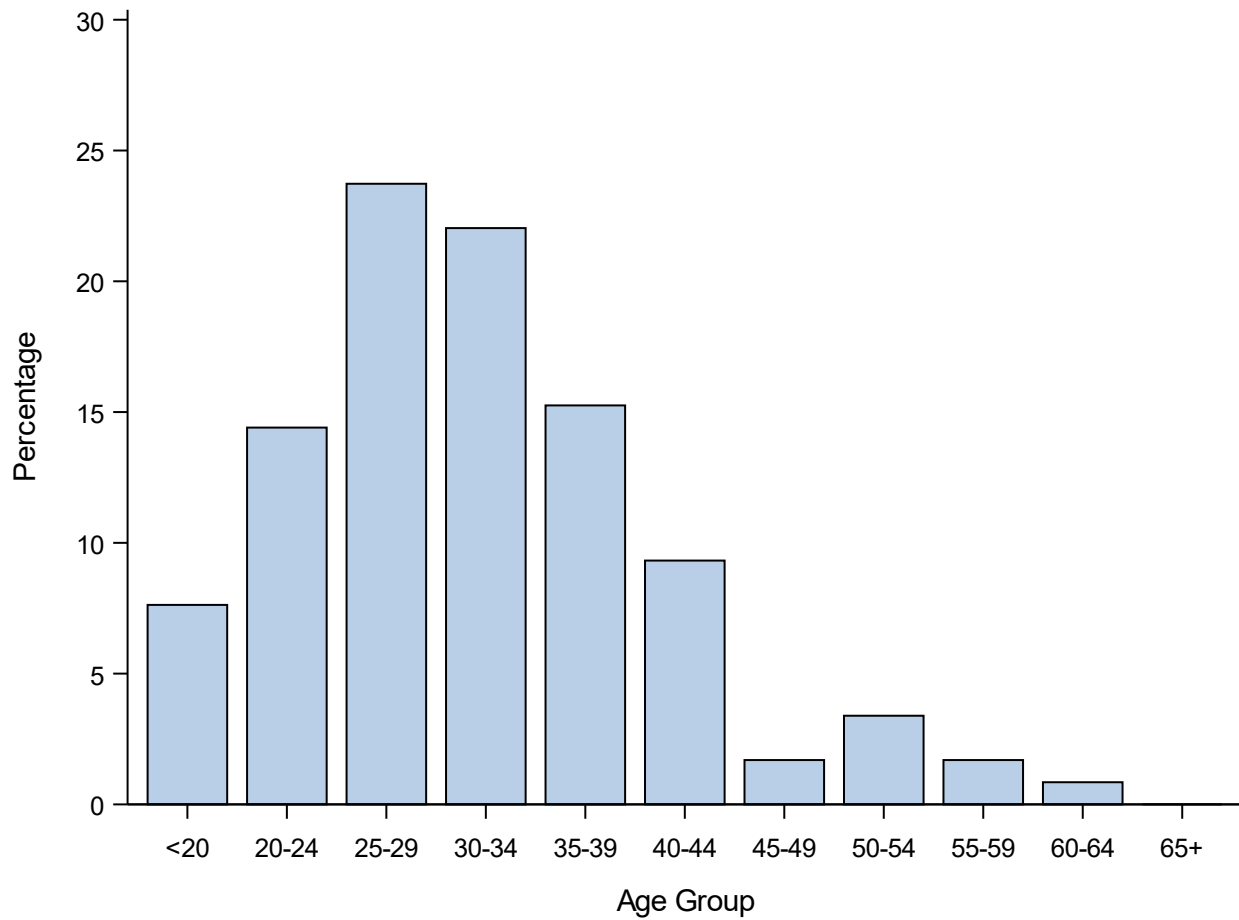
2020 Gonococcal Isolate Surveillance Project Clinical Sites and Years Participated

Albuquerque, New Mexico (1987–2020)	Greensboro, North Carolina (2002–2020)	New York, New York (2006–2020)
Anchorage, Alaska (1987–2003, 2018–2020)	Honolulu, Hawaii (1987–2020)	Orange County, California (1991–2020)
Birmingham, Alabama (1987–2020)	Indianapolis, Indiana (2013–2020)	Philadelphia, Pennsylvania (1987–2020)
Baltimore, Maryland (1987–2013, 2019–2020)	Jackson, Mississippi (2018–2020)	Phoenix, Arizona (1987–2020)
Buffalo, New York (2014–2020)	Kansas City, Missouri (1999–2001, 2007–2020)	Pontiac, Michigan (2012–2020)
Camden, New Jersey (2019–2020)	Las Vegas, Nevada (2002–2020)	Portland, Oregon (1987–2020)
Chicago, Illinois (1996–2020)	Los Angeles, California (2003–2020)	San Diego, California (1987–2020)
Cleveland, Ohio (1991–2020)	Miami, Florida (1998–2013, 2018–2020)	San Francisco, California (1987–2020)
Columbus, Ohio (2012–2020)	Milwaukee, Wisconsin (2018–2020)	Seattle, Washington (1987–2020)
Dallas, Texas (1999–2020)	Minneapolis, Minnesota (1992–2020)	Tripler Army Medical Center, Hawaii (2001–2020)
Denver, Colorado (1987–2013, 2018–2020)	New Orleans, Louisiana (1987–2020)	Washington, District of Columbia (2018–2020)

2020 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>
Texas Department of State Health Services <i>Austin, Texas</i>
Washington State Department of Health <i>Seattle, Washington</i>

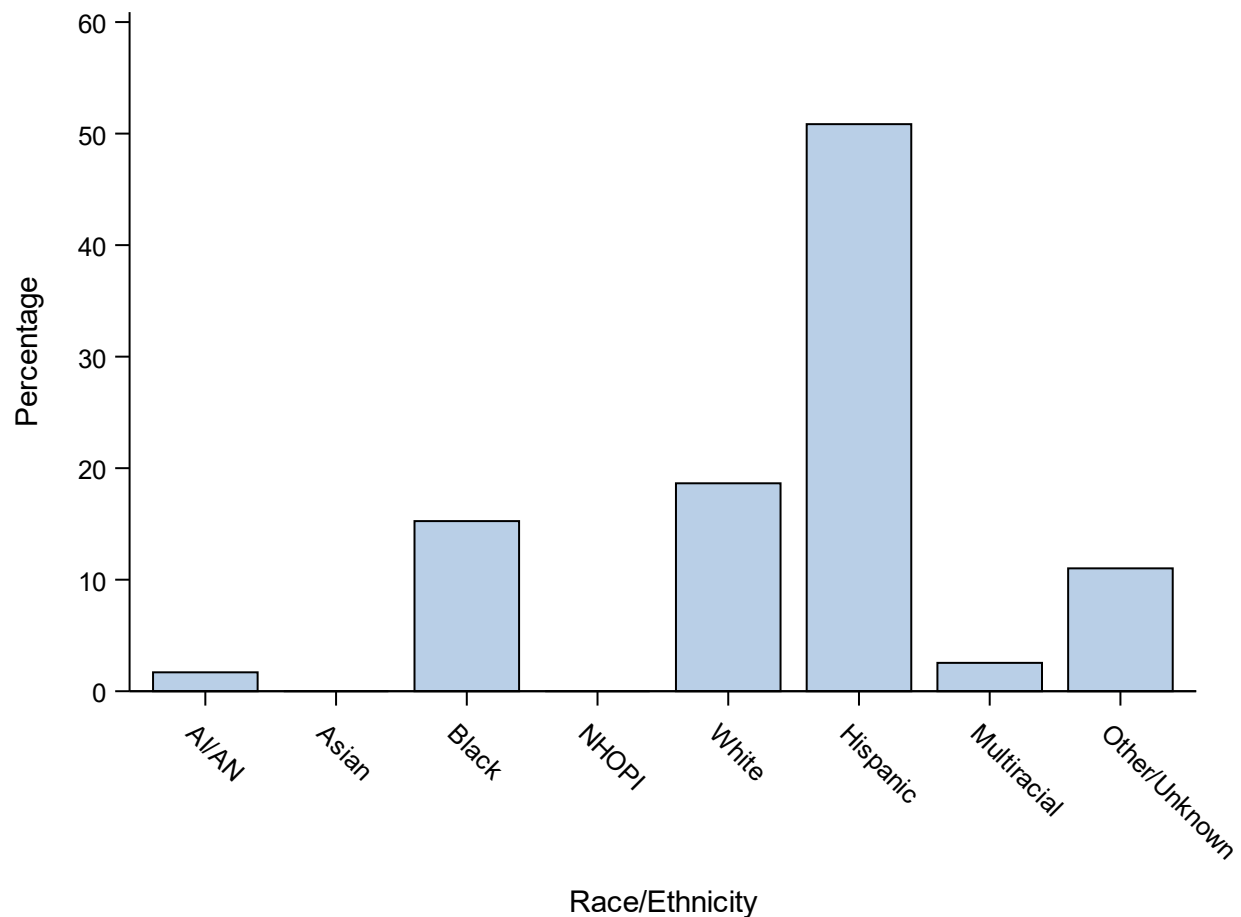
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
9 (7.6)	17 (14.4)	28 (23.7)	26 (22.0)	18 (15.3)	11 (9.3)	2 (1.7)	4 (3.4)	2 (1.7)	1 (0.8)	0 (0.0)	118

Note: Cases with unknown age were excluded.

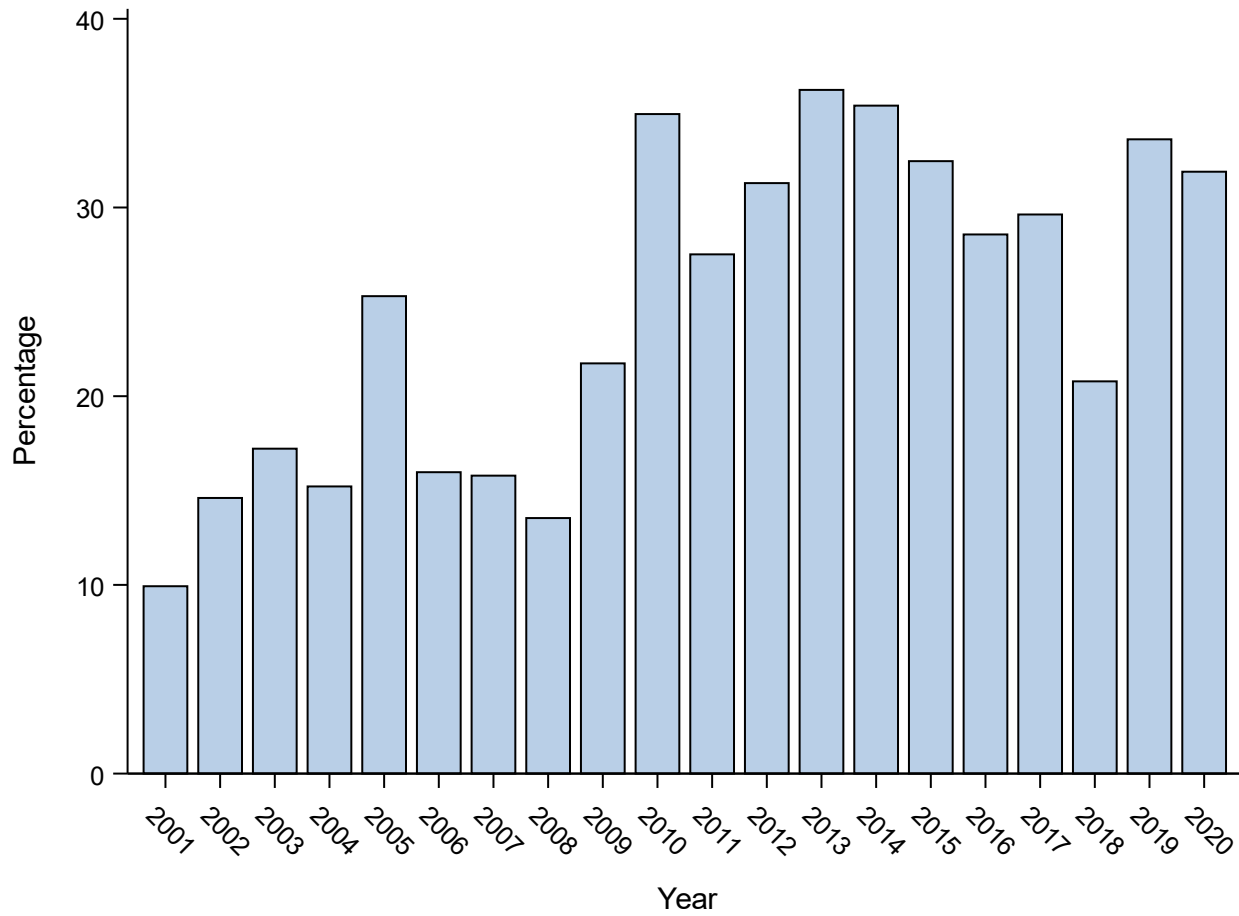
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
2 (1.7)	0 (0.0)	18 (15.3)	0 (0.0)	22 (18.6)	60 (50.8)	3 (2.5)	13 (11.0)	118

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2001-2020

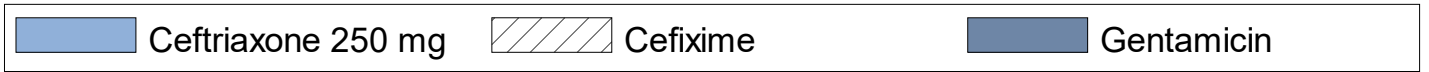
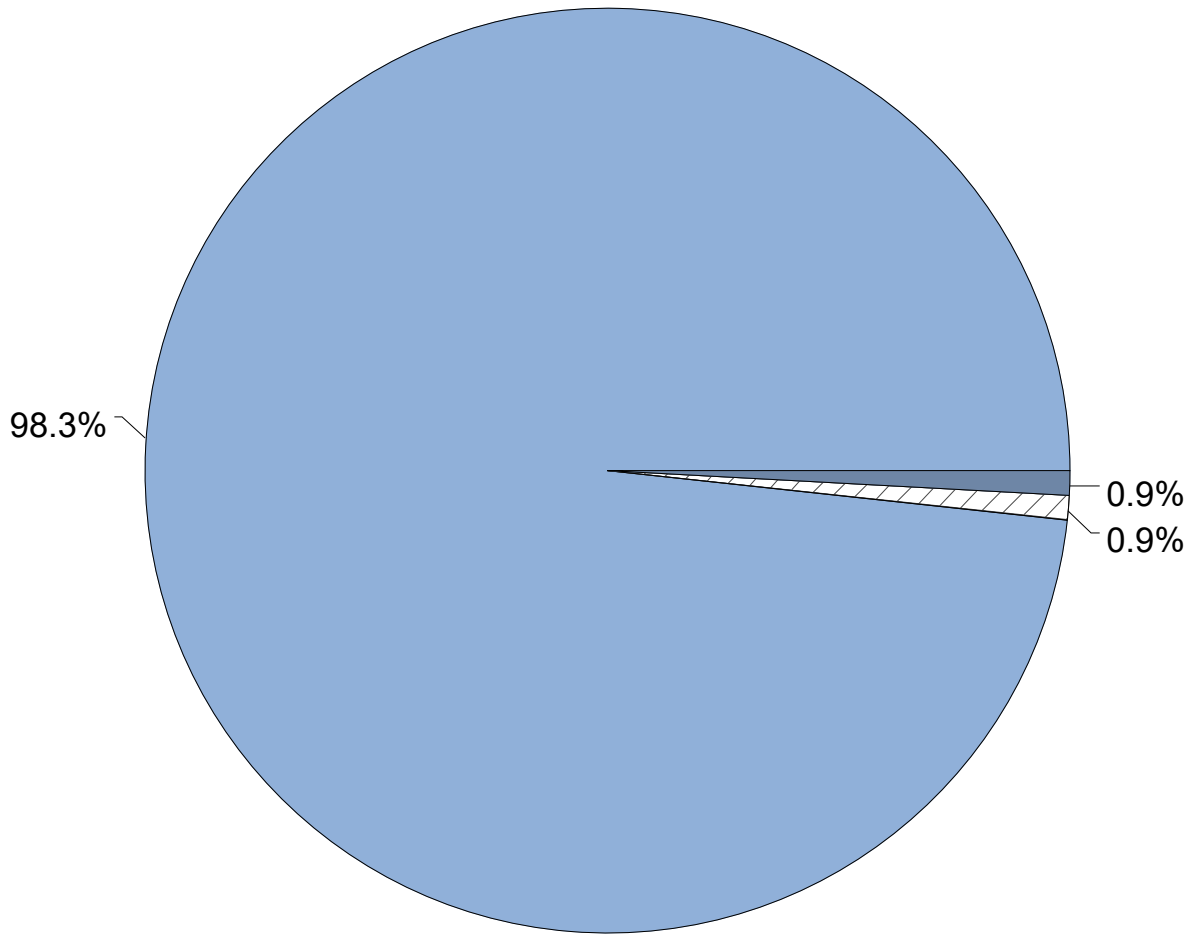


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
14 (9.9)	26 (14.6)	26 (17.2)	7 (15.2)	21 (25.3)	23 (16.0)	24 (15.8)	13 (13.5)	20 (21.7)	36 (35.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
41 (27.5)	46 (31.3)	50 (36.2)	40 (35.4)	37 (32.5)	40 (28.6)	40 (29.6)	37 (20.8)	40 (33.6)	37 (31.9)

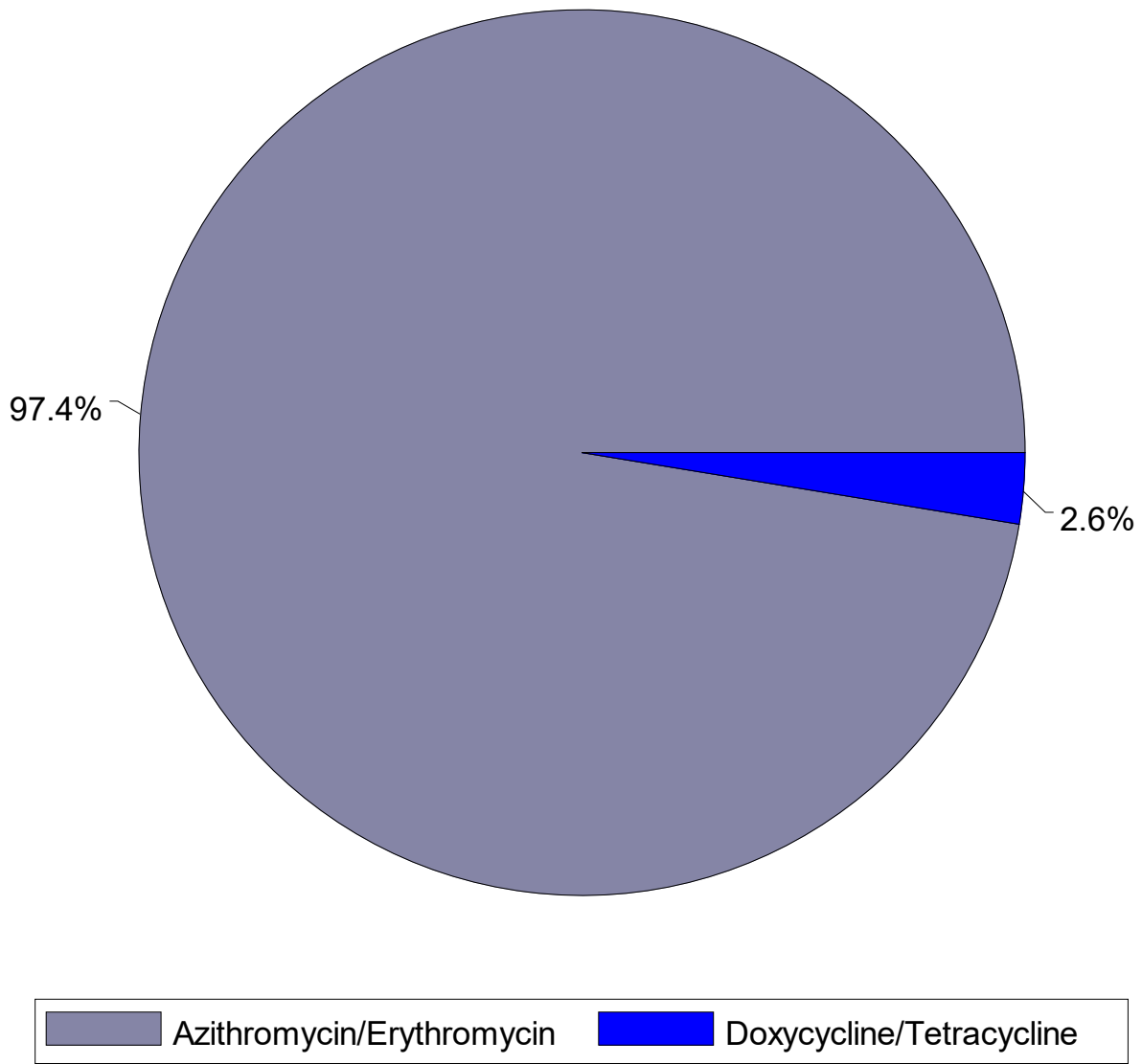
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2020



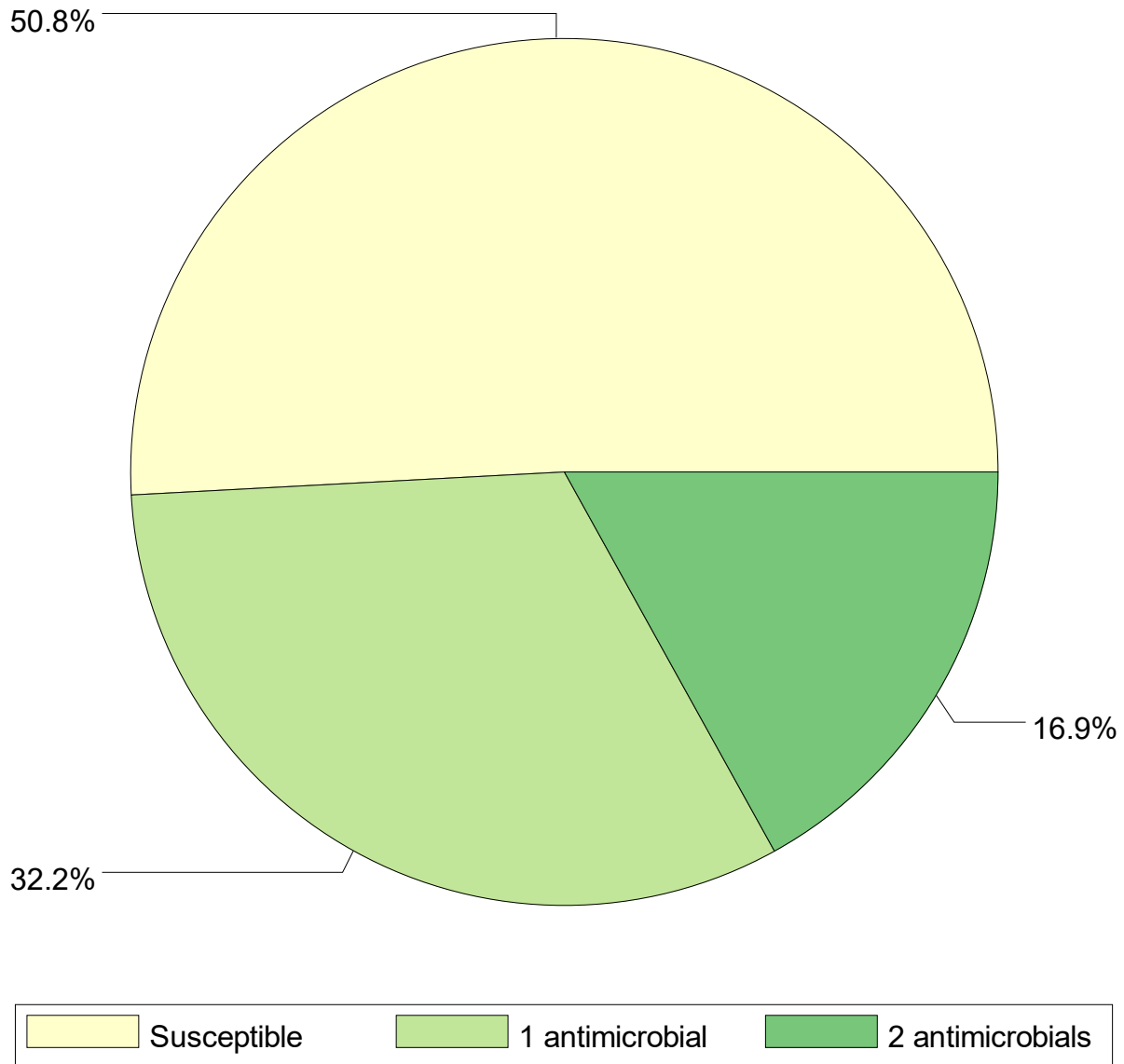
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	115	98.3
Cefixime	1	0.9
Gentamicin	1	0.9

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	113	97.4
Doxycycline/Tetracycline	3	2.6

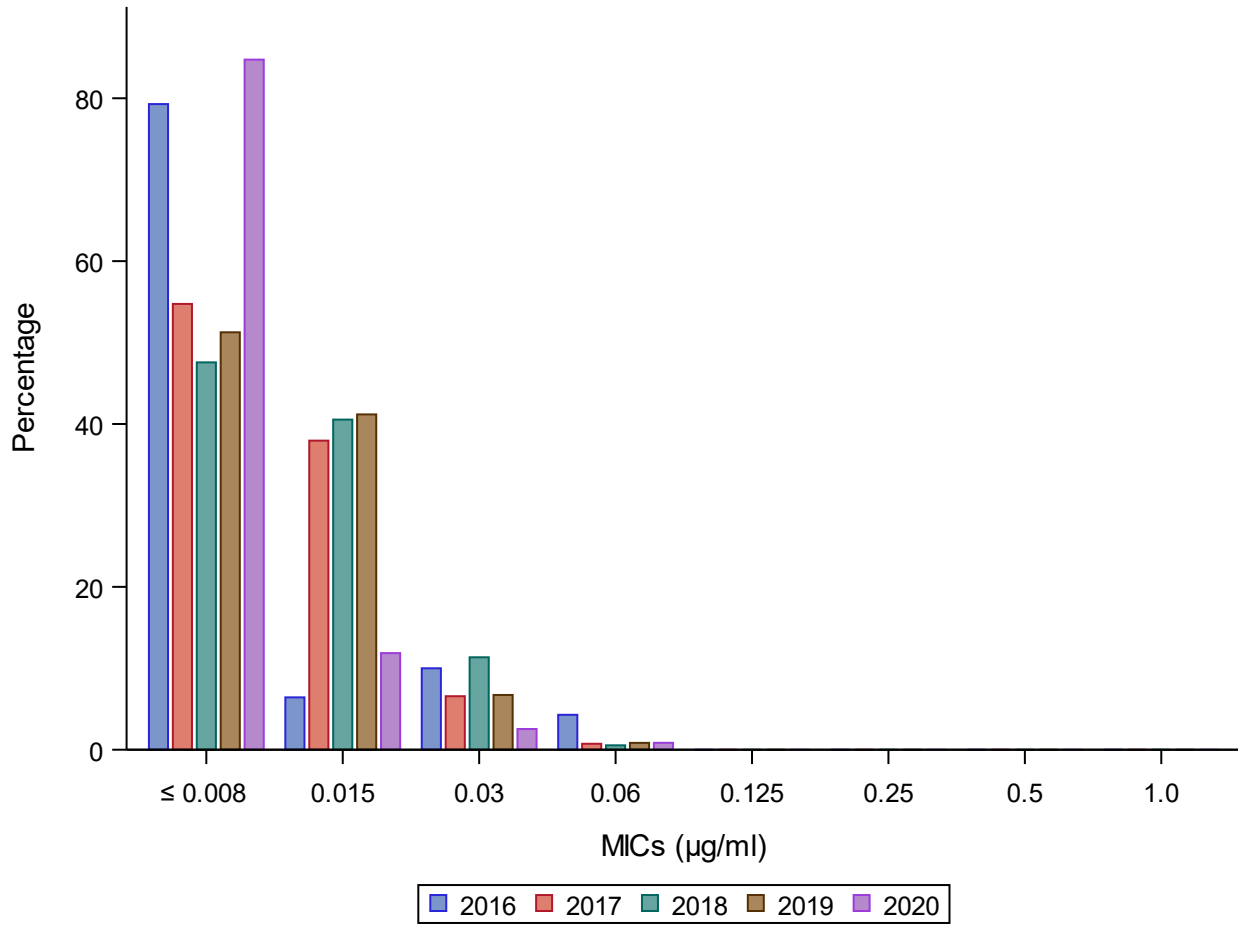
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	60	50.8
1 antimicrobial	38	32.2
2 antimicrobials	20	16.9
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

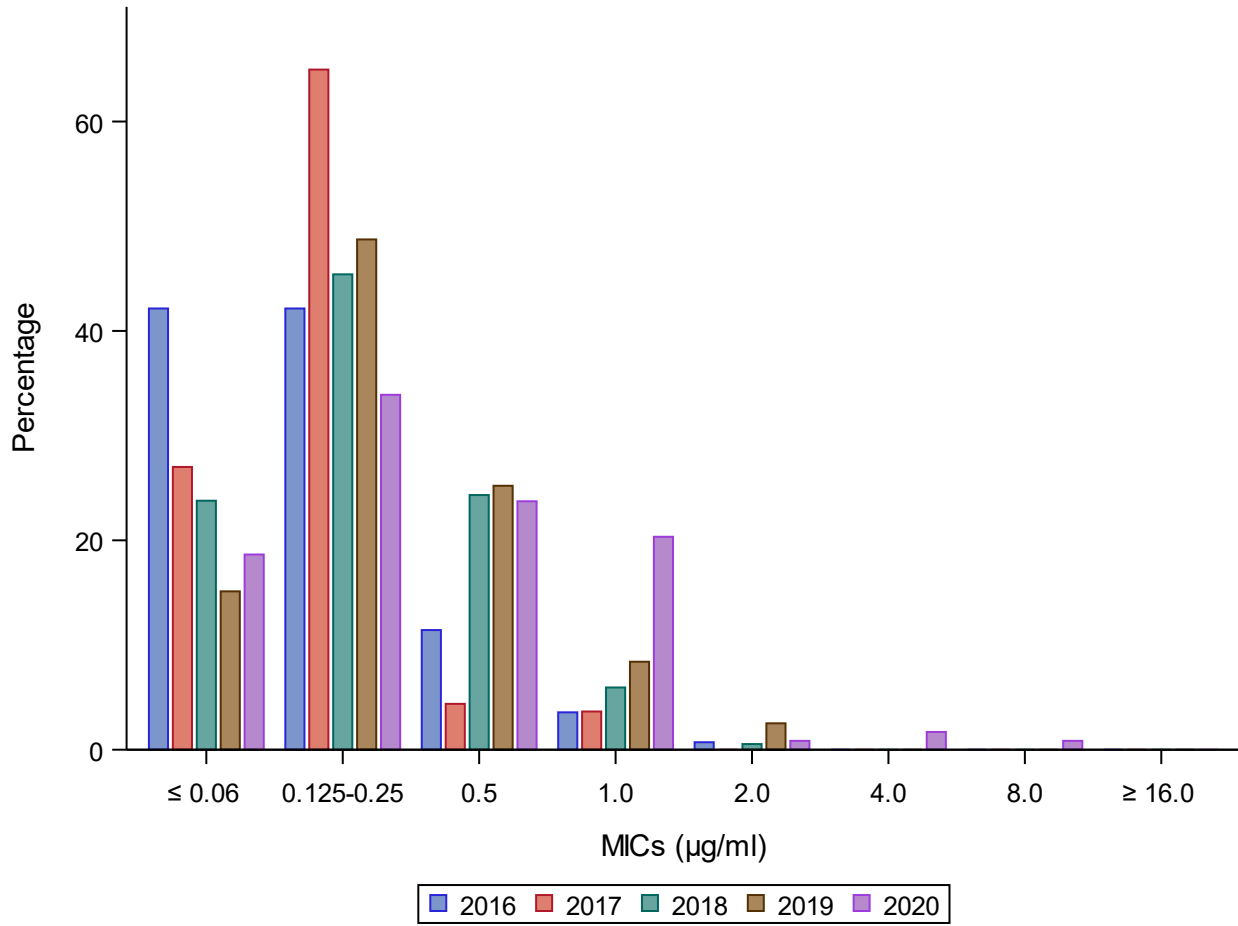
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g}/\text{mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g}/\text{mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g}/\text{mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2016-2020



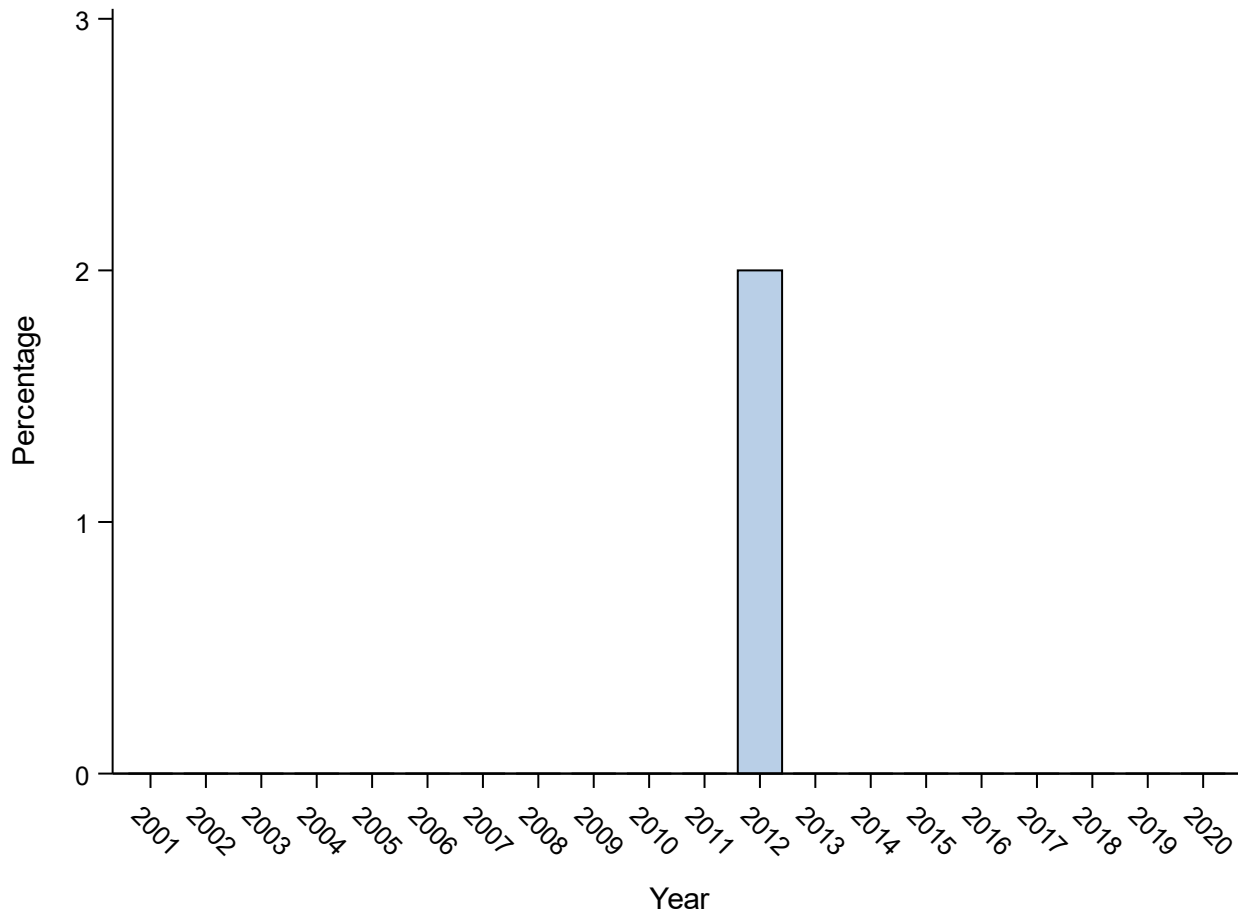
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	111 (79.3)	9 (6.4)	14 (10.0)	6 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	140
2017	75 (54.7)	52 (38.0)	9 (6.6)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	137
2018	88 (47.6)	75 (40.5)	21 (11.4)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	185
2019	61 (51.3)	49 (41.2)	8 (6.7)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	119
2020	100 (84.7)	14 (11.9)	3 (2.5)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	118

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2016-2020



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
2016	59 (42.1)	59 (42.1)	16 (11.4)	5 (3.6)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	140
2017	37 (27.0)	89 (65.0)	6 (4.4)	5 (3.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	137
2018	44 (23.8)	84 (45.4)	45 (24.3)	11 (5.9)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	185
2019	18 (15.1)	58 (48.7)	30 (25.2)	10 (8.4)	3 (2.5)	0 (0.0)	0 (0.0)	0 (0.0)	119
2020	22 (18.6)	40 (33.9)	28 (23.7)	24 (20.3)	1 (0.8)	2 (1.7)	1 (0.8)	0 (0.0)	118

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2001-2020

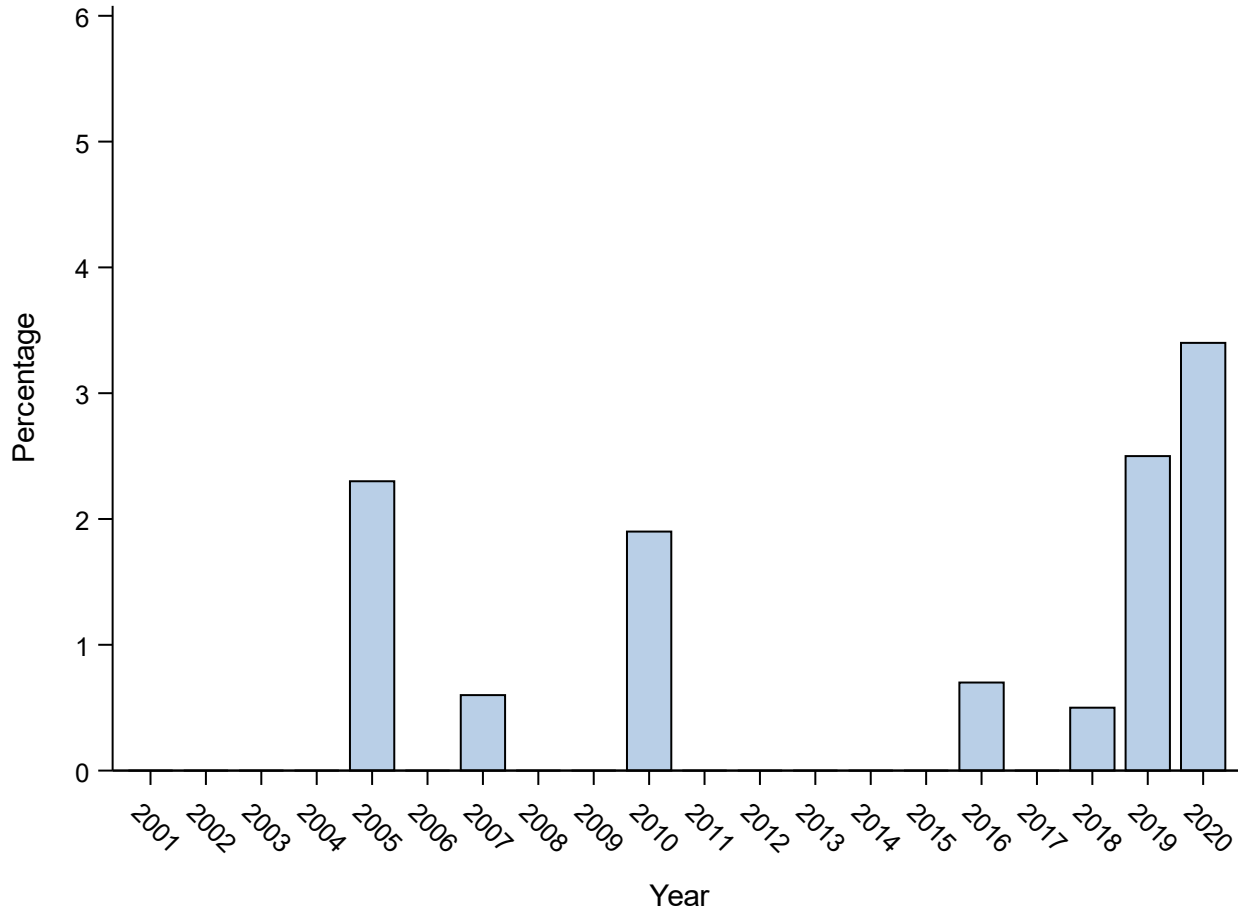


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	3 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2001-2020

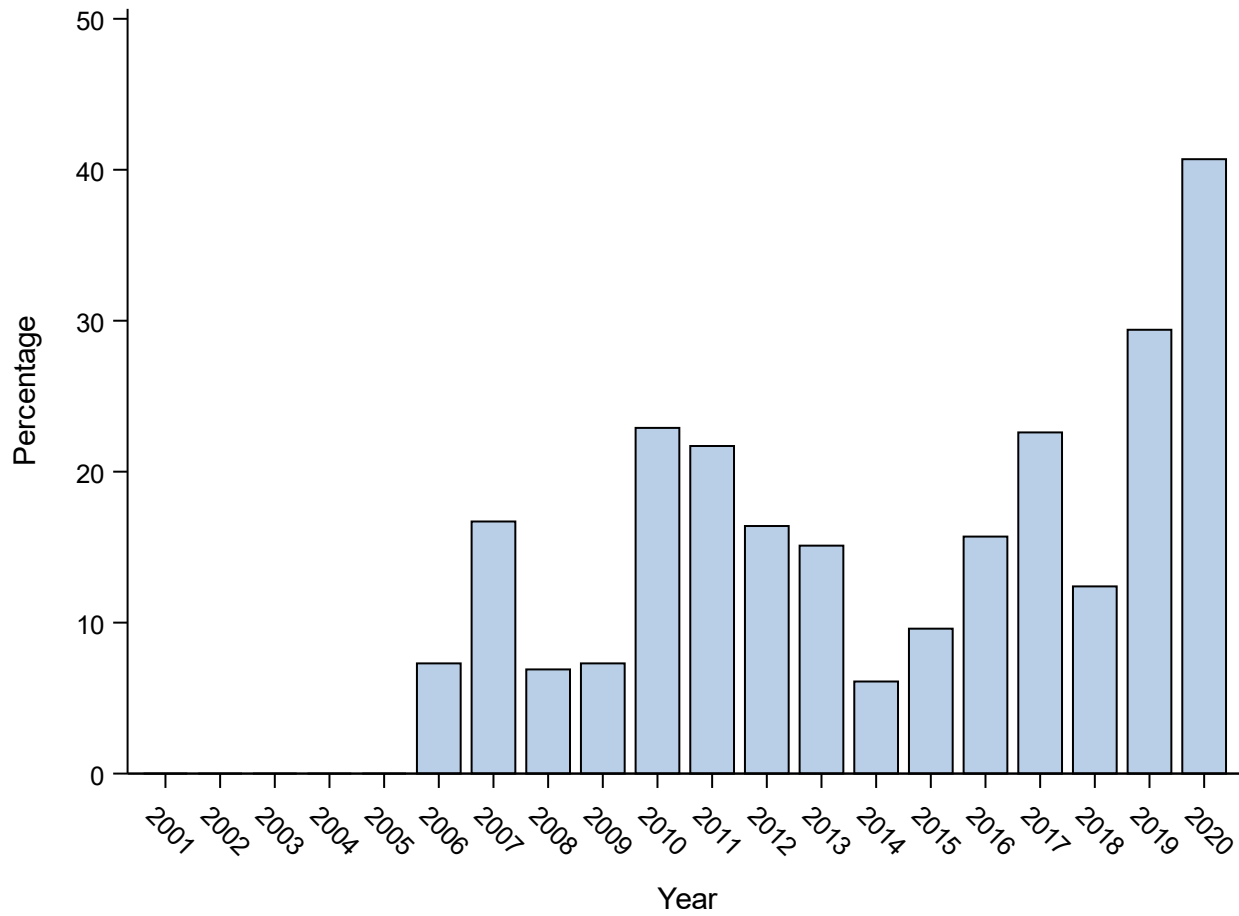


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.3)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	2 (1.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	0 (0.0)	1 (0.5)	3 (2.5)	4 (3.4)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Albuquerque, New Mexico, 2001-2020

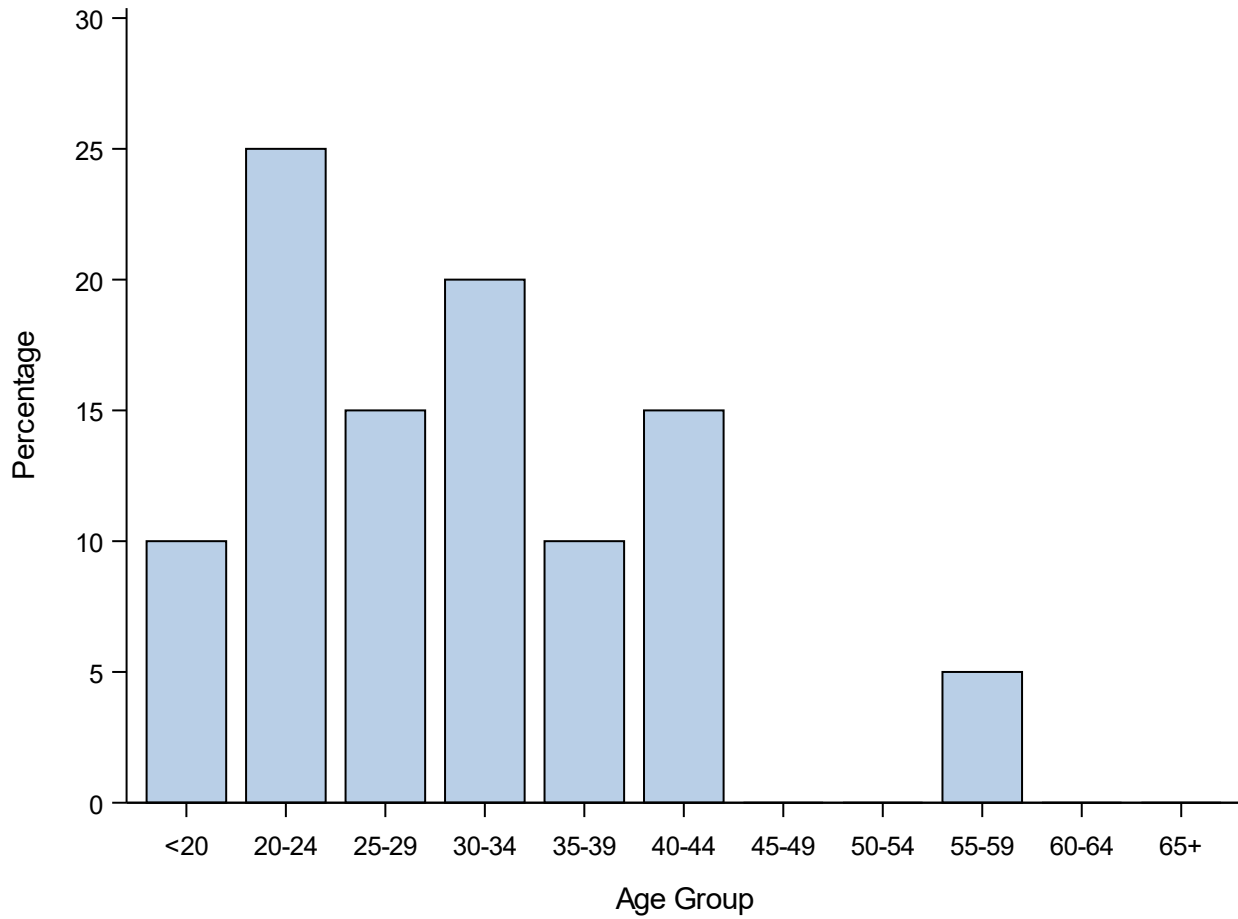


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	11 (7.3)	26 (16.7)	7 (6.9)	7 (7.3)	24 (22.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
33 (21.7)	25 (16.4)	21 (15.1)	7 (6.1)	11 (9.6)	22 (15.7)	31 (22.6)	23 (12.4)	35 (29.4)	48 (40.7)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

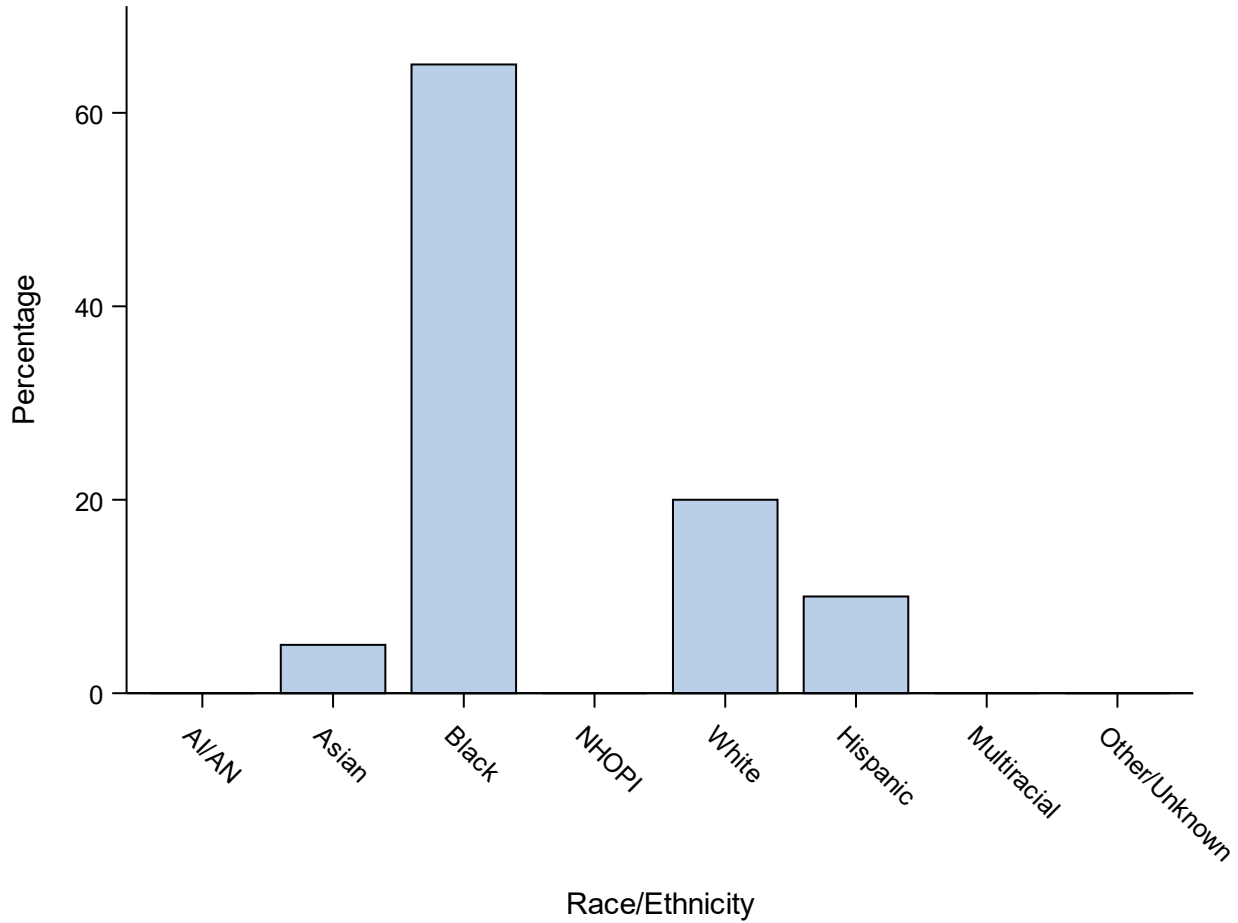
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (10.0)	5 (25.0)	3 (15.0)	4 (20.0)	2 (10.0)	3 (15.0)	0 (0.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	20

Note: Cases with unknown age were excluded.

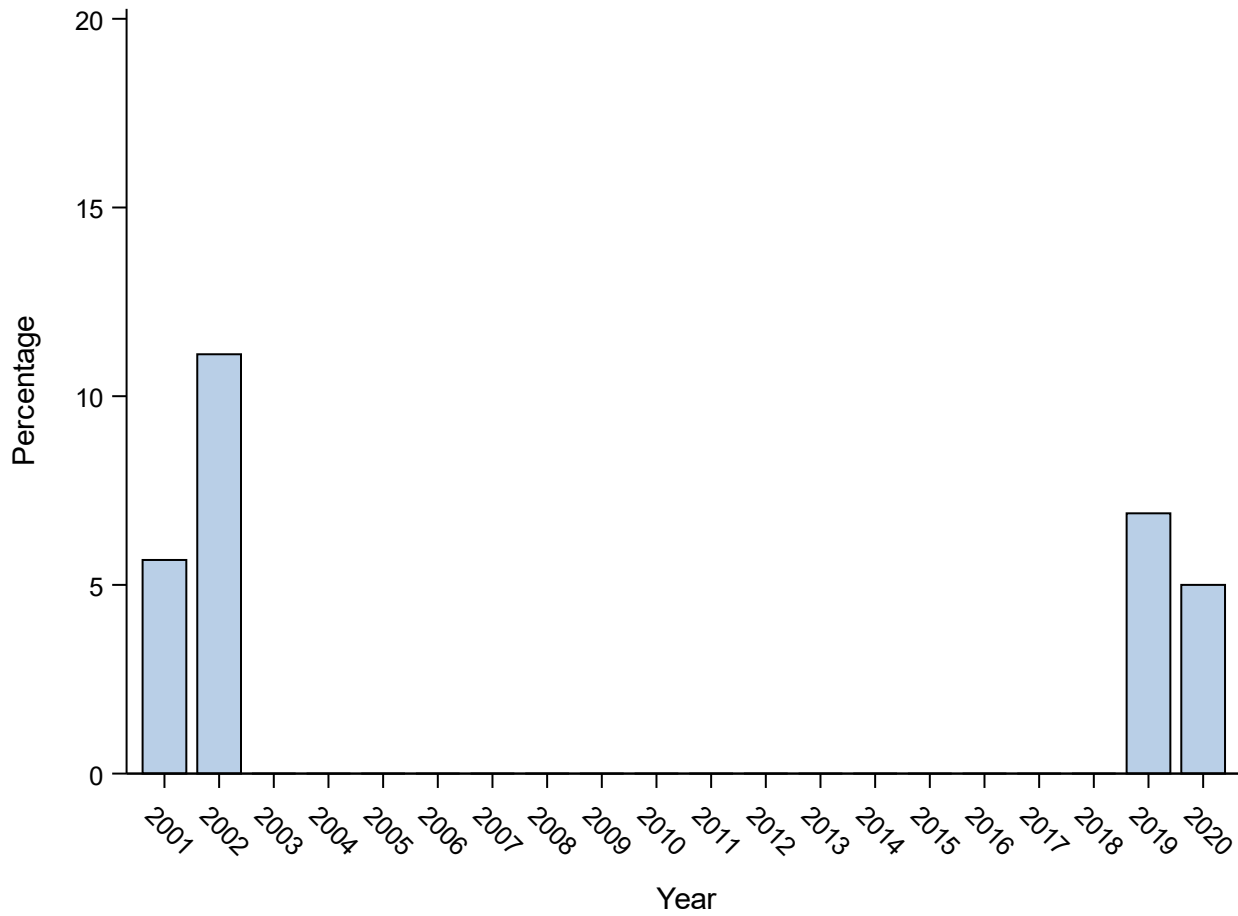
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	1 (5.0)	13 (65.0)	0 (0.0)	4 (20.0)	2 (10.0)	0 (0.0)	0 (0.0)	20

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2001-2020

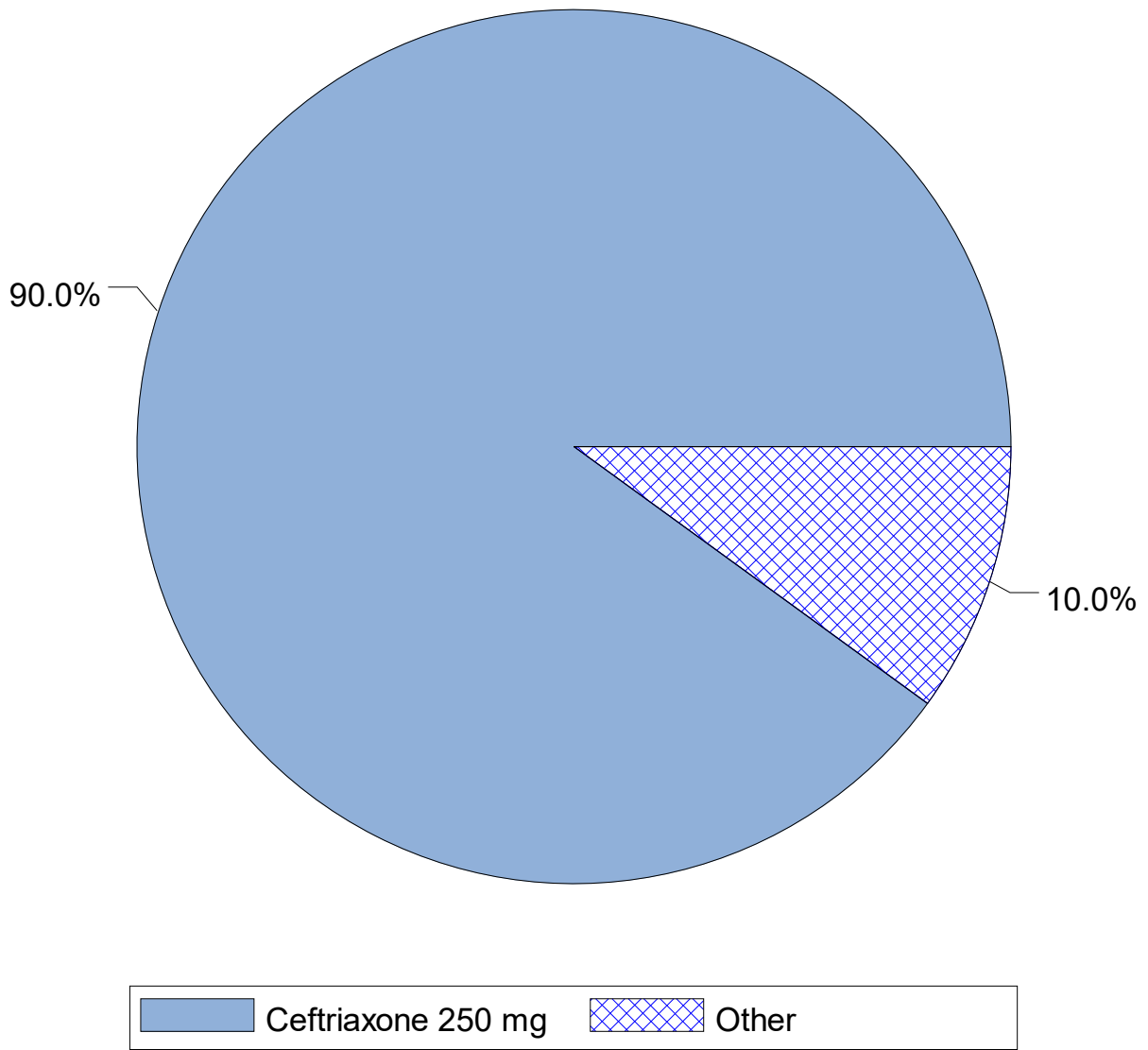


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
3 (5.7)	3 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (6.9)	1 (5.0)

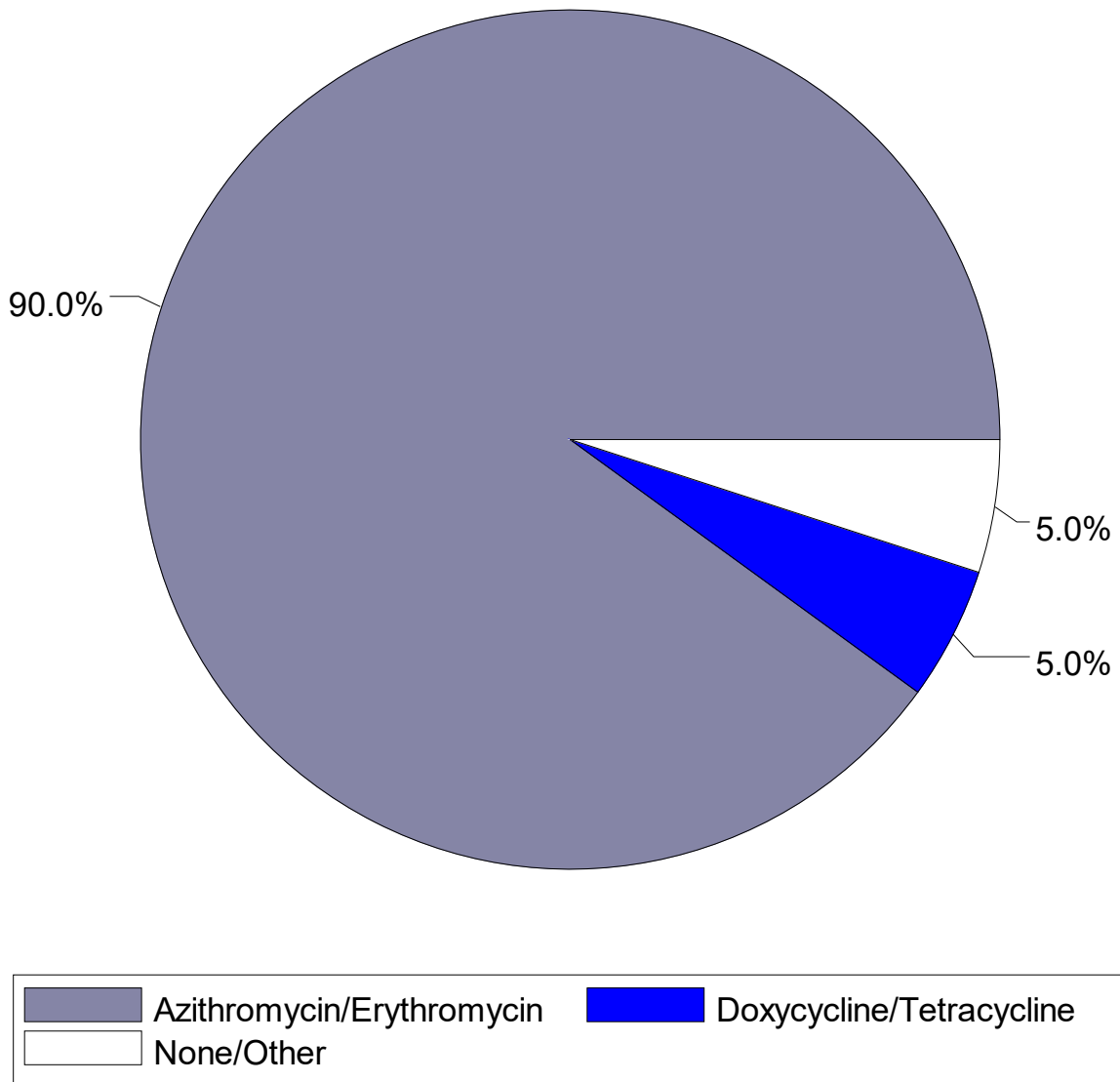
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2001-2003 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2020



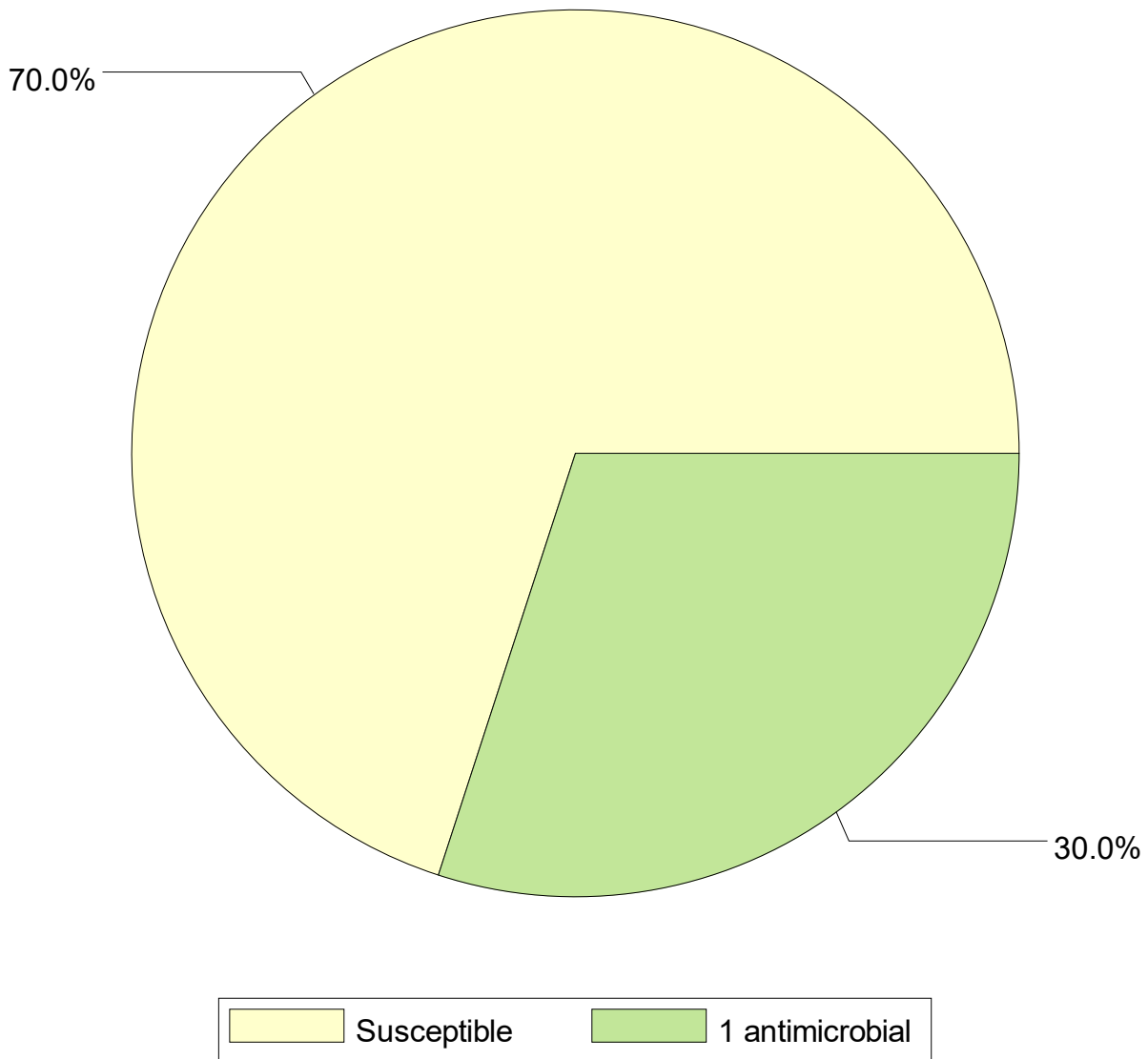
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	18	90.0
Other	2	10.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	18	90.0
Doxycycline/Tetracycline	1	5.0
None/Other	1	5.0

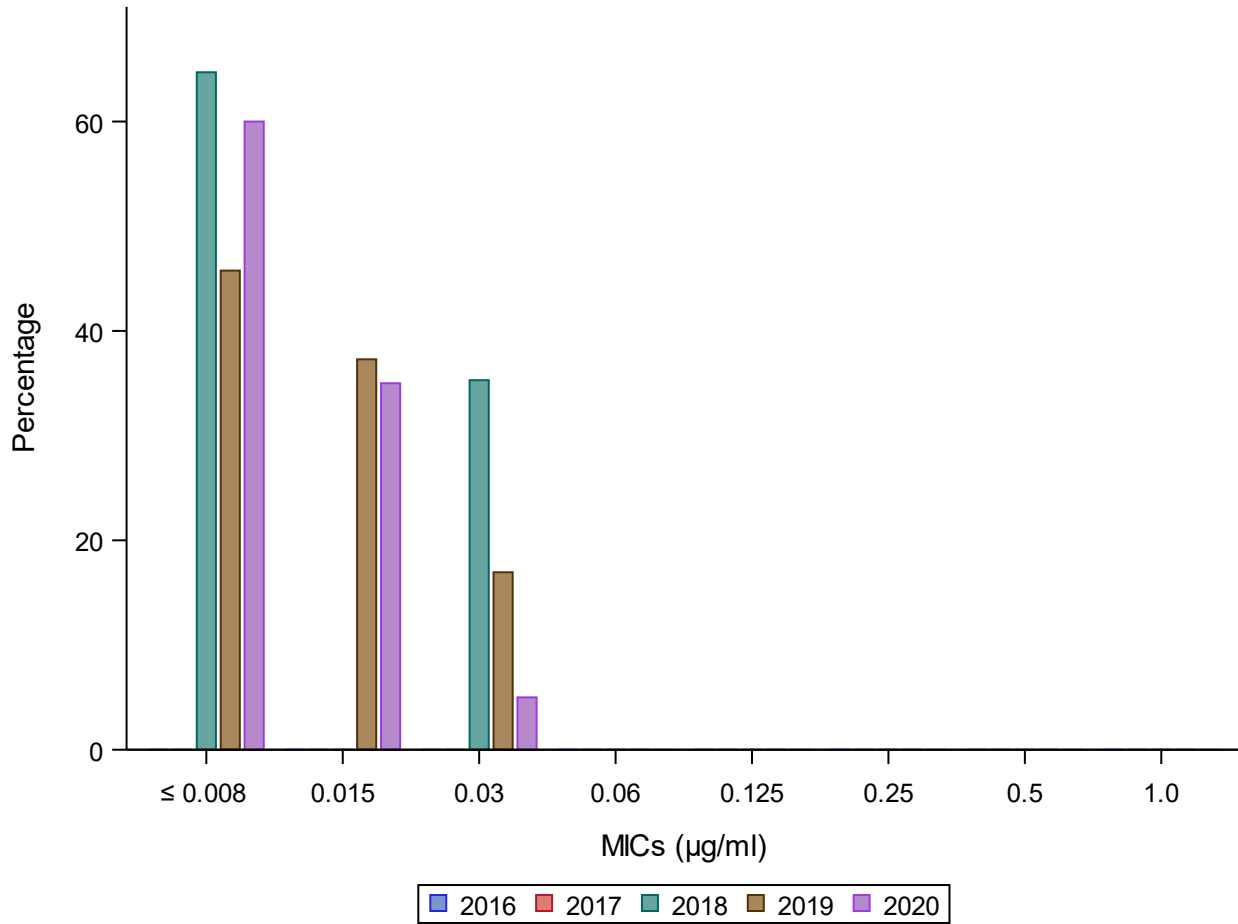
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	14	70.0
1 antimicrobial	6	30.0
2 antimicrobials	0	0.0
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

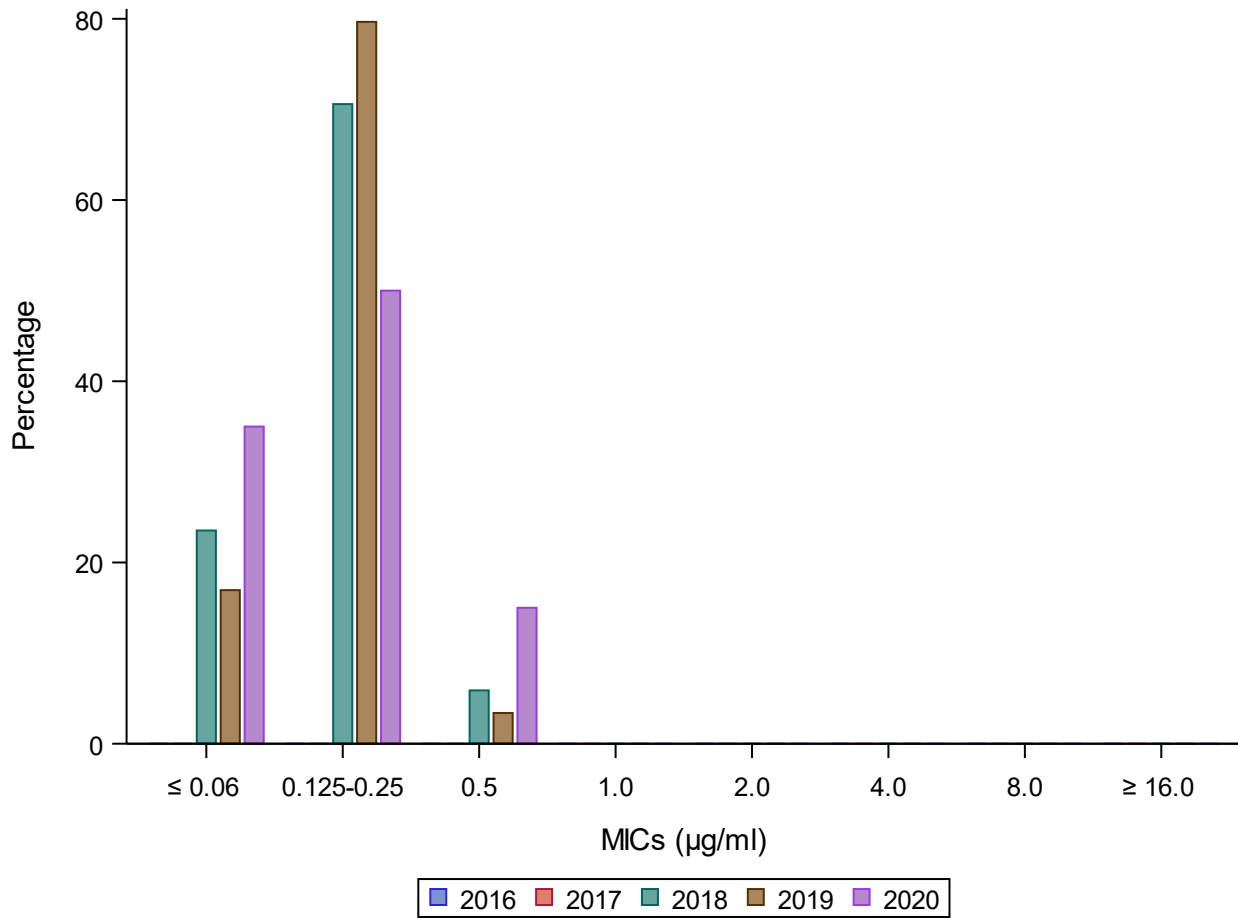
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2016-2020



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
2016	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
2017	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
2018	11 (64.7)	0 (0.0)	6 (35.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	17
2019	27 (45.8)	22 (37.3)	10 (16.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	59
2020	12 (60.0)	7 (35.0)	1 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	20

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

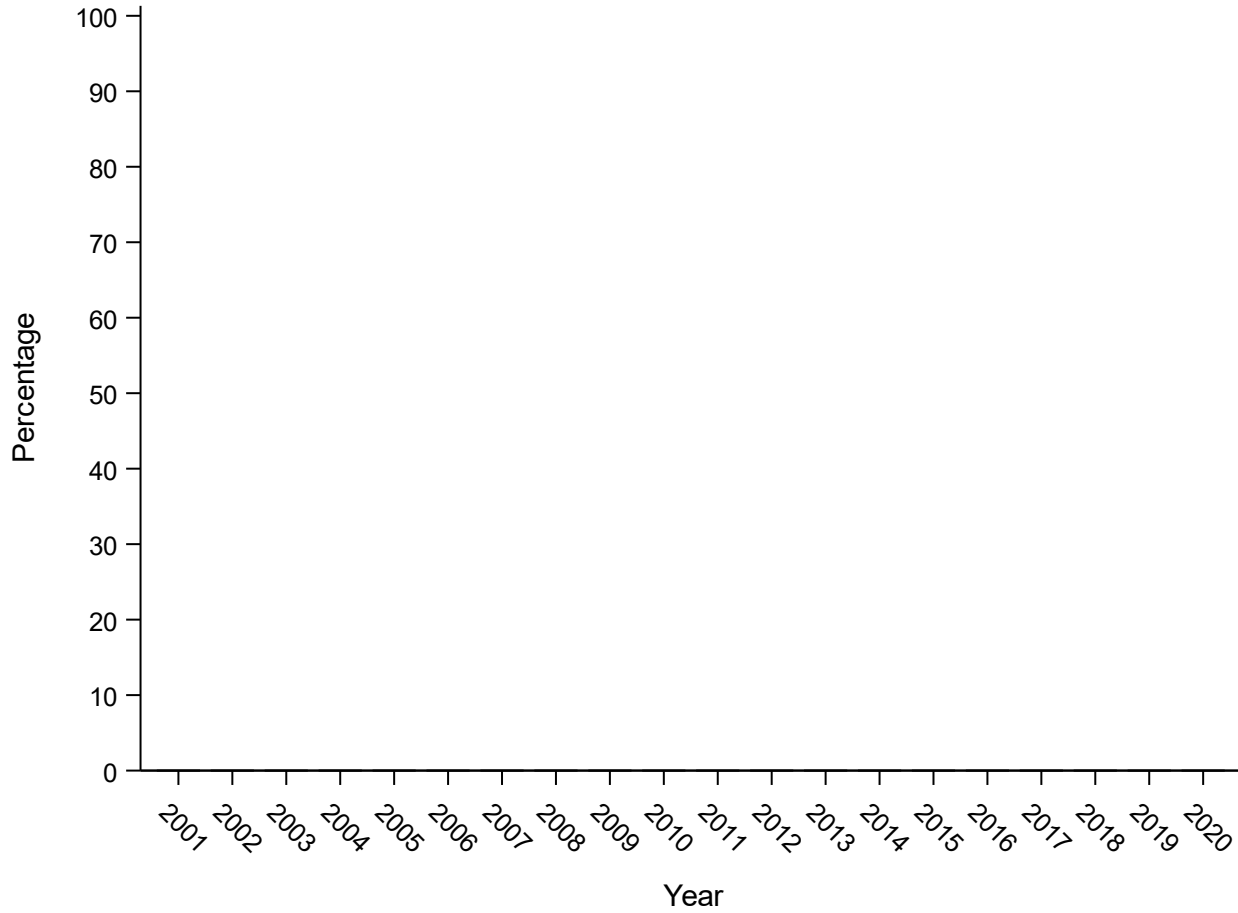
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2016-2020



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
2016	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
2017	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
2018	4 (23.5)	12 (70.6)	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	17
2019	10 (16.9)	47 (79.7)	2 (3.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	59
2020	7 (35.0)	10 (50.0)	3 (15.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	20

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2001-2020

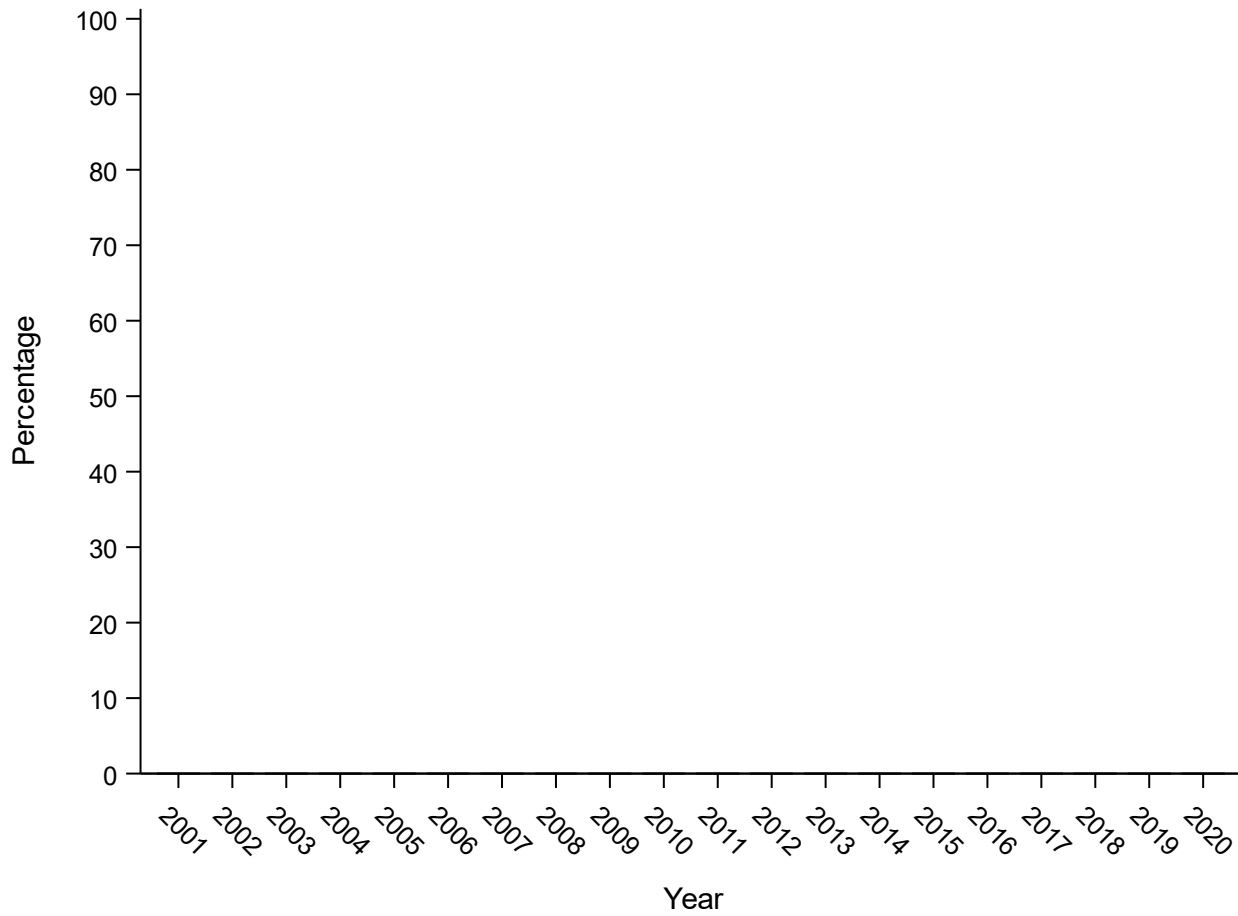


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2001-2003 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2001-2020

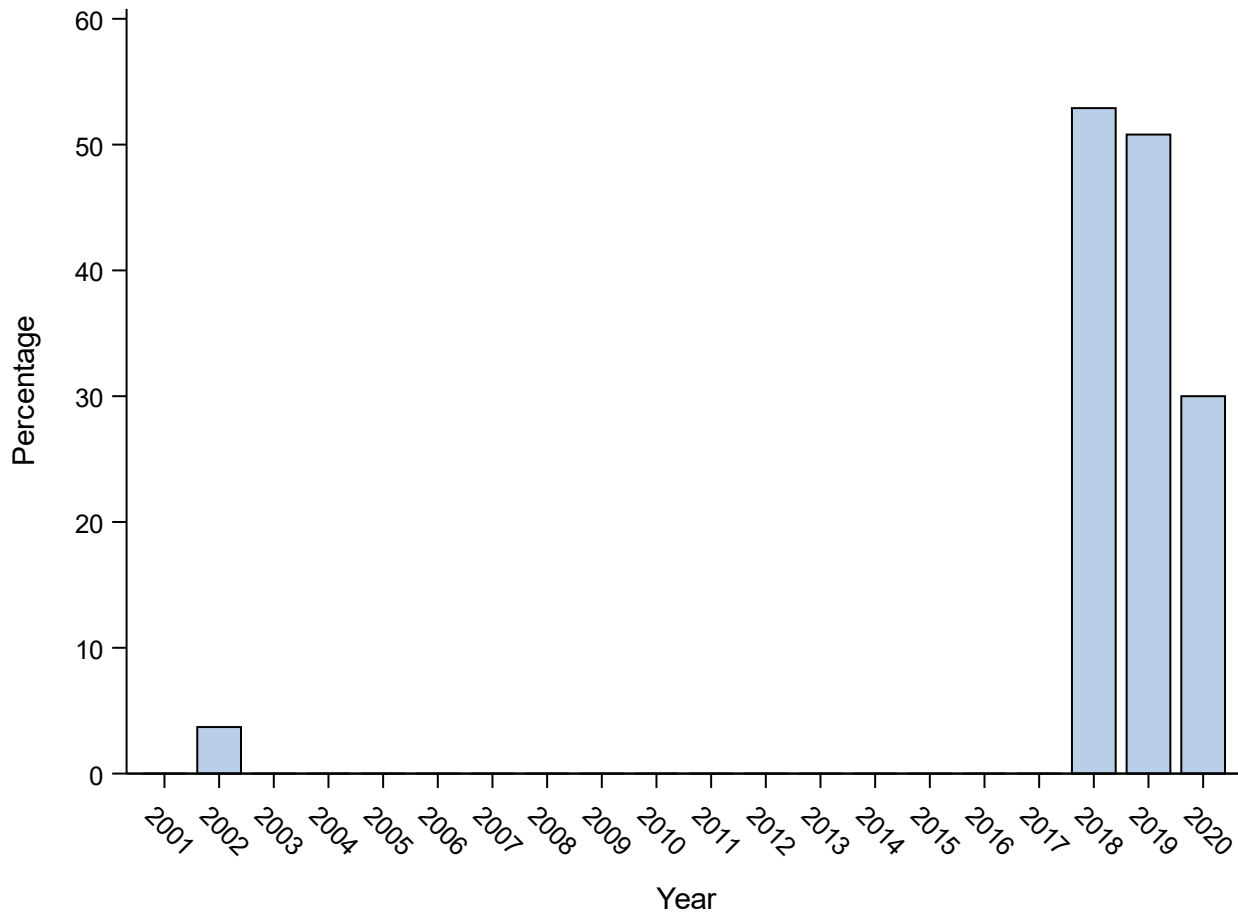


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2001-2003 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Anchorage, Alaska, 2001-2020

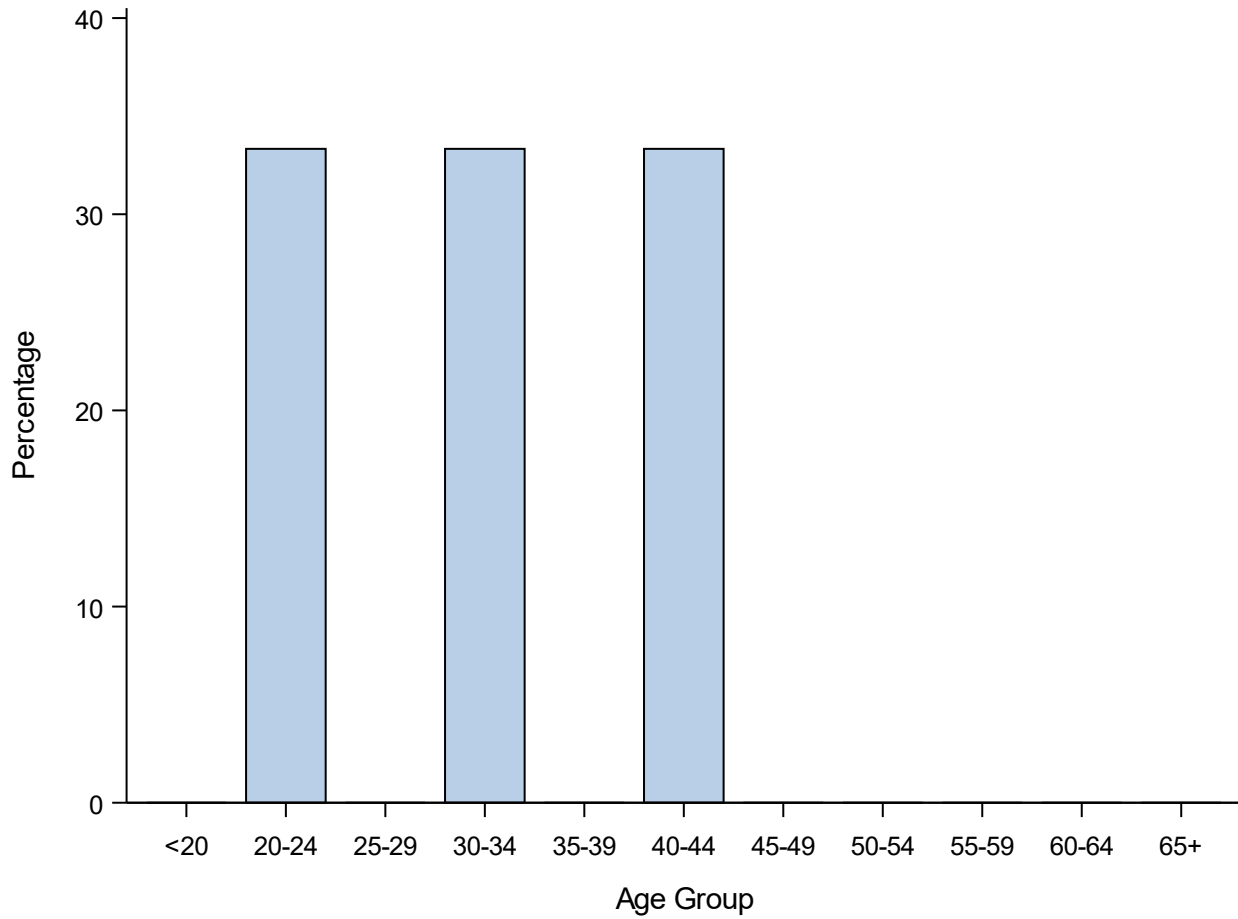


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (52.9)	30 (50.8)	6 (30.0)

Note: Ciprofloxacin resistance MICs $\geq 1.0 \mu\text{g/ml}$. Site participated in GISP during 2001-2003 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

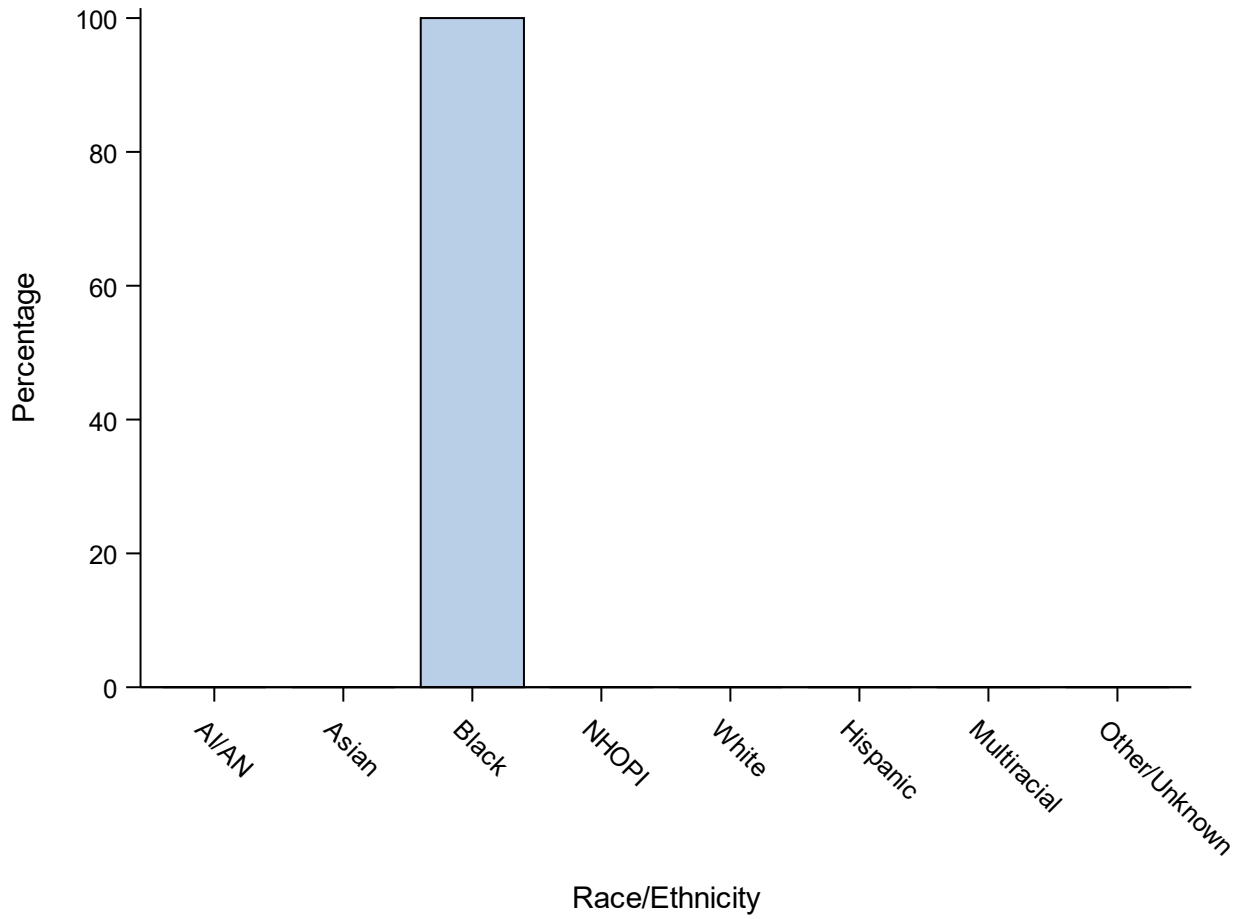
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
0 (0.0)	1 (33.3)	0 (0.0)	1 (33.3)	0 (0.0)	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3

Note: Cases with unknown age were excluded.

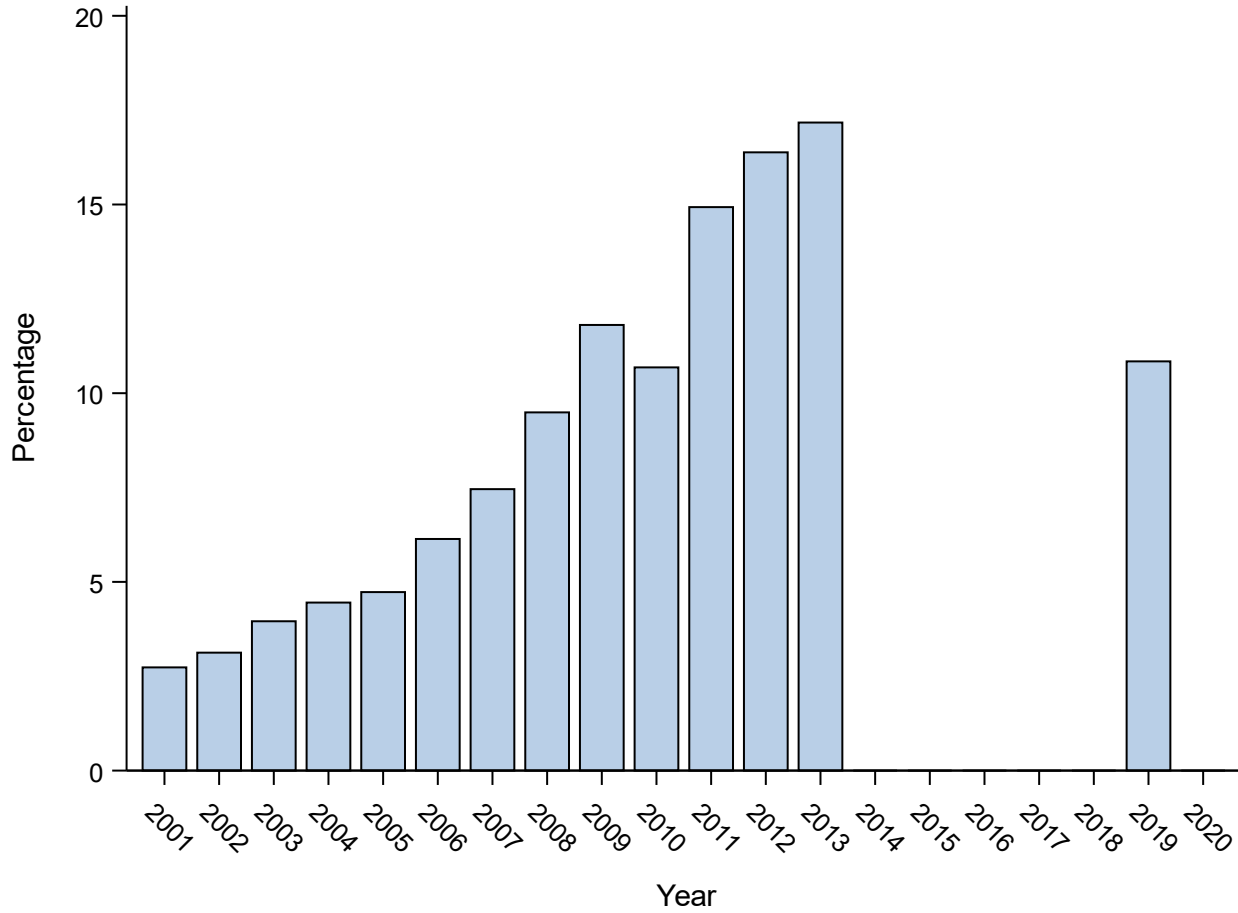
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	3 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2001-2020

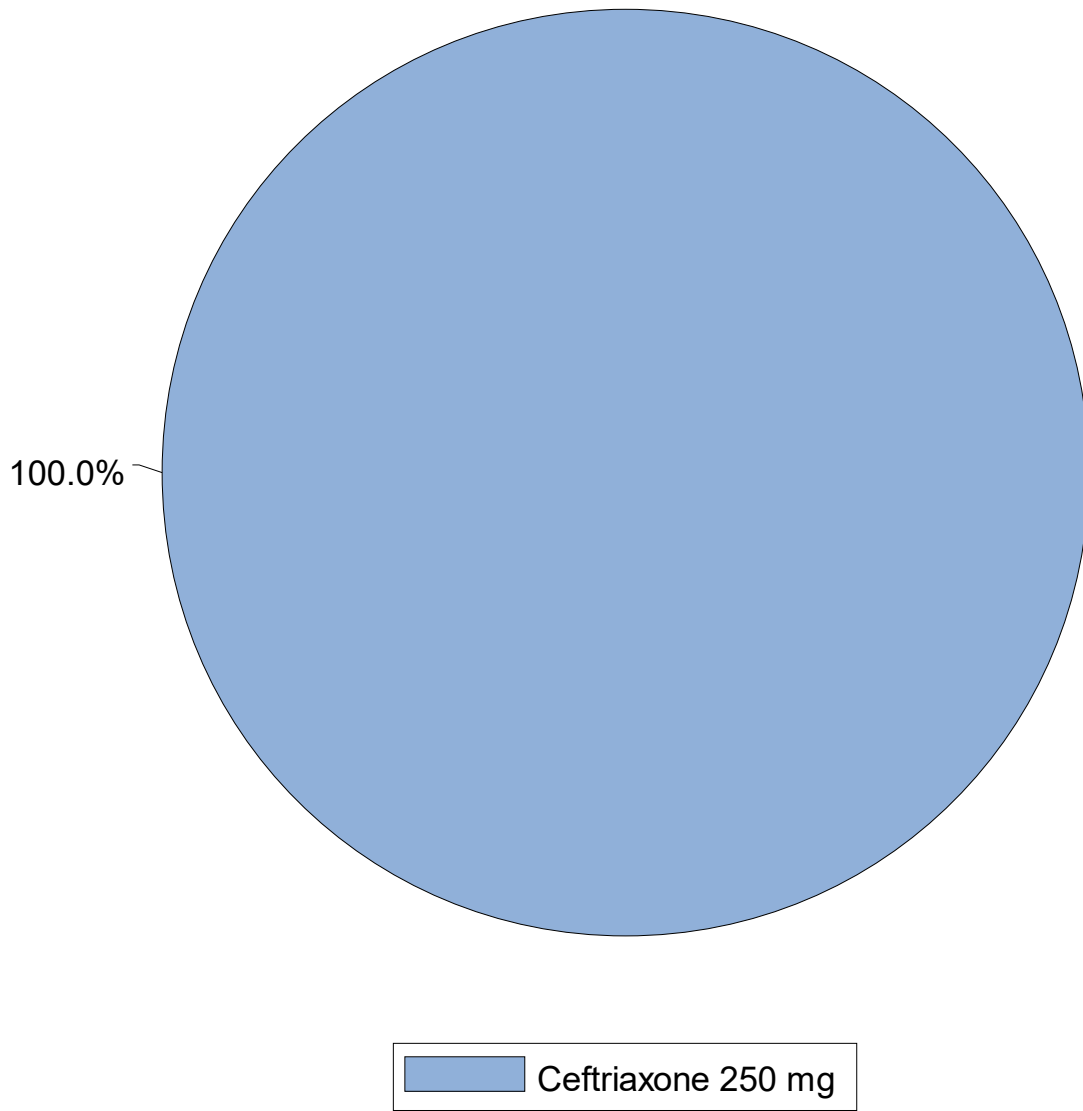


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
7 (2.7)	9 (3.1)	11 (4.0)	13 (4.5)	14 (4.7)	17 (6.1)	22 (7.5)	28 (9.5)	32 (11.8)	25 (10.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
43 (14.9)	48 (16.4)	51 (17.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (10.8)	0 (0.0)

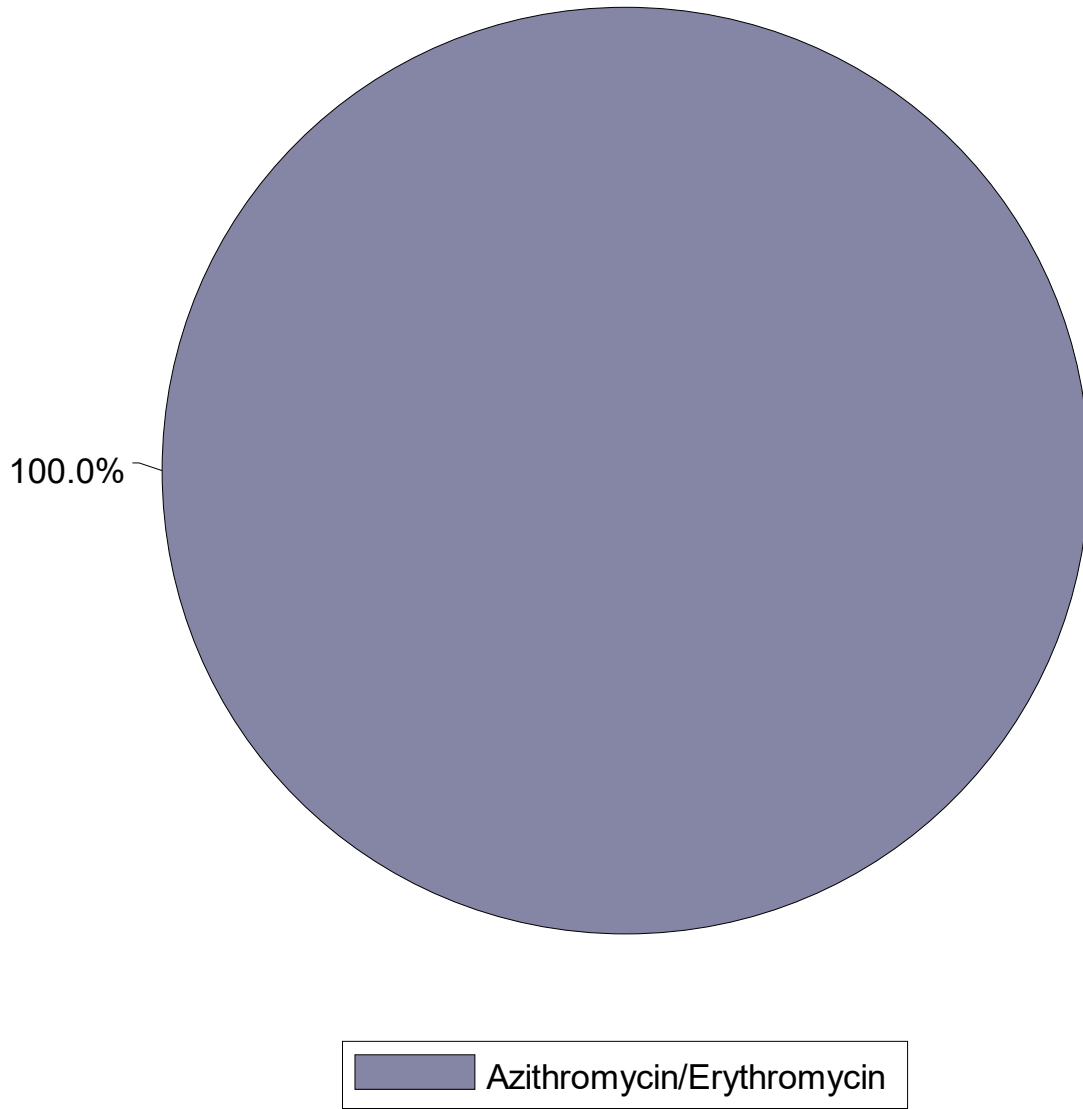
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2001-2013 and 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2020



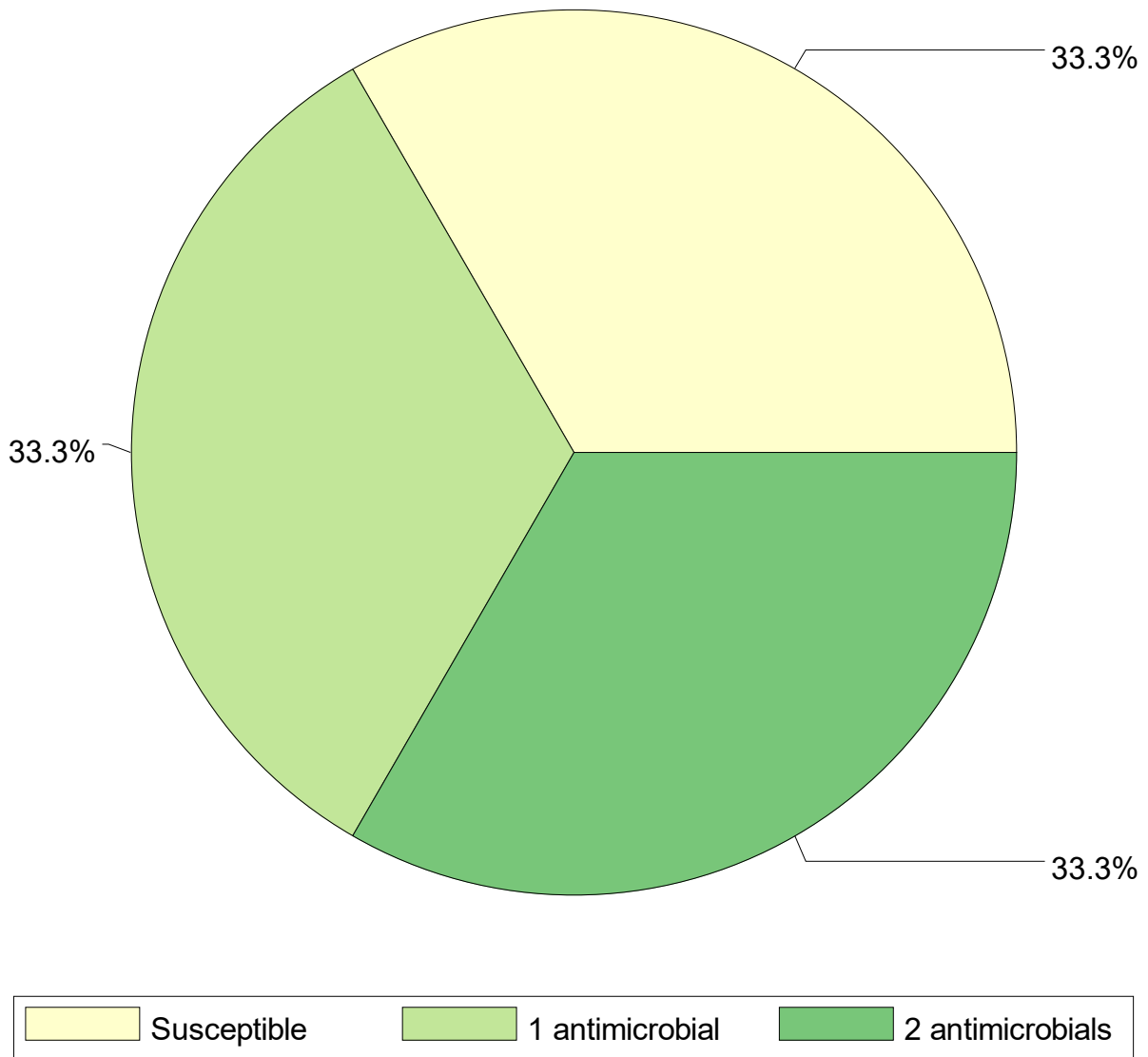
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	3	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	3	100.0

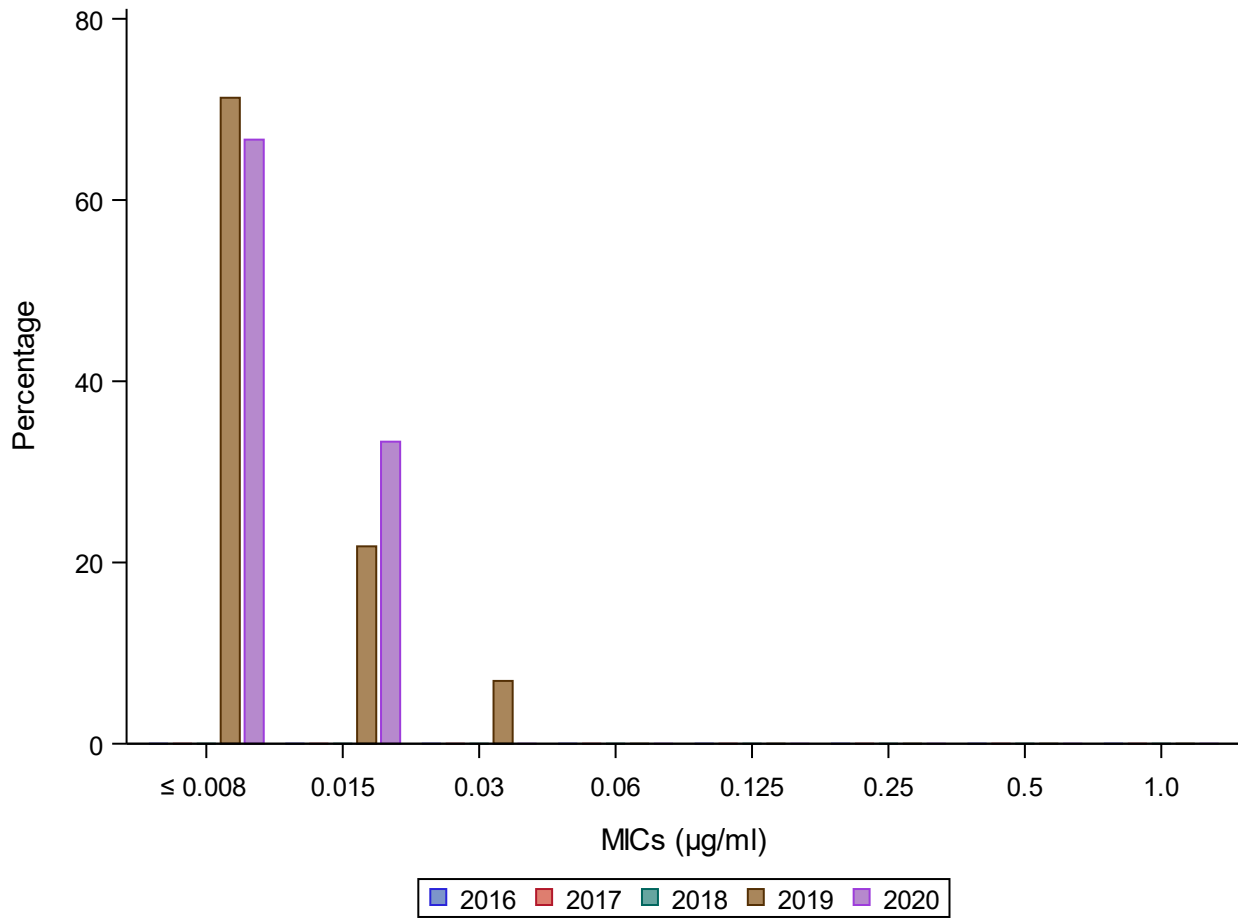
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	1	33.3
1 antimicrobial	1	33.3
2 antimicrobials	1	33.3
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

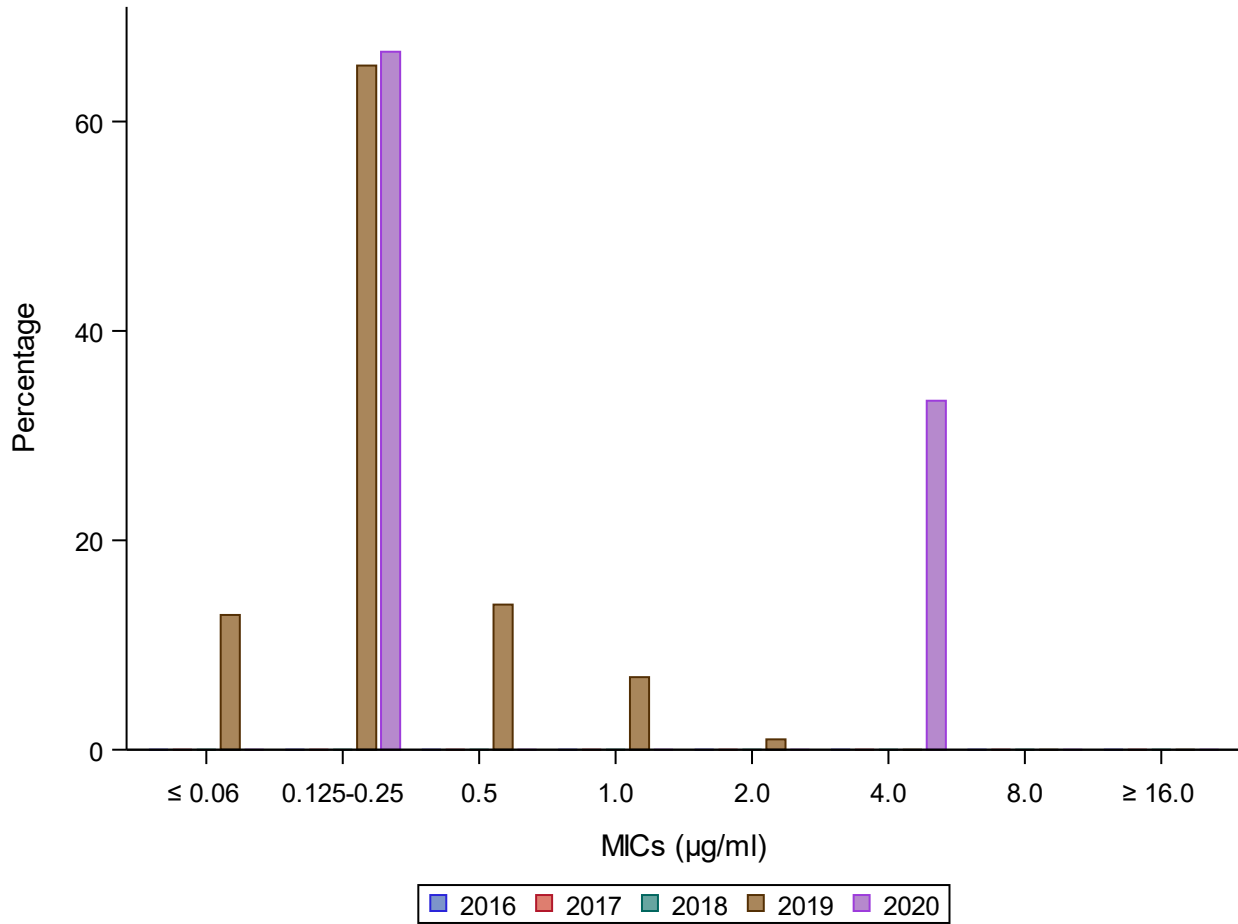
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2016-2020



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
2016	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
2017	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
2018	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
2019	72 (71.3)	22 (21.8)	7 (6.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	101
2020	2 (66.7)	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3

Note: Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

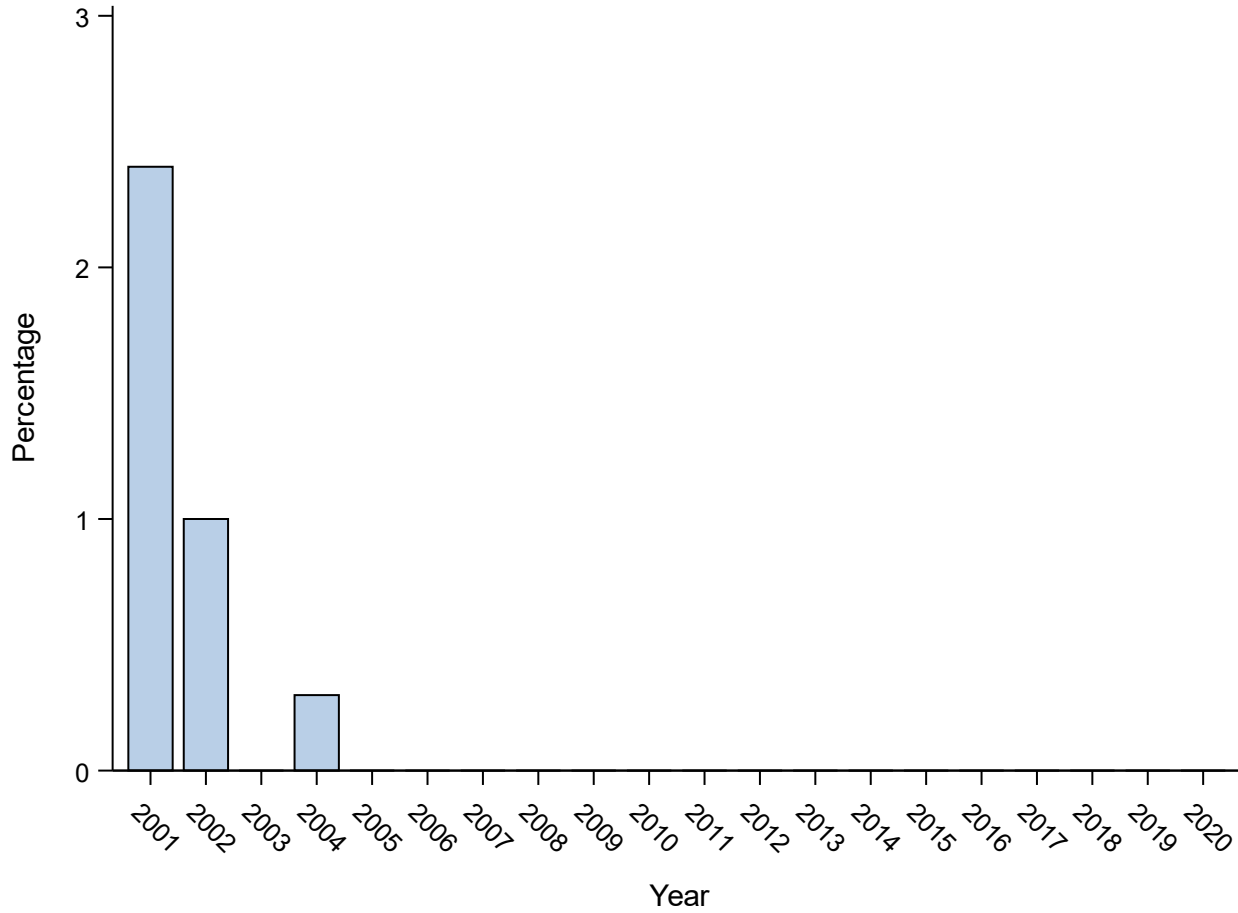
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2016-2020



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
2016	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
2017	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
2018	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
2019	13 (12.9)	66 (65.3)	14 (13.9)	7 (6.9)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	101
2020	0 (0.0)	2 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	0 (0.0)	0 (0.0)	3

Note: Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2001-2020

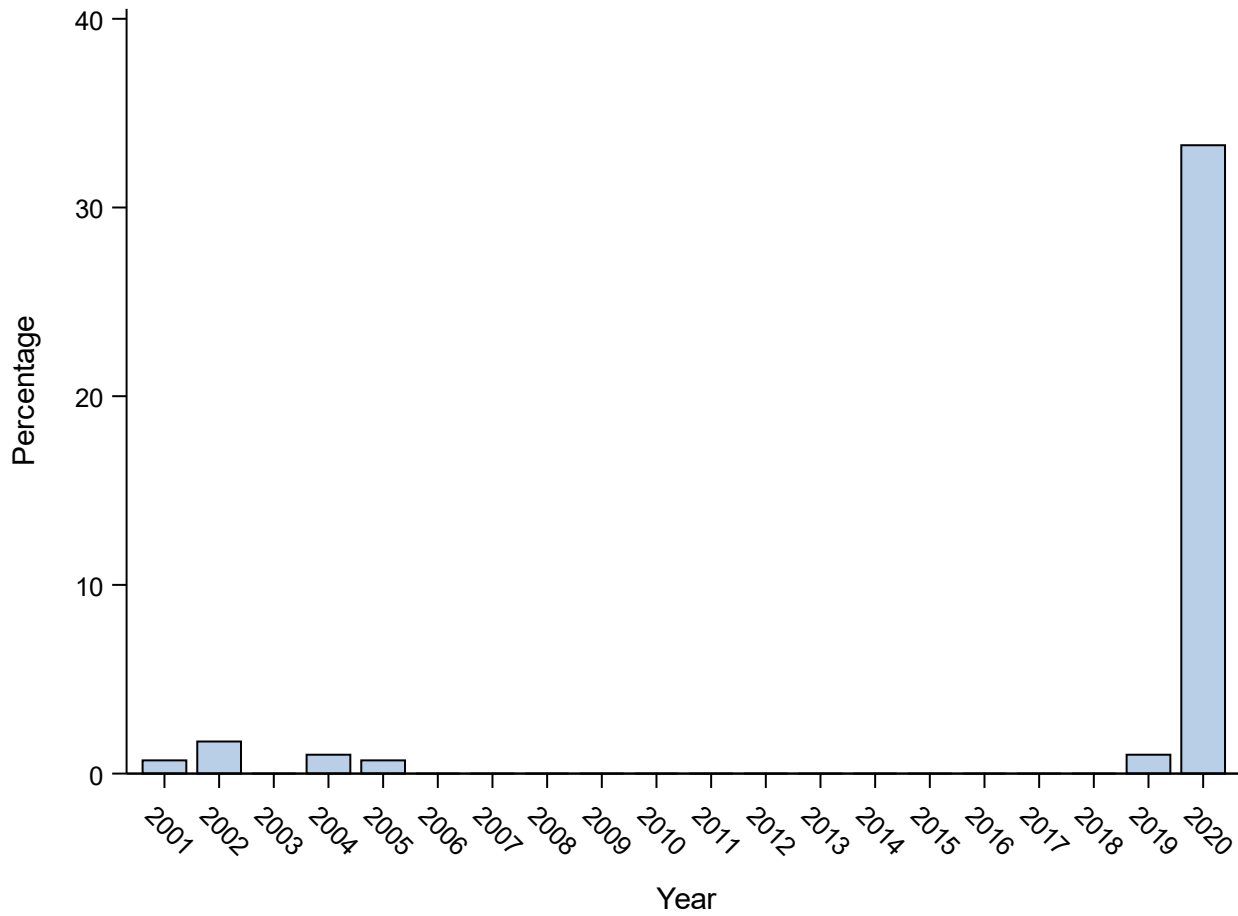


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
7 (2.4)	3 (1.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2001-2020

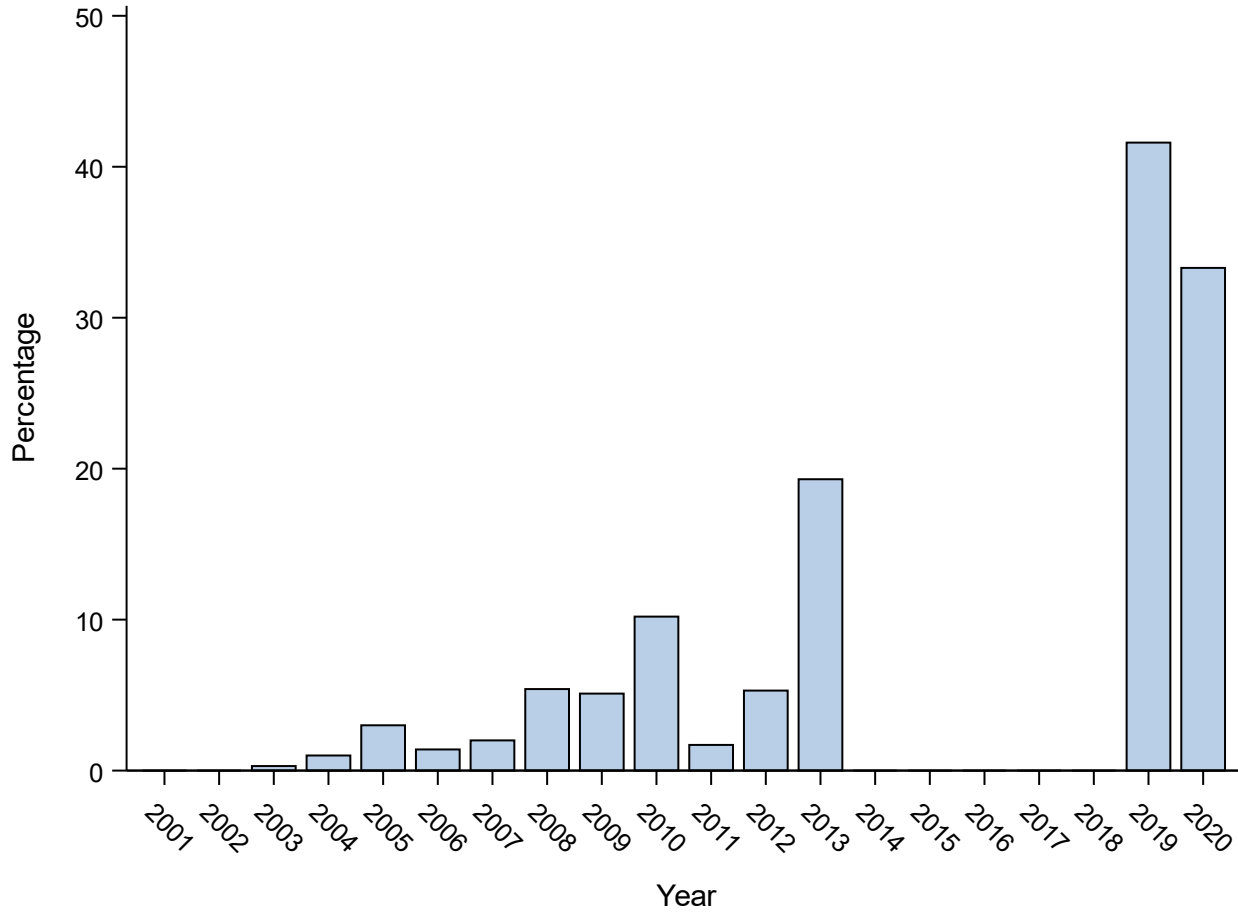


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
2 (0.7)	5 (1.7)	0 (0.0)	3 (1.0)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.0)	1 (33.3)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2001-2013 and 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Baltimore, Maryland, 2001-2020

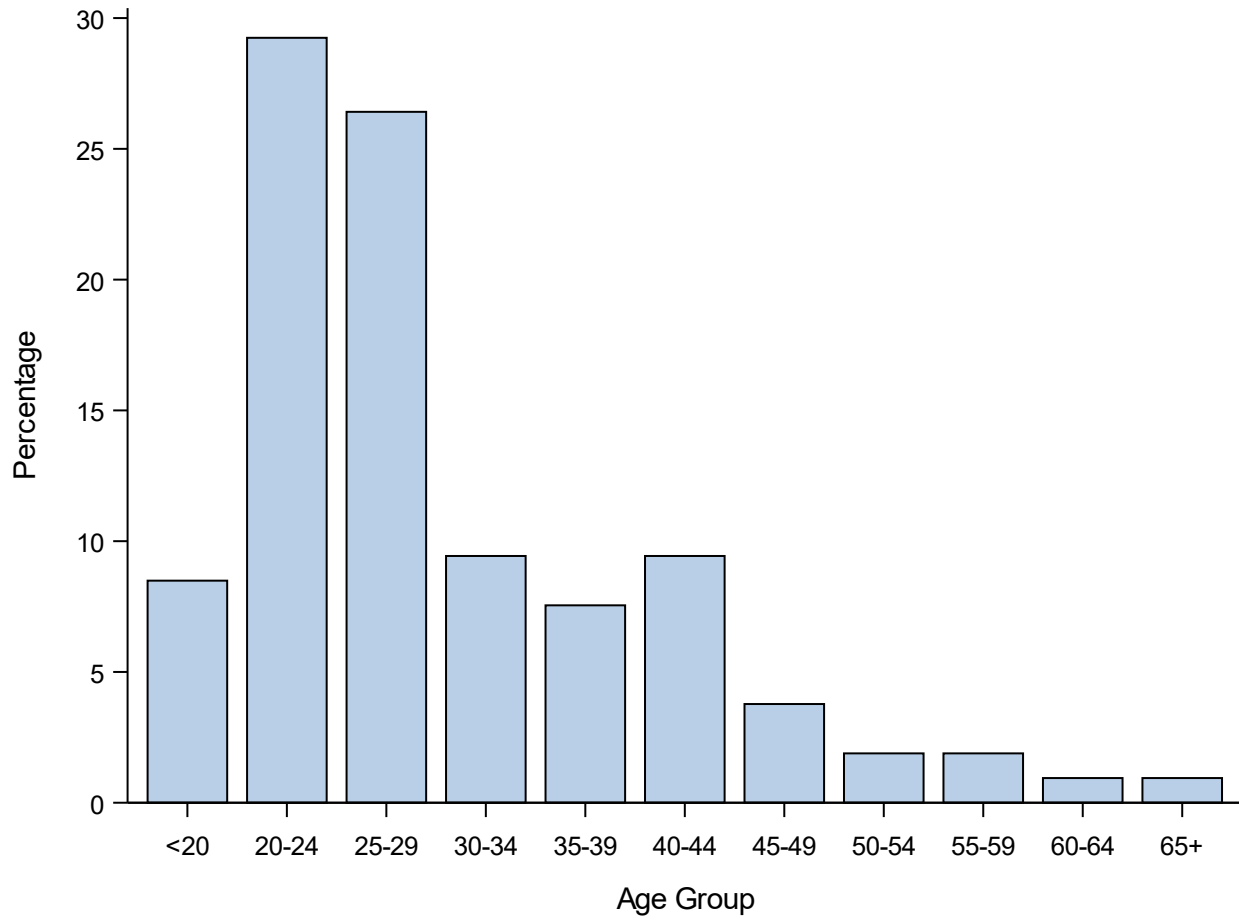


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.3)	3 (1.0)	9 (3.0)	4 (1.4)	6 (2.0)	16 (5.4)	14 (5.1)	25 (10.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
5 (1.7)	16 (5.3)	58 (19.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	42 (41.6)	1 (33.3)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

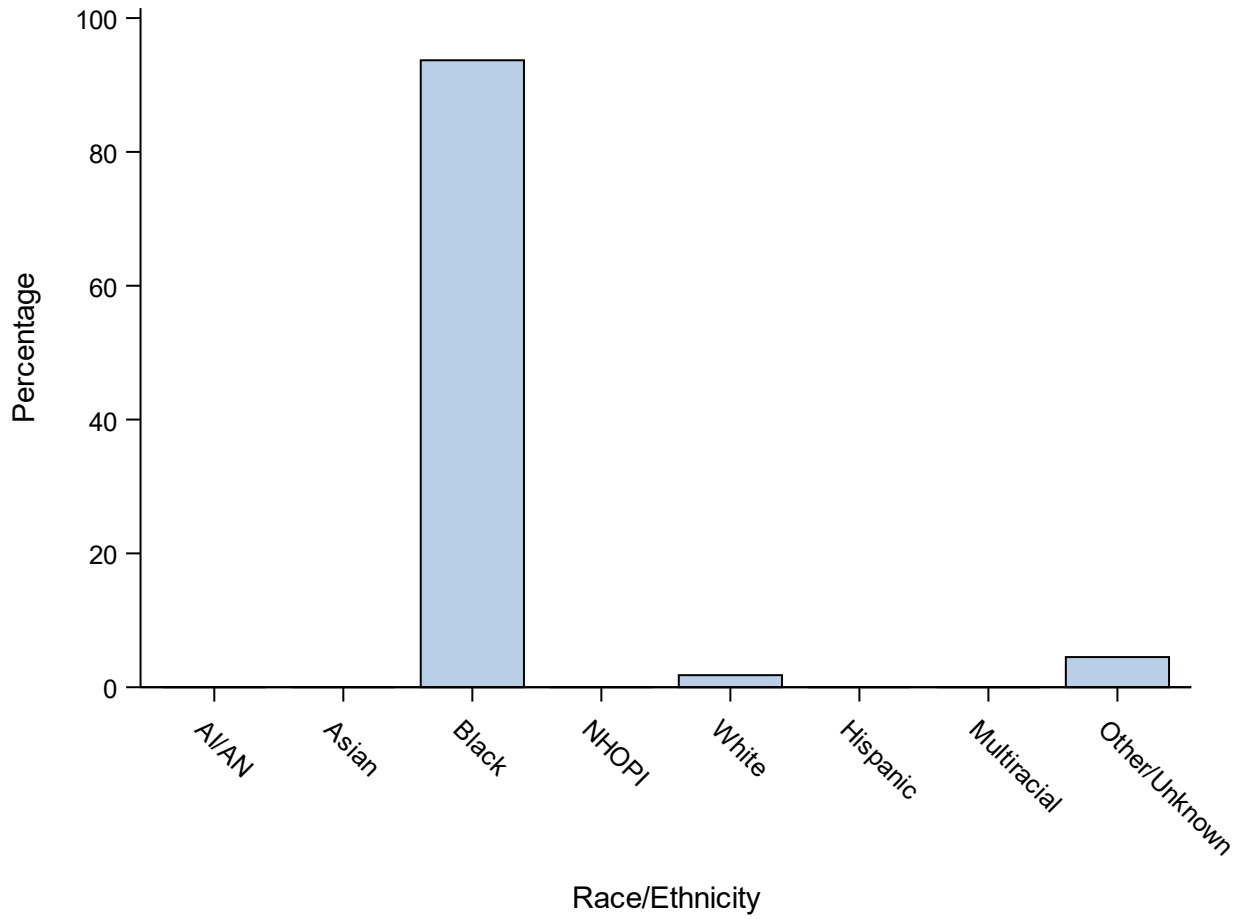
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
9 (8.5)	31 (29.2)	28 (26.4)	10 (9.4)	8 (7.5)	10 (9.4)	4 (3.8)	2 (1.9)	2 (1.9)	1 (0.9)	1 (0.9)	106

Note: Cases with unknown age were excluded.

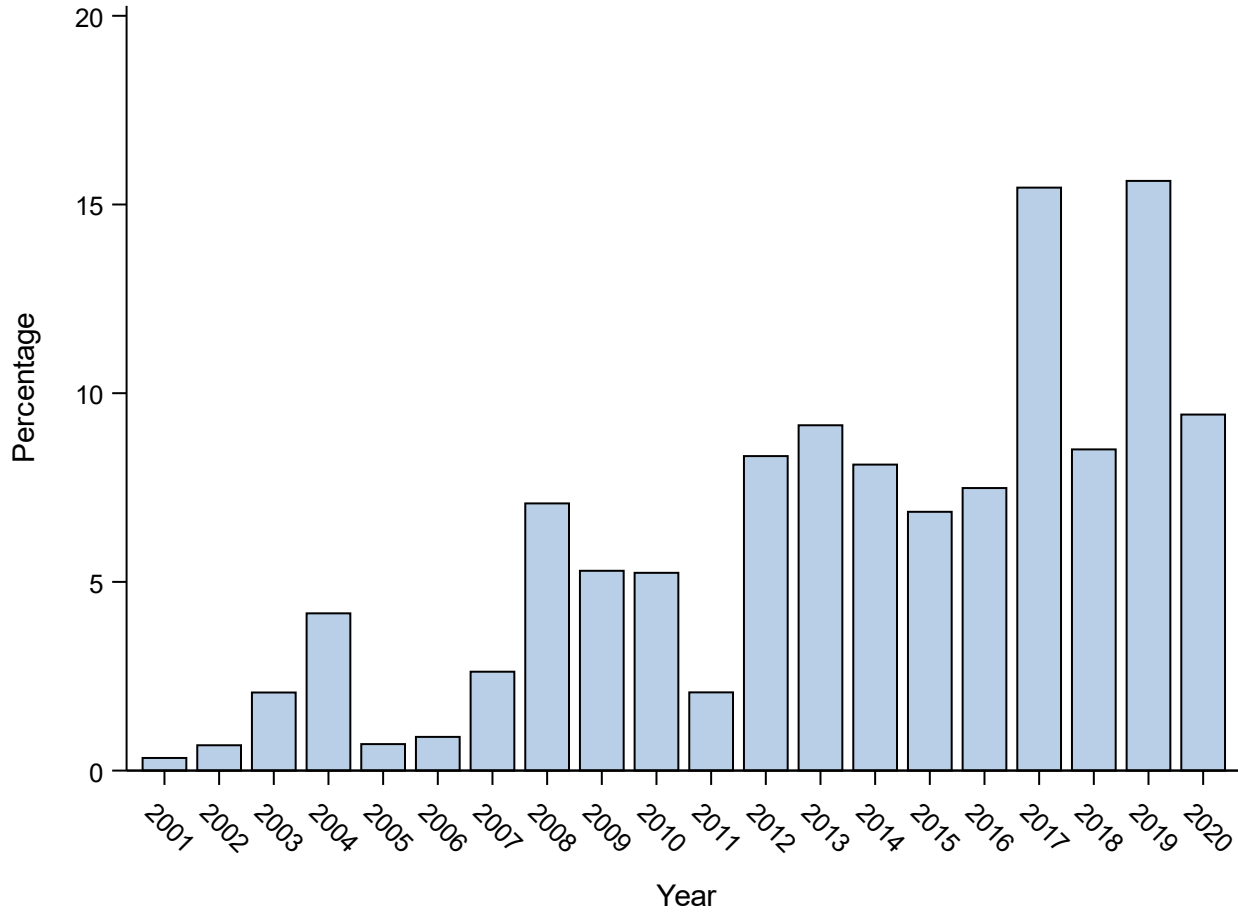
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	104 (93.7)	0 (0.0)	2 (1.8)	0 (0.0)	0 (0.0)	5 (4.5)	111

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2001-2020

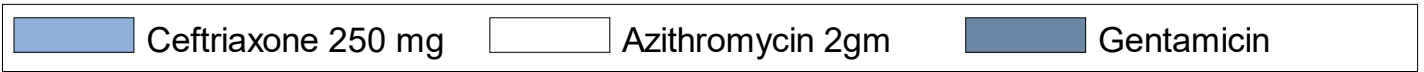
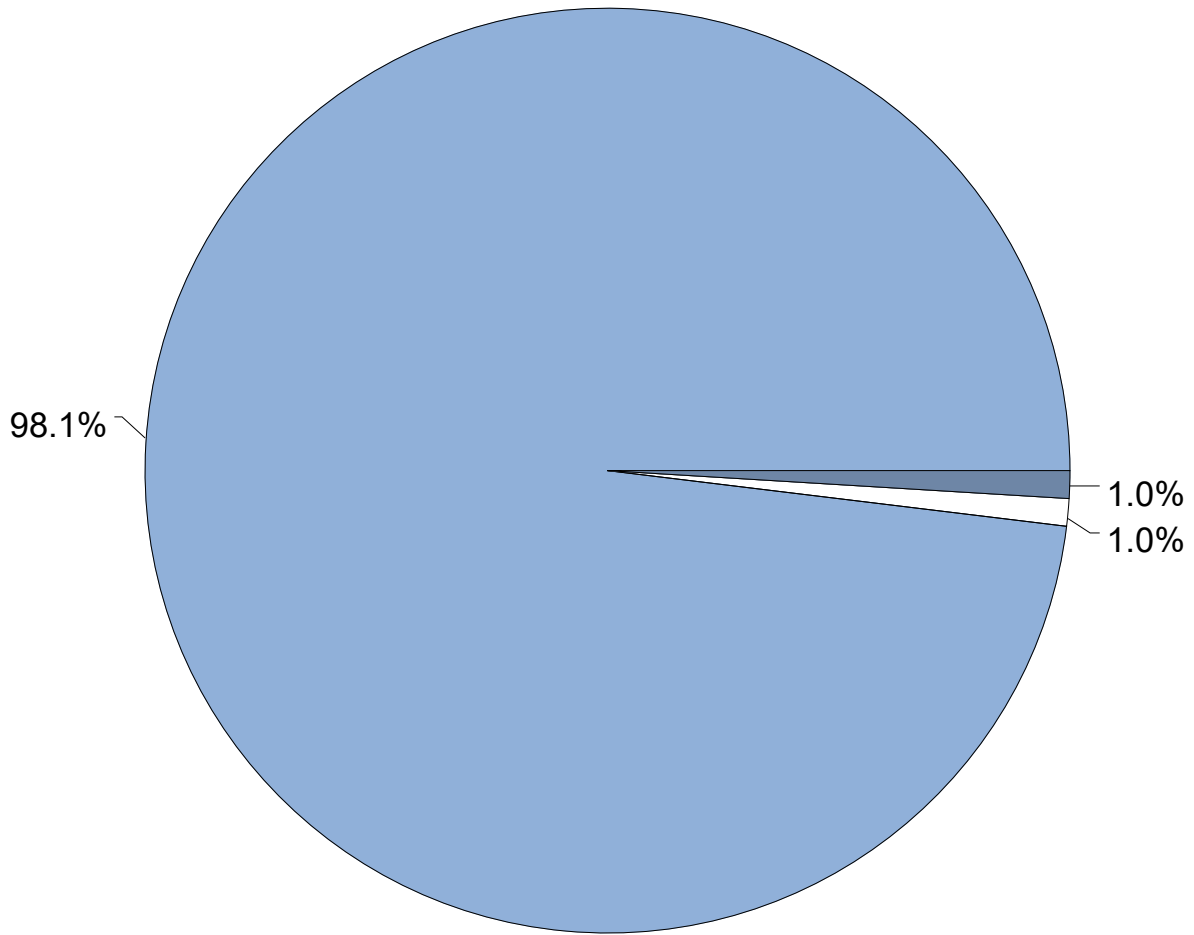


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.3)	2 (0.7)	6 (2.1)	12 (4.2)	2 (0.7)	2 (0.9)	6 (2.6)	16 (7.1)	9 (5.3)	12 (5.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
4 (2.1)	25 (8.3)	14 (9.2)	18 (8.1)	12 (6.9)	14 (7.5)	19 (15.4)	8 (8.5)	15 (15.6)	10 (9.4)

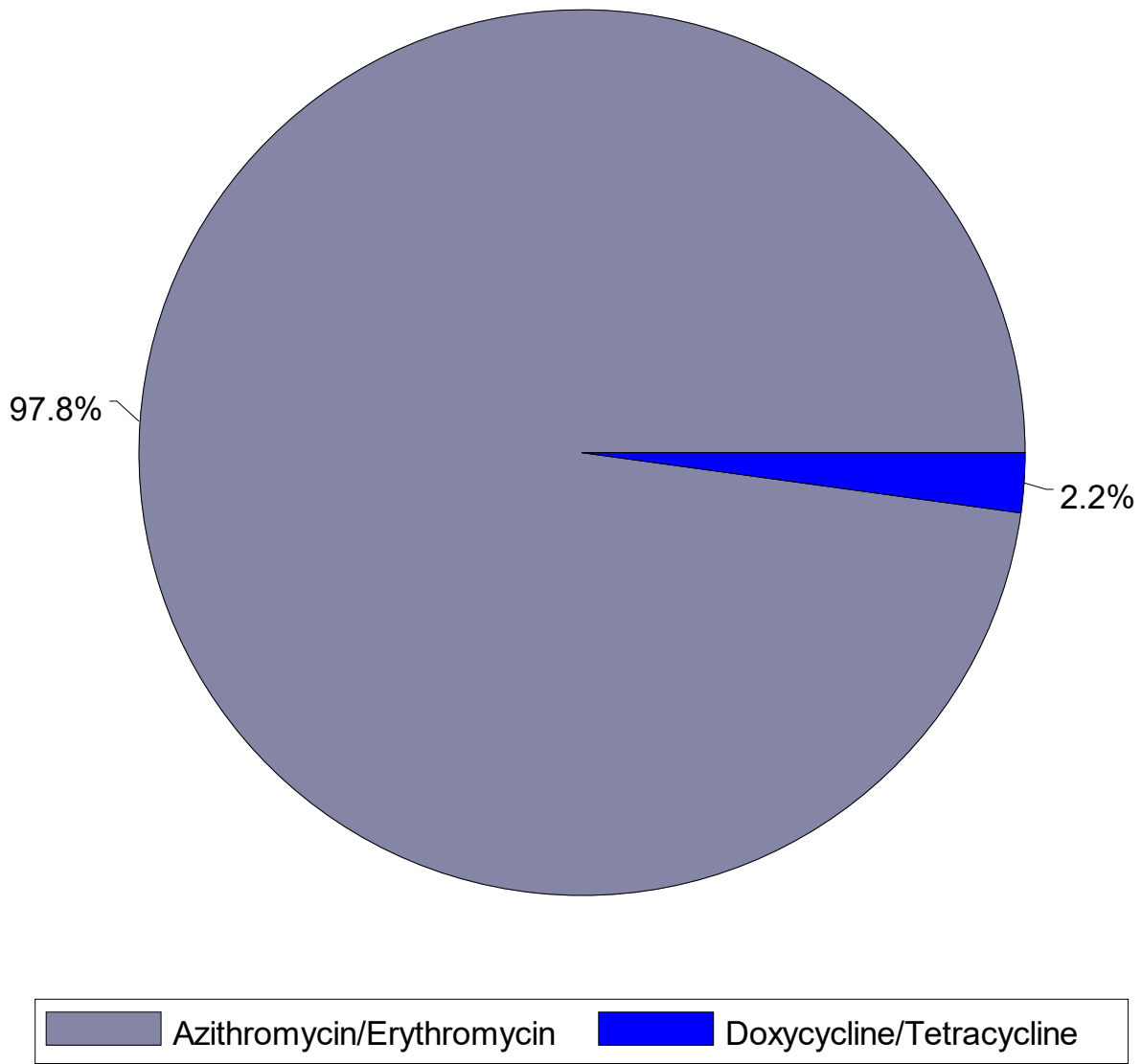
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2020



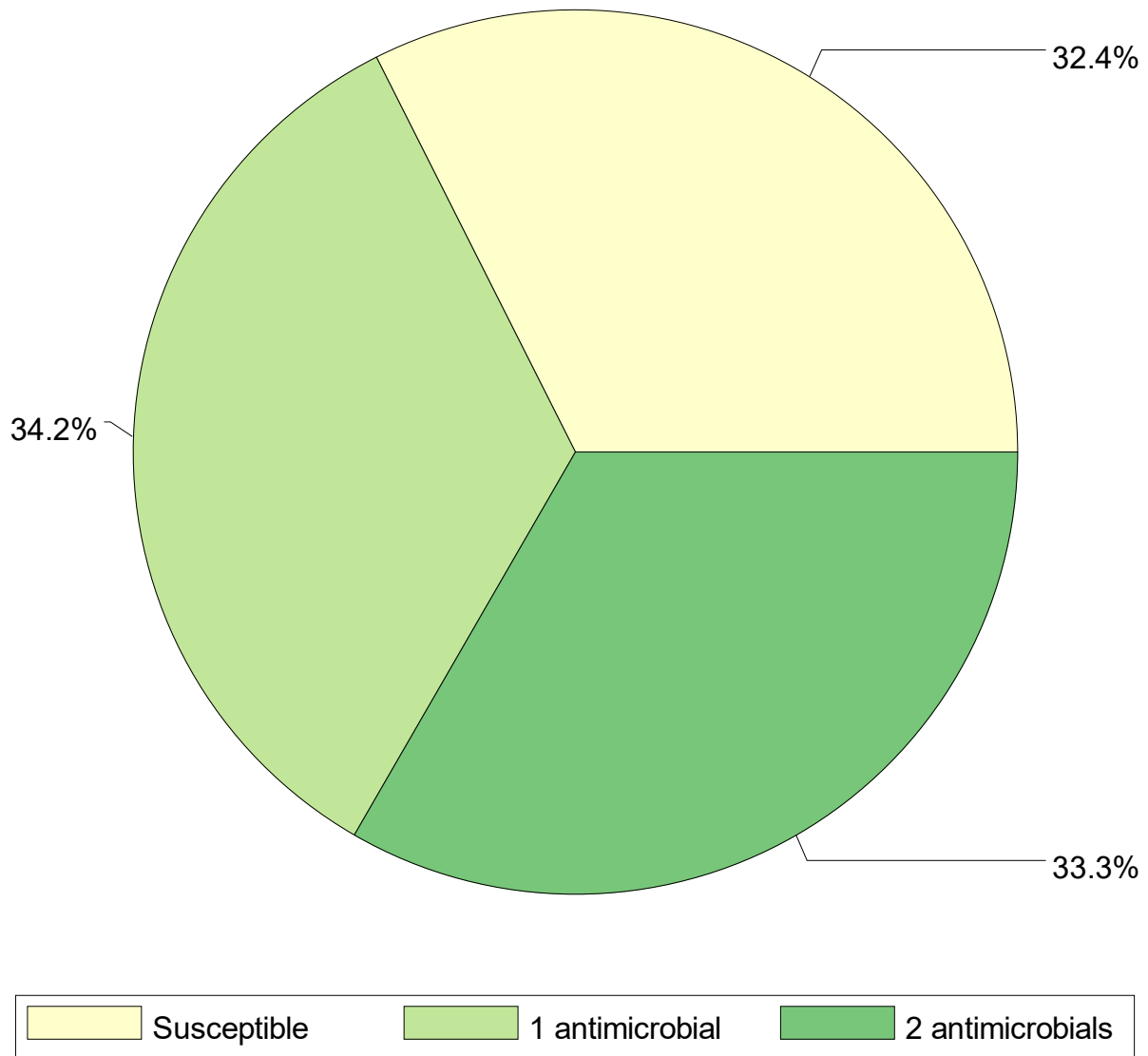
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	102	98.1
Azithromycin 2gm	1	1.0
Gentamicin	1	1.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	90	97.8
Doxycycline/Tetracycline	2	2.2

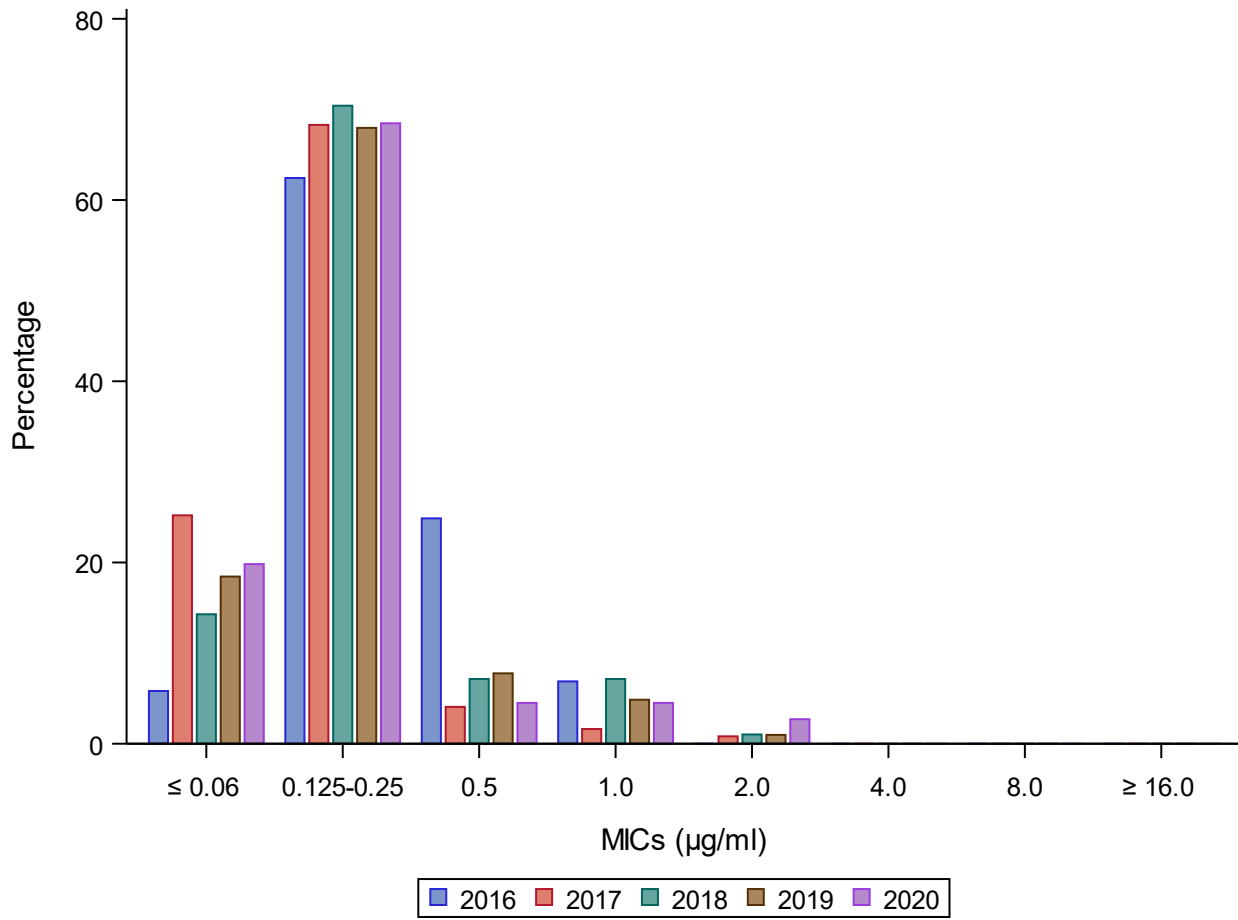
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	36	32.4
1 antimicrobial	38	34.2
2 antimicrobials	37	33.3
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

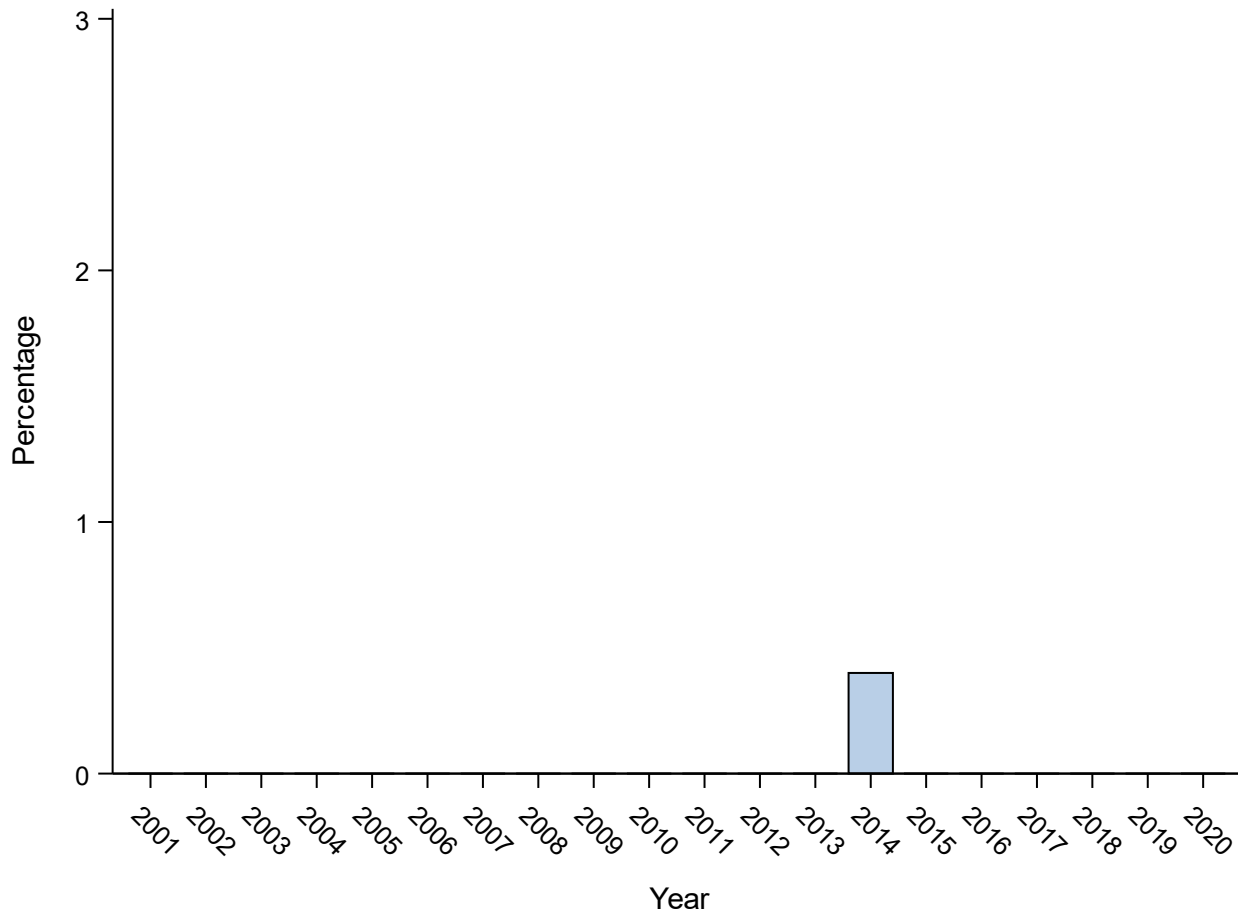
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g}/\text{mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g}/\text{mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g}/\text{mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2016-2020



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
2016	11 (5.8)	118 (62.4)	47 (24.9)	13 (6.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	189
2017	31 (25.2)	84 (68.3)	5 (4.1)	2 (1.6)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	123
2018	14 (14.3)	69 (70.4)	7 (7.1)	7 (7.1)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	98
2019	19 (18.4)	70 (68.0)	8 (7.8)	5 (4.9)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	103
2020	22 (19.8)	76 (68.5)	5 (4.5)	5 (4.5)	3 (2.7)	0 (0.0)	0 (0.0)	0 (0.0)	111

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2001-2020

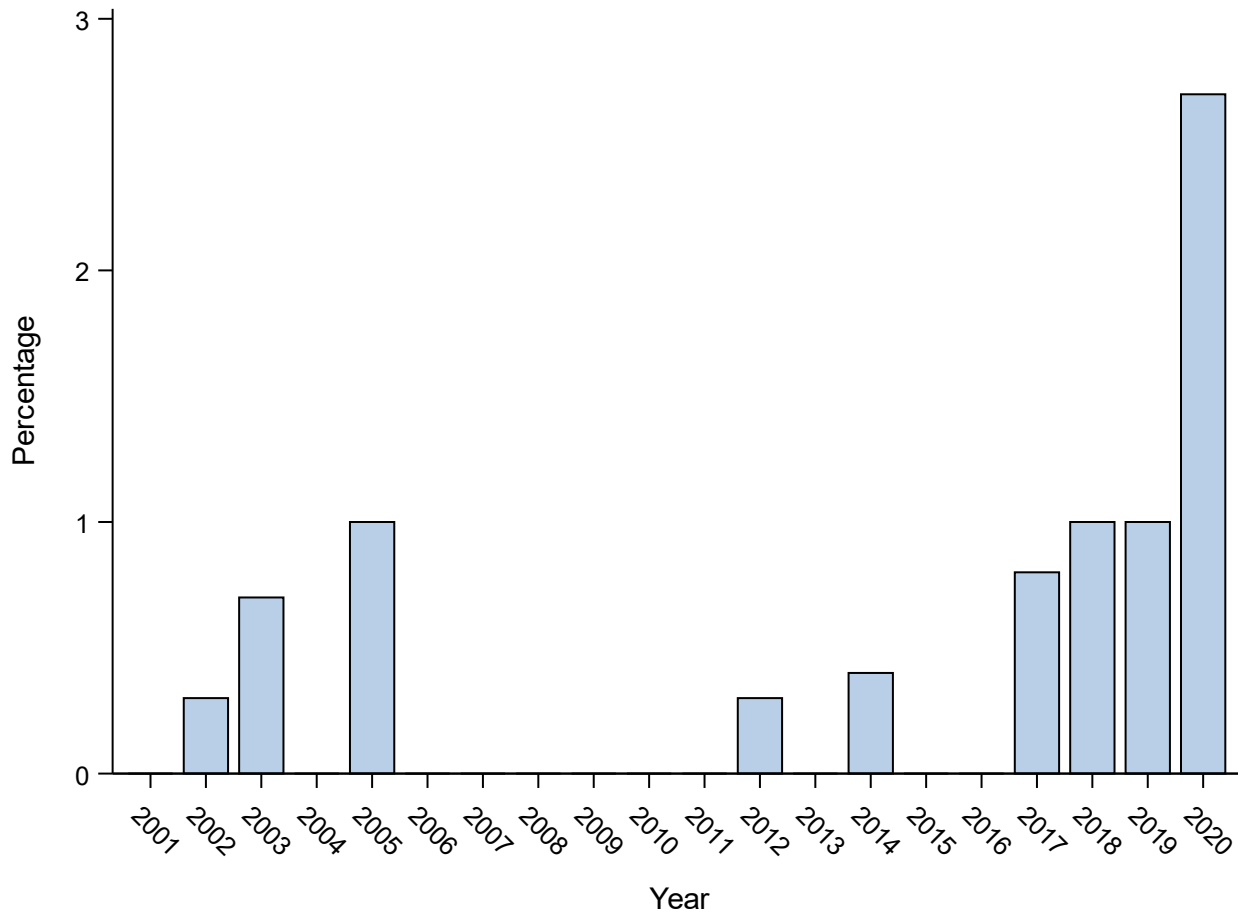


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2001-2020

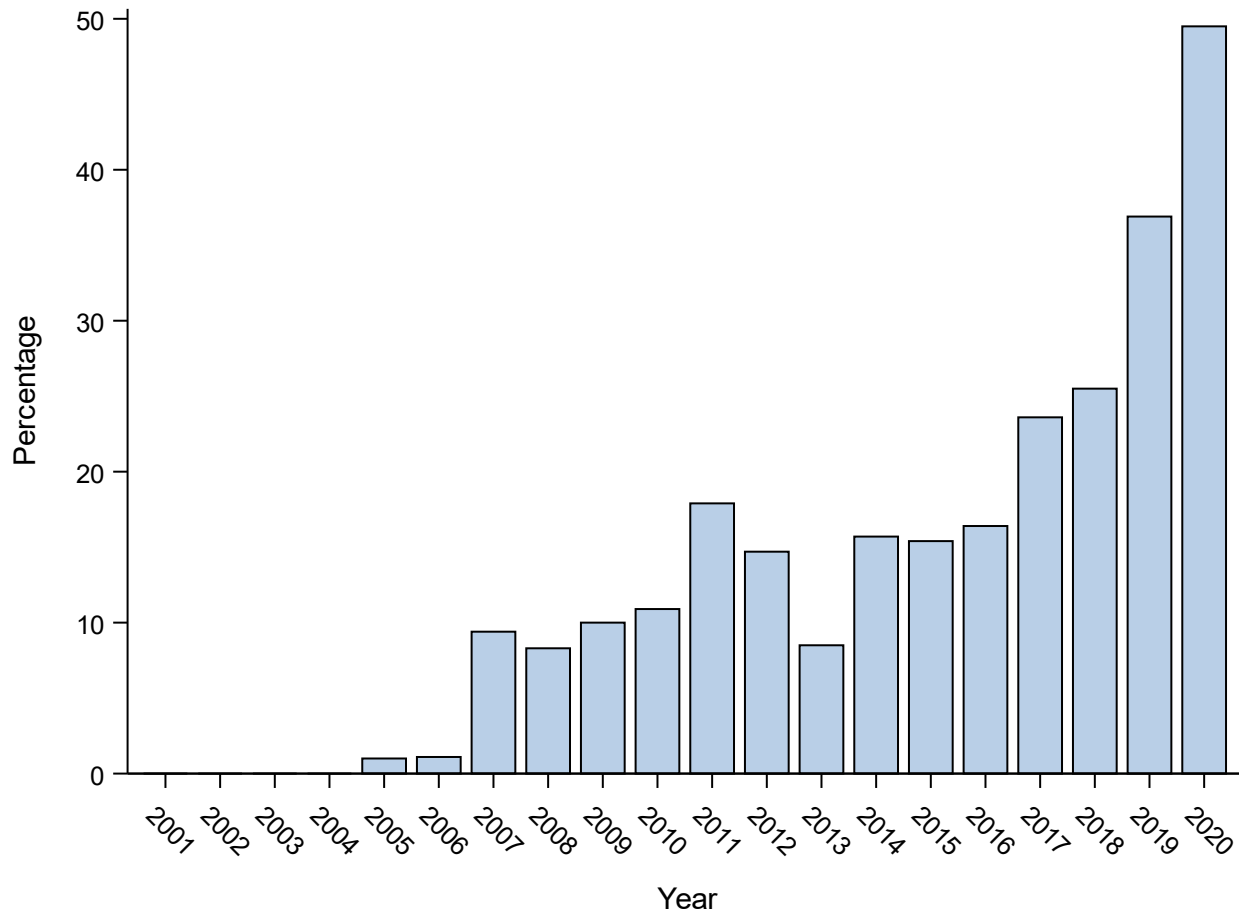


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.3)	2 (0.7)	0 (0.0)	3 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.3)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.8)	1 (1.0)	1 (1.0)	3 (2.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Birmingham, Alabama, 2001-2020

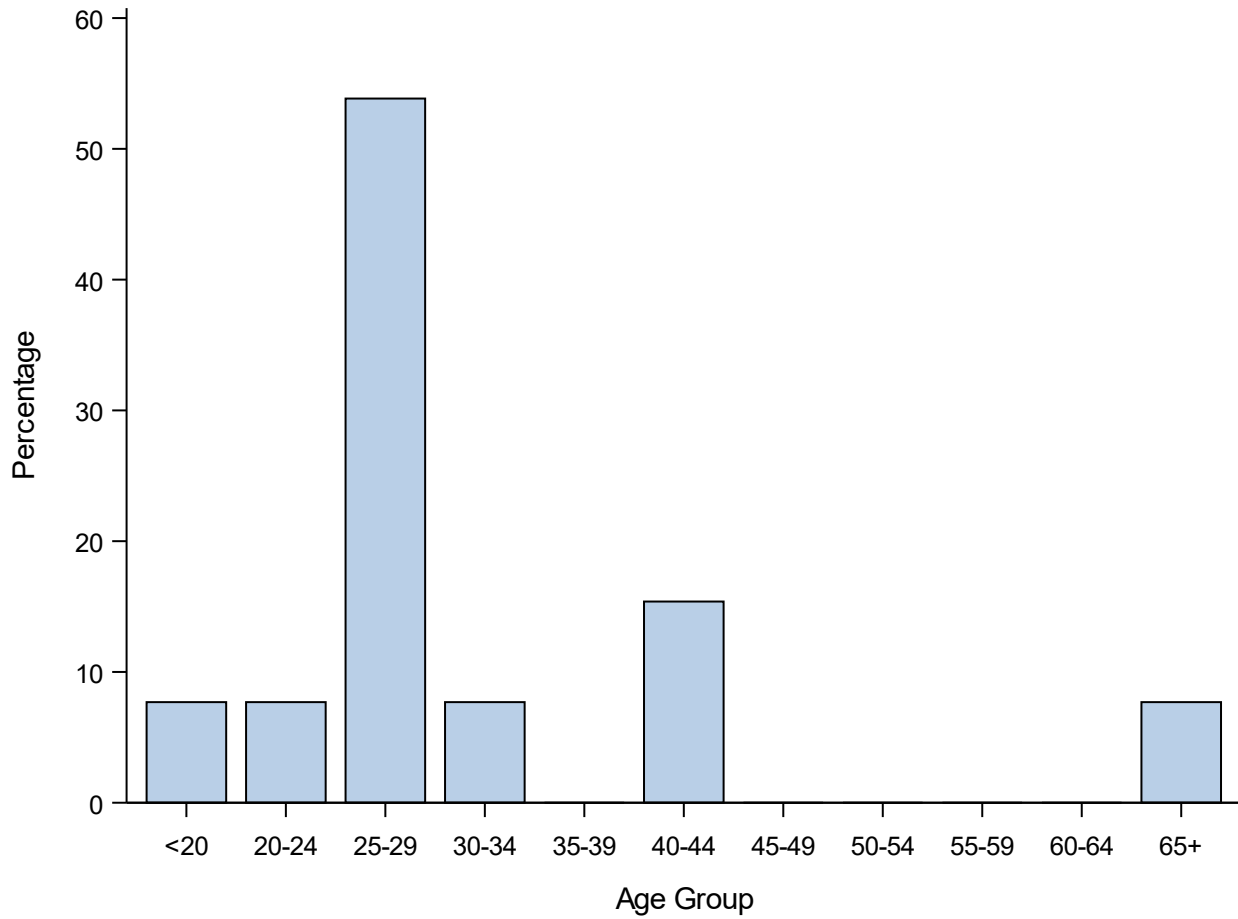


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.0)	3 (1.1)	26 (9.4)	20 (8.3)	21 (10.0)	29 (10.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
38 (17.9)	44 (14.7)	13 (8.5)	35 (15.7)	27 (15.4)	31 (16.4)	29 (23.6)	25 (25.5)	38 (36.9)	55 (49.5)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

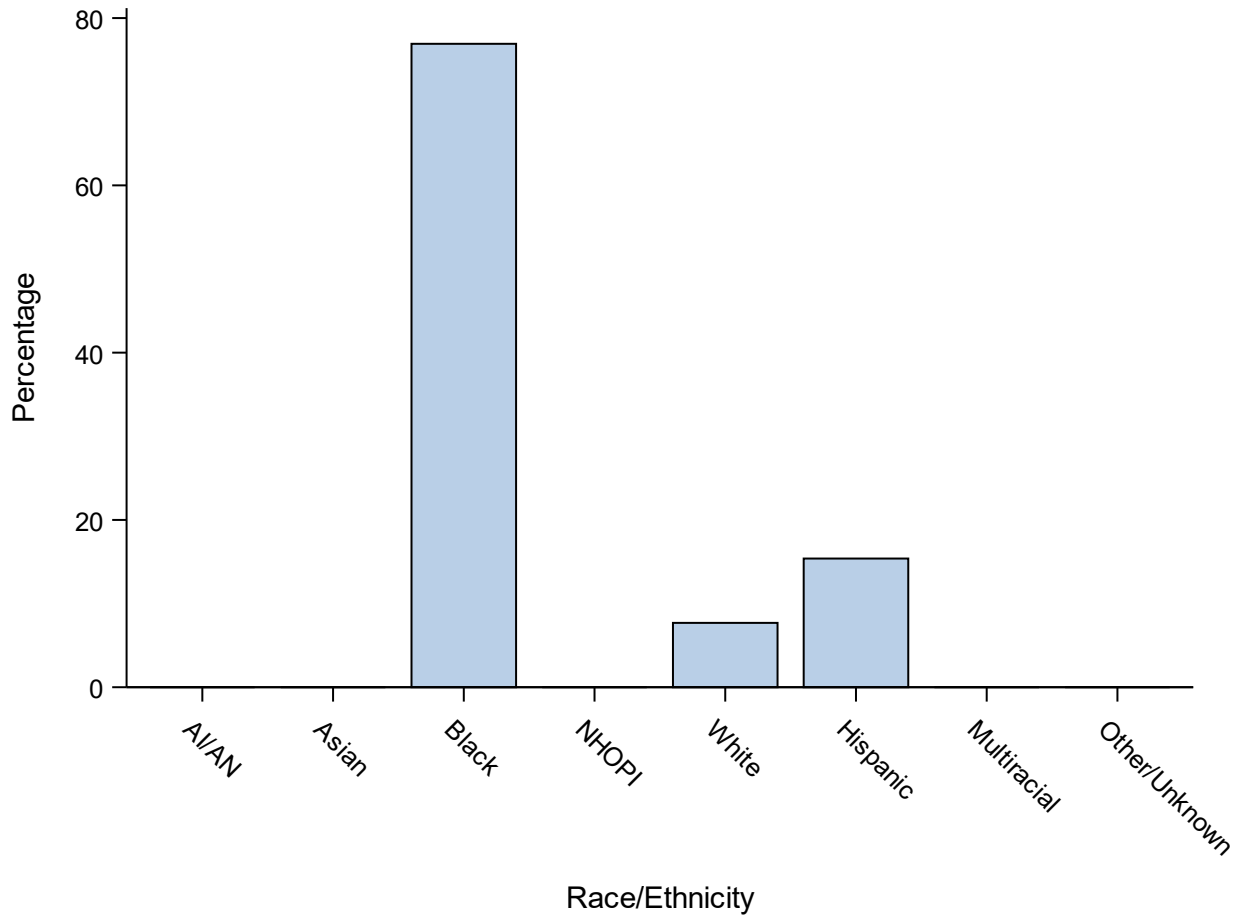
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
1 (7.7)	1 (7.7)	7 (53.8)	1 (7.7)	0 (0.0)	2 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.7)	13

Note: Cases with unknown age were excluded.

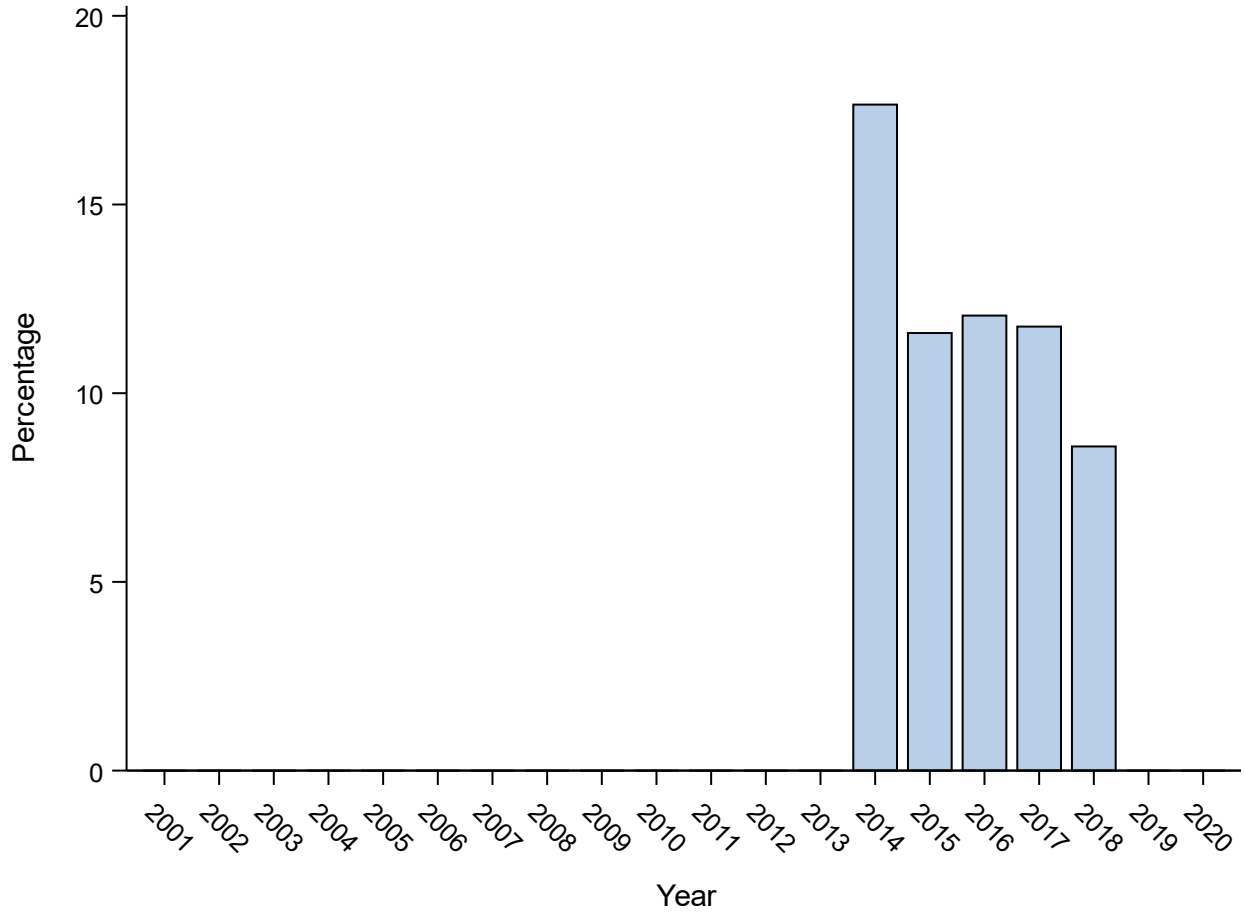
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	10 (76.9)	0 (0.0)	1 (7.7)	2 (15.4)	0 (0.0)	0 (0.0)	13

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2001-2020

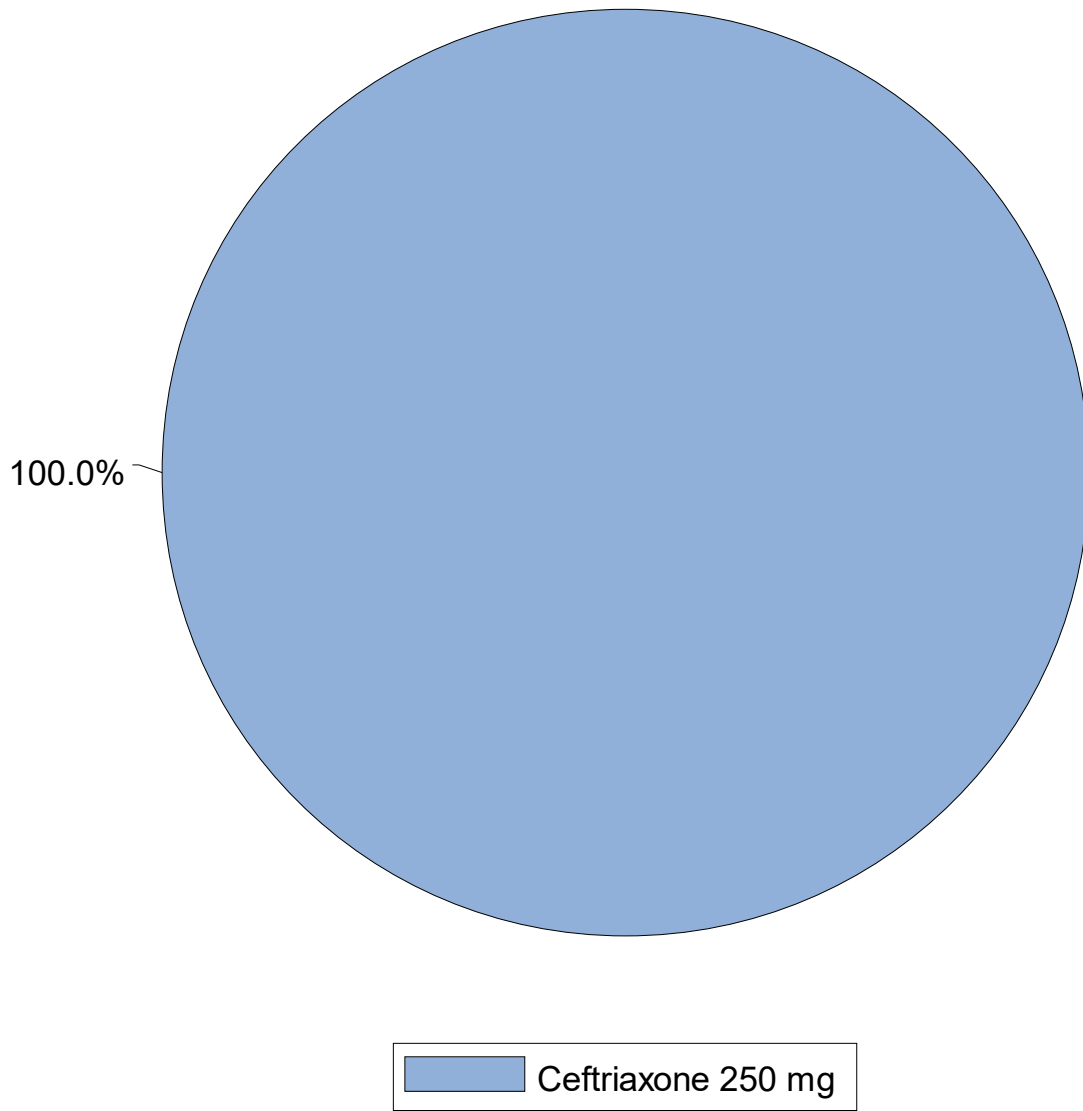


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	15 (17.6)	16 (11.6)	17 (12.1)	16 (11.8)	14 (8.6)	0 (0.0)	0 (0.0)

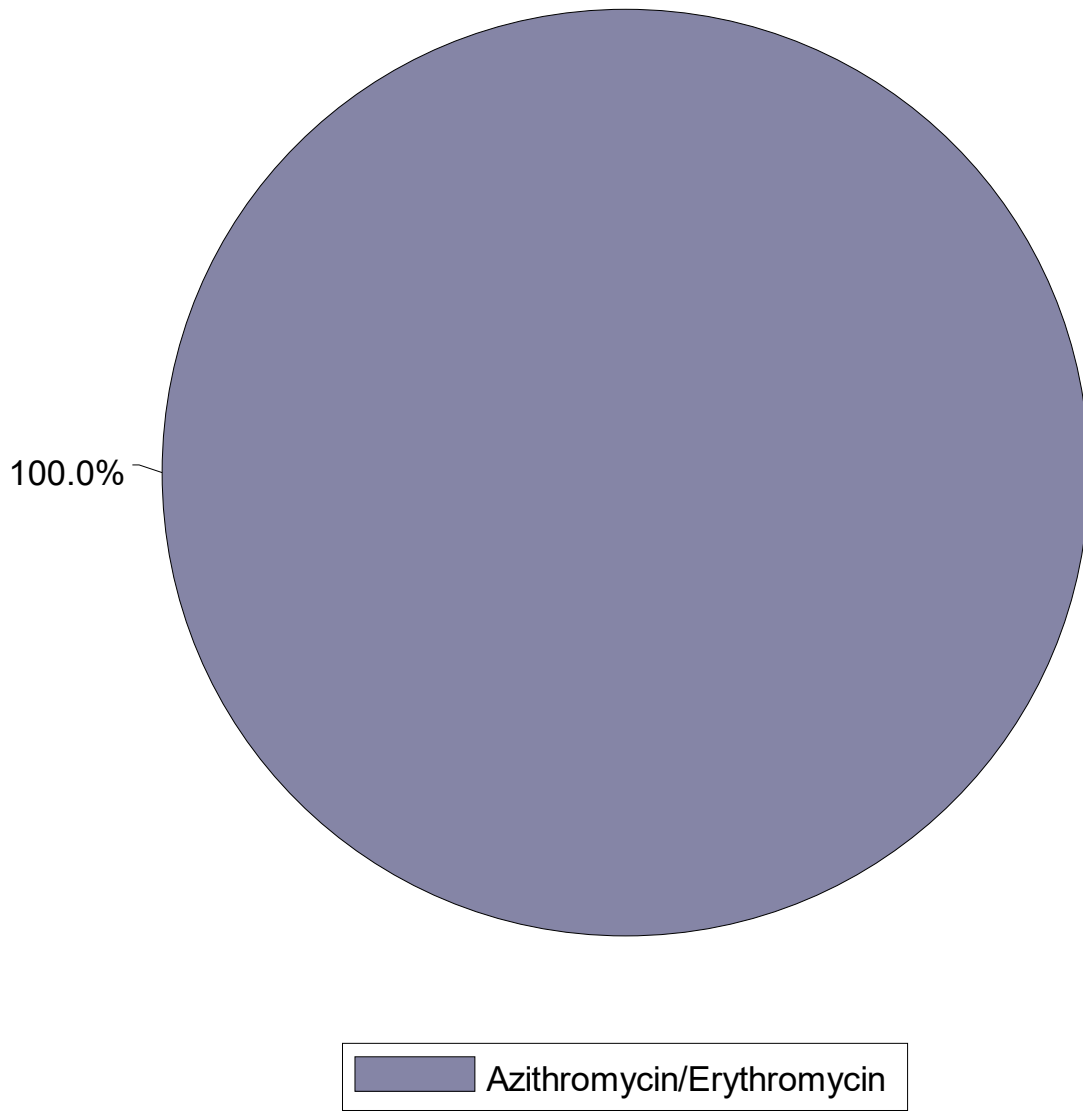
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2014-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2020



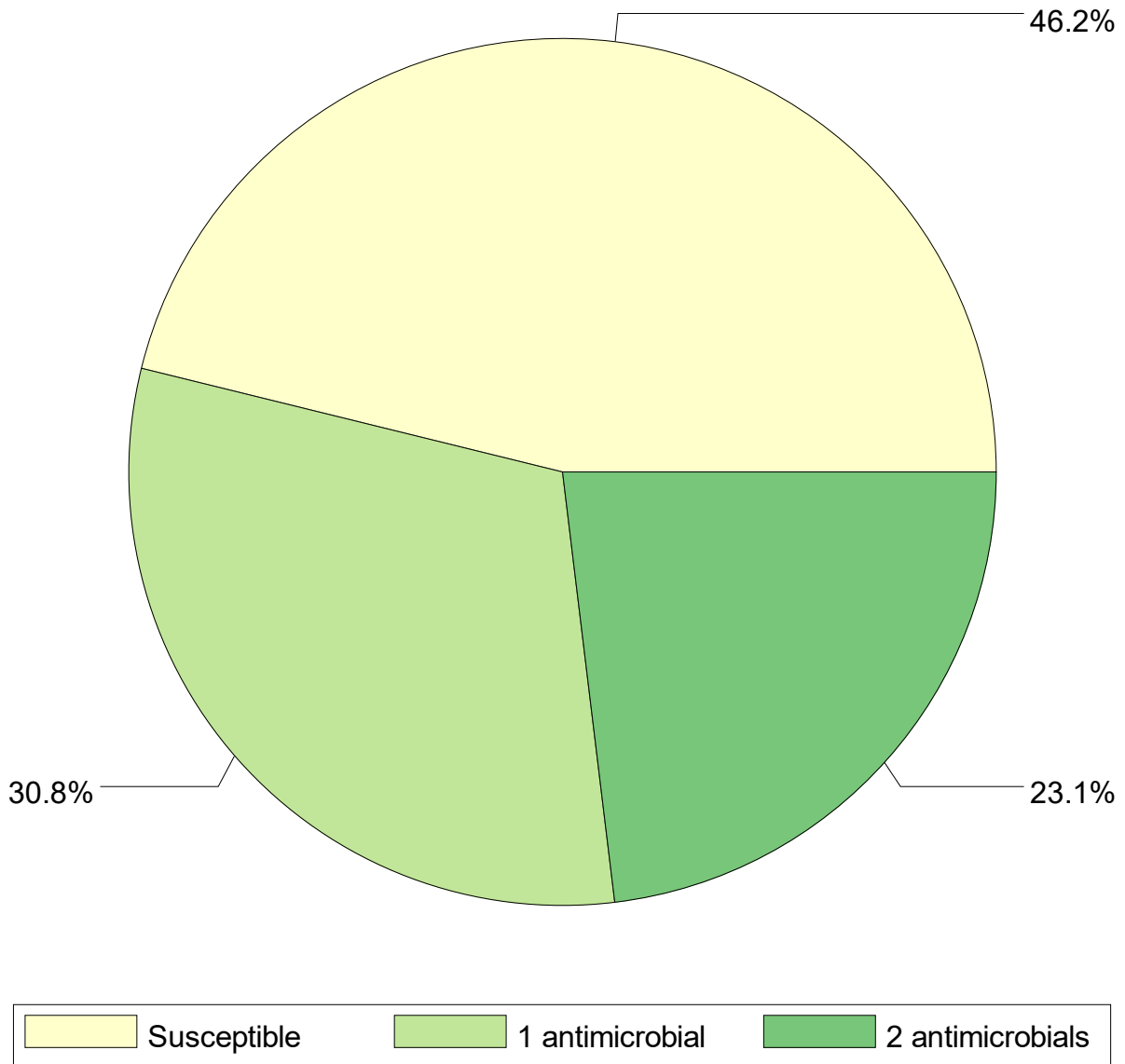
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	13	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	13	100.0

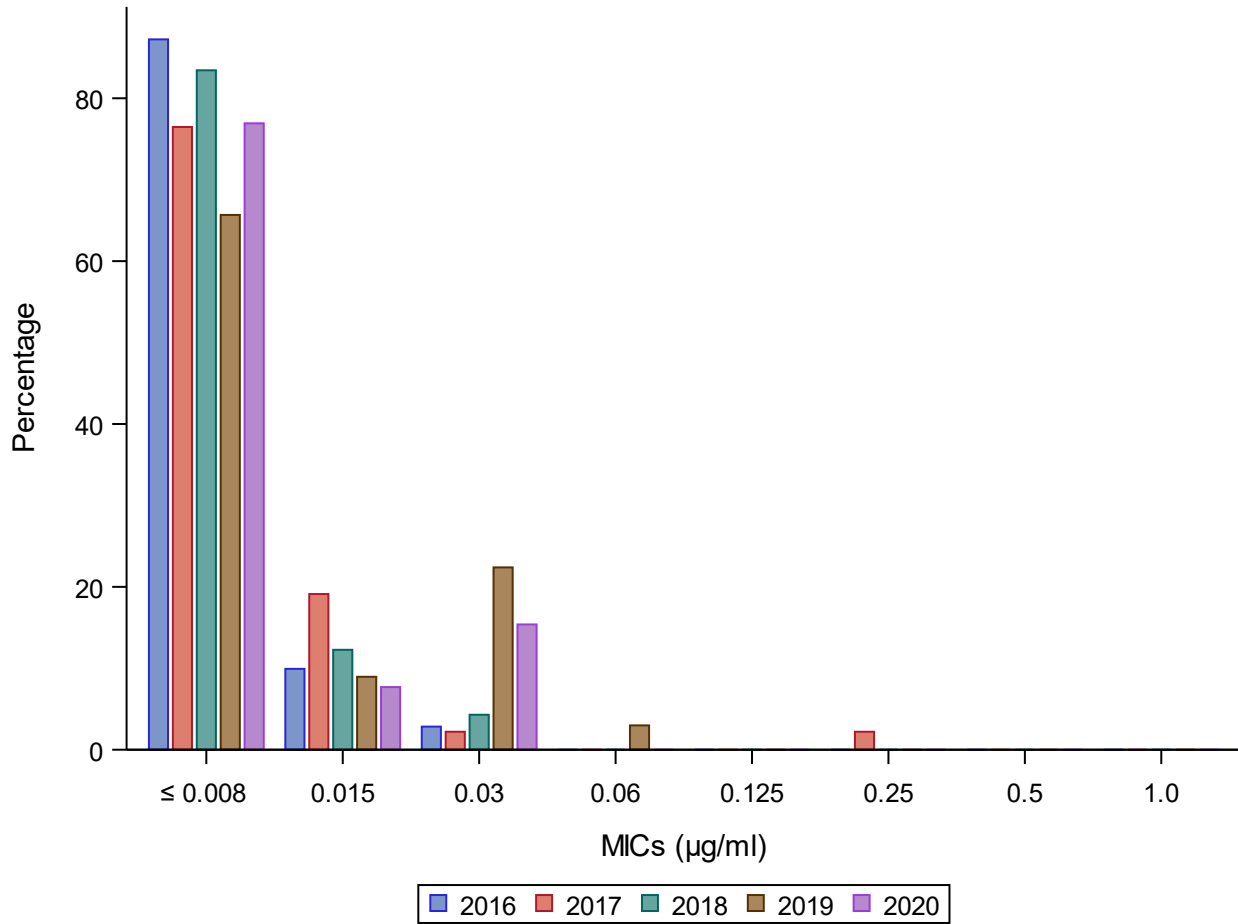
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	6	46.2
1 antimicrobial	4	30.8
2 antimicrobials	3	23.1
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

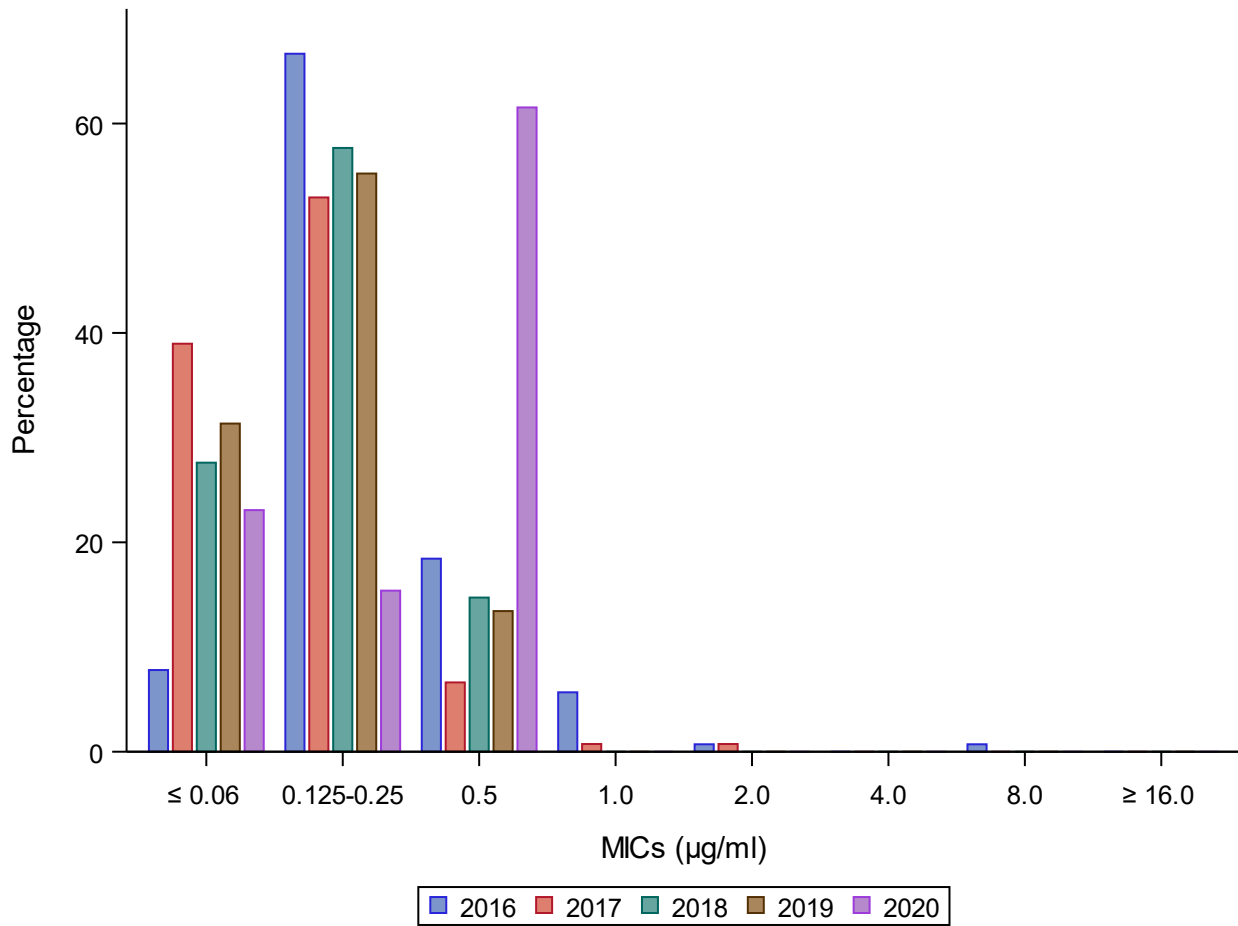
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2016-2020



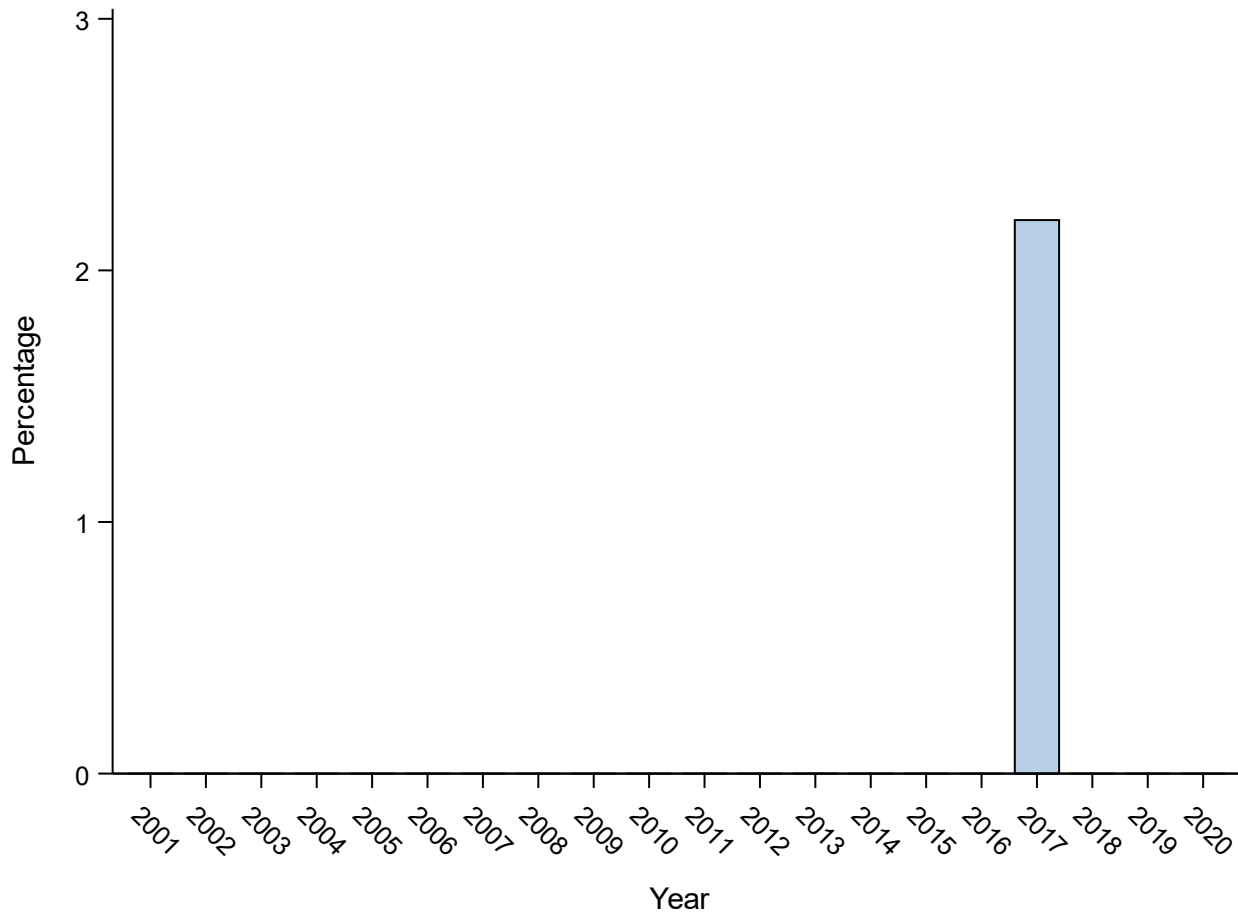
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	123 (87.2)	14 (9.9)	4 (2.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	141
2017	104 (76.5)	26 (19.1)	3 (2.2)	0 (0.0)	0 (0.0)	3 (2.2)	0 (0.0)	0 (0.0)	136
2018	136 (83.4)	20 (12.3)	7 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	163
2019	44 (65.7)	6 (9.0)	15 (22.4)	2 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	67
2020	10 (76.9)	1 (7.7)	2 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	13

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2016-2020



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
2016	11 (7.8)	94 (66.7)	26 (18.4)	8 (5.7)	1 (0.7)	0 (0.0)	1 (0.7)	0 (0.0)	141
2017	53 (39.0)	72 (52.9)	9 (6.6)	1 (0.7)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	136
2018	45 (27.6)	94 (57.7)	24 (14.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	163
2019	21 (31.3)	37 (55.2)	9 (13.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	67
2020	3 (23.1)	2 (15.4)	8 (61.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	13

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2001-2020

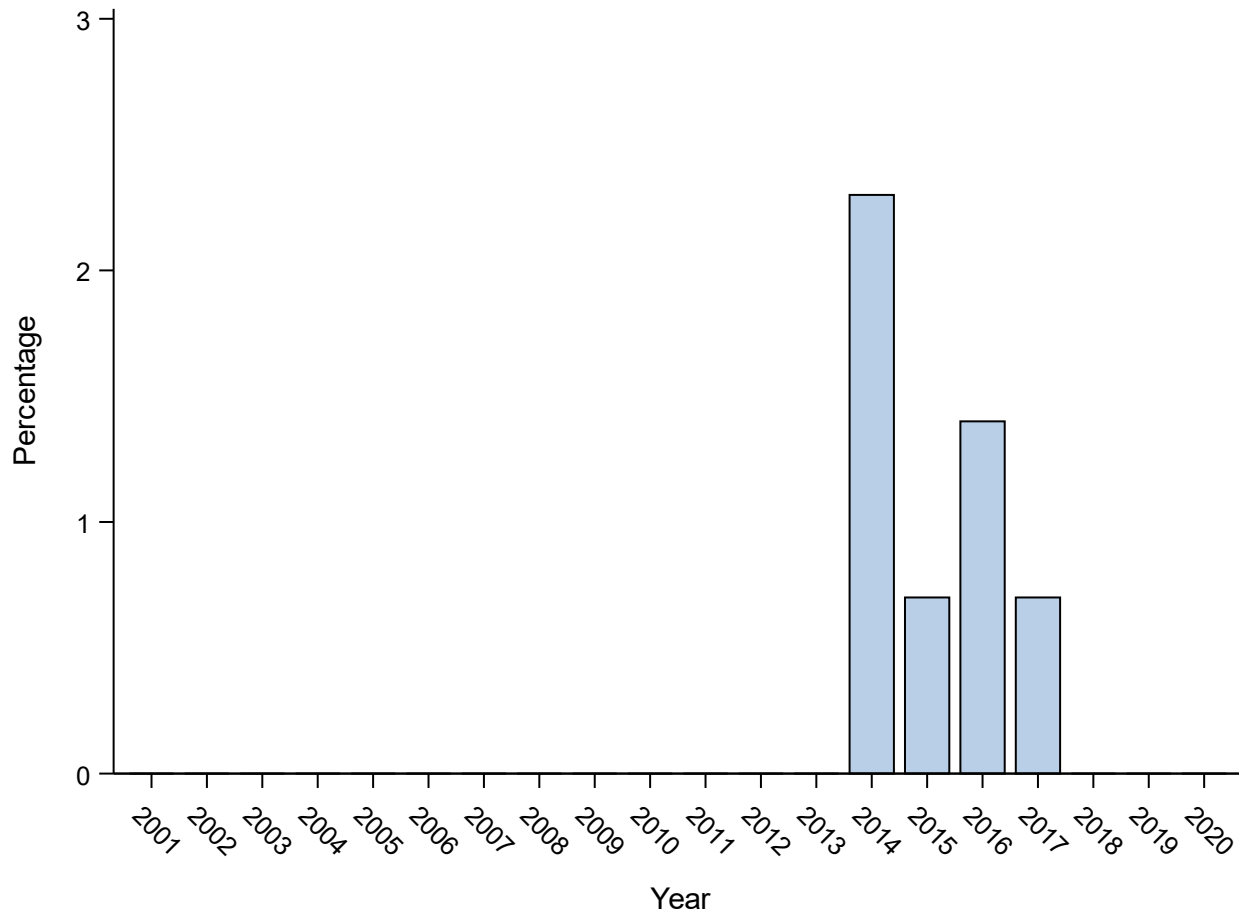


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2014-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2001-2020

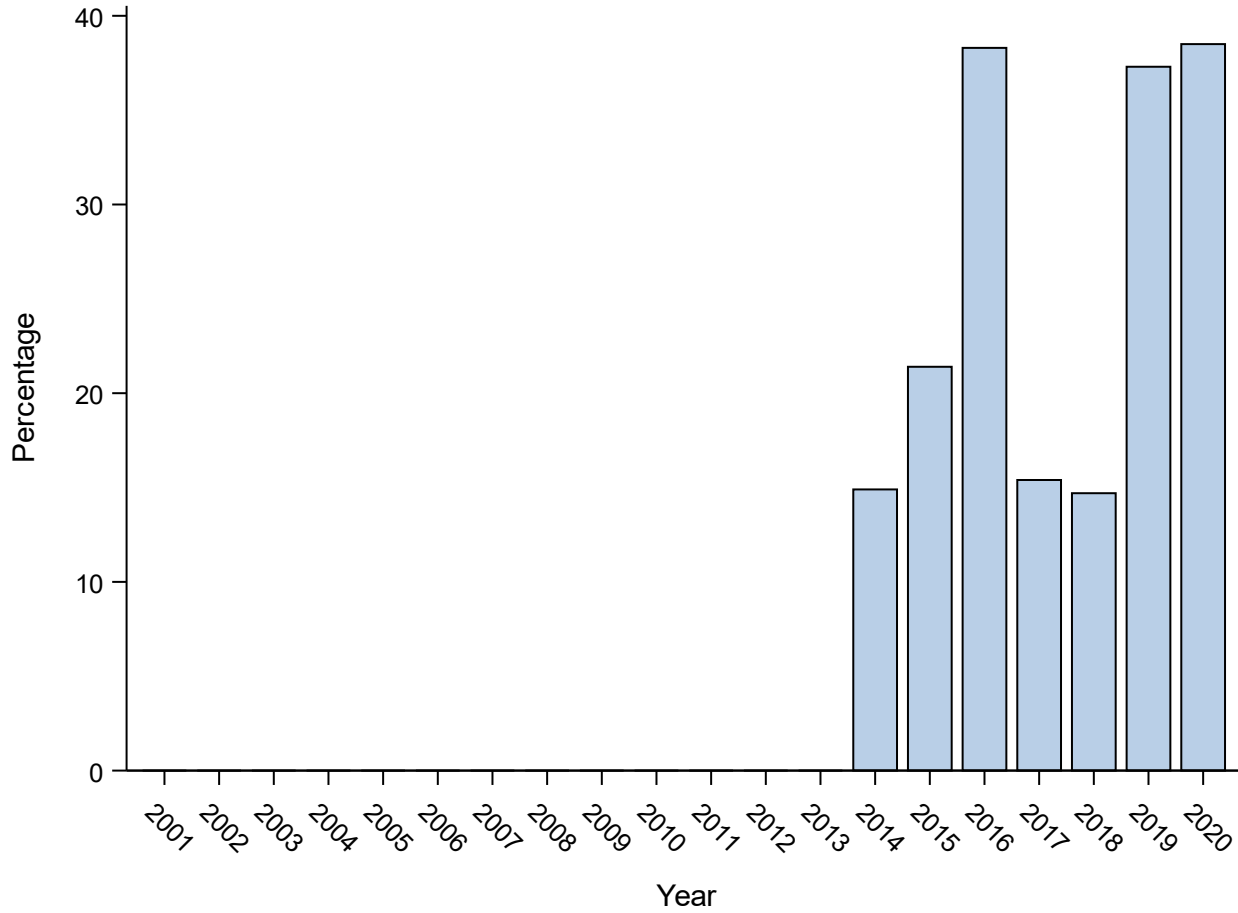


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	2 (2.3)	1 (0.7)	2 (1.4)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2014-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Buffalo, New York, 2001-2020

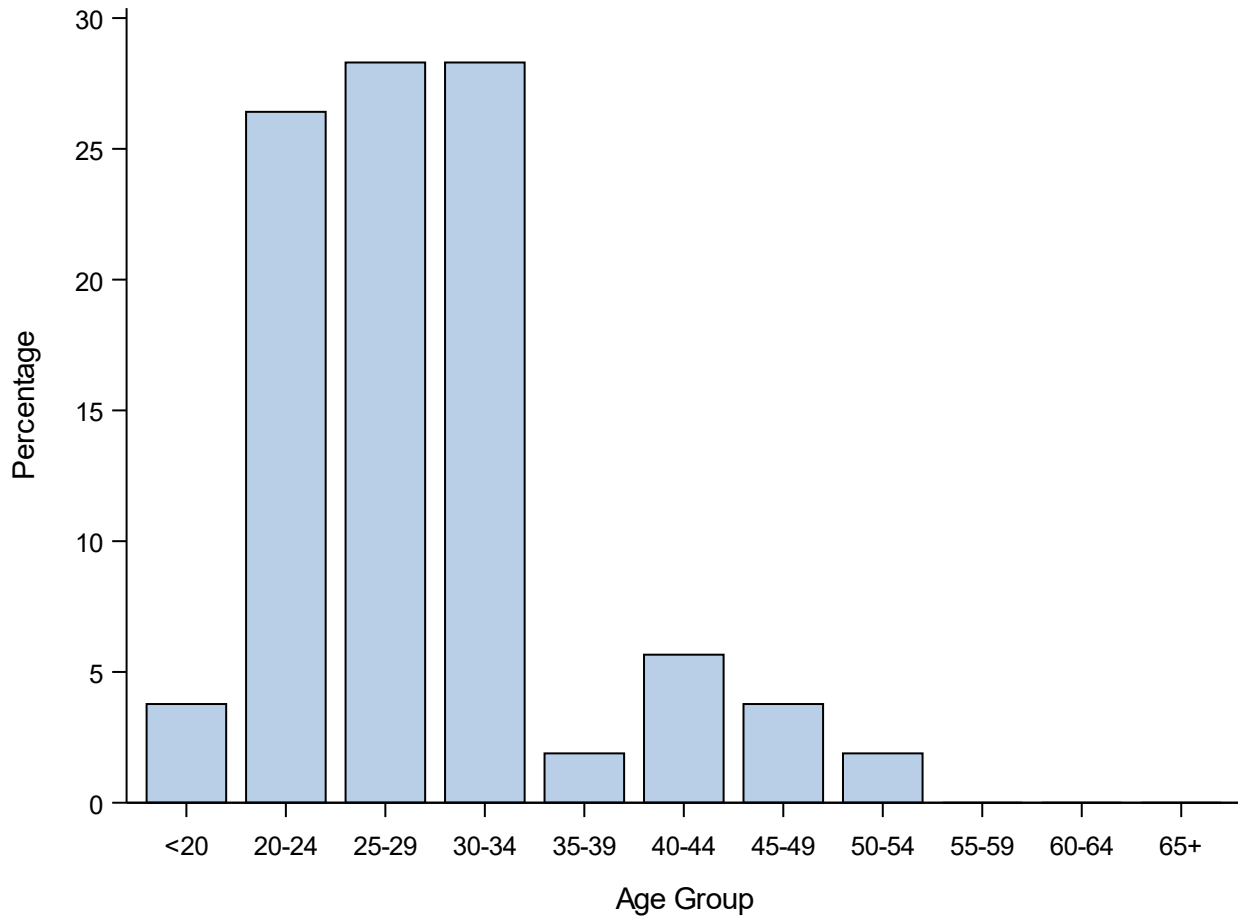


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	13 (14.9)	30 (21.4)	54 (38.3)	21 (15.4)	24 (14.7)	25 (37.3)	5 (38.5)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2014-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

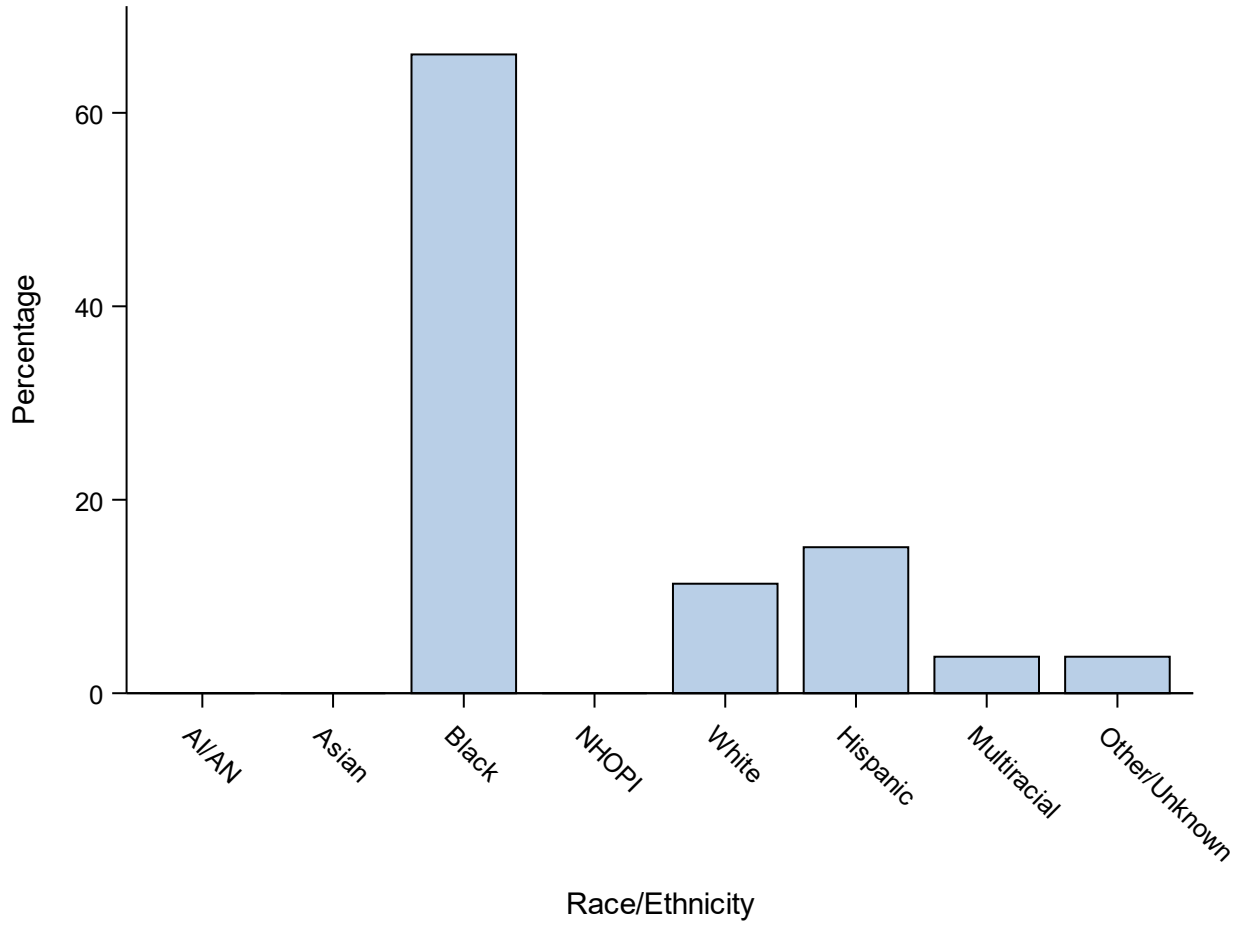
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (3.8)	14 (26.4)	15 (28.3)	15 (28.3)	1 (1.9)	3 (5.7)	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	53

Note: Cases with unknown age were excluded.

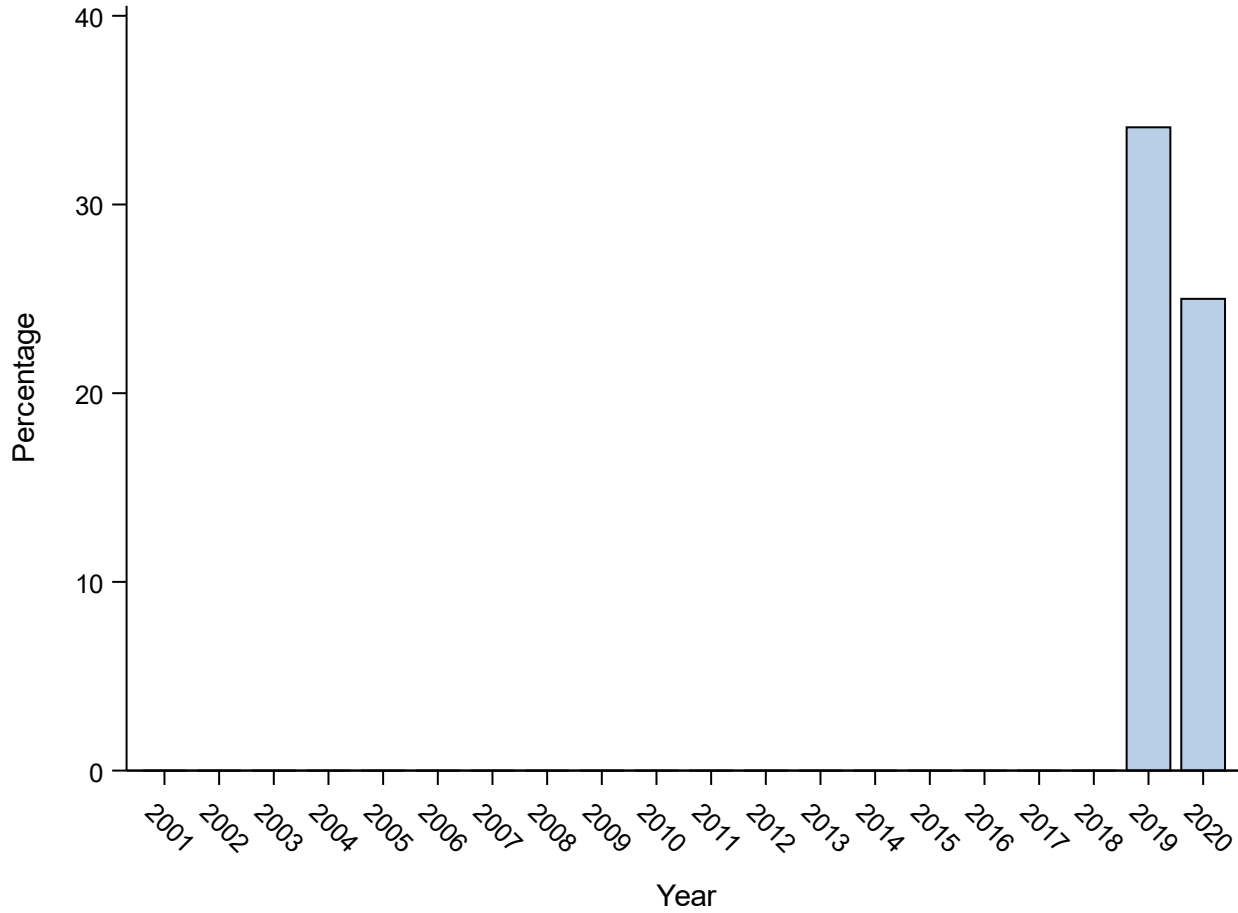
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	35 (66.0)	0 (0.0)	6 (11.3)	8 (15.1)	2 (3.8)	2 (3.8)	53

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2001-2020

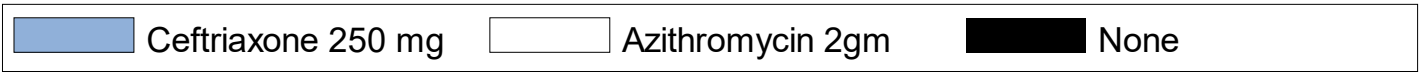
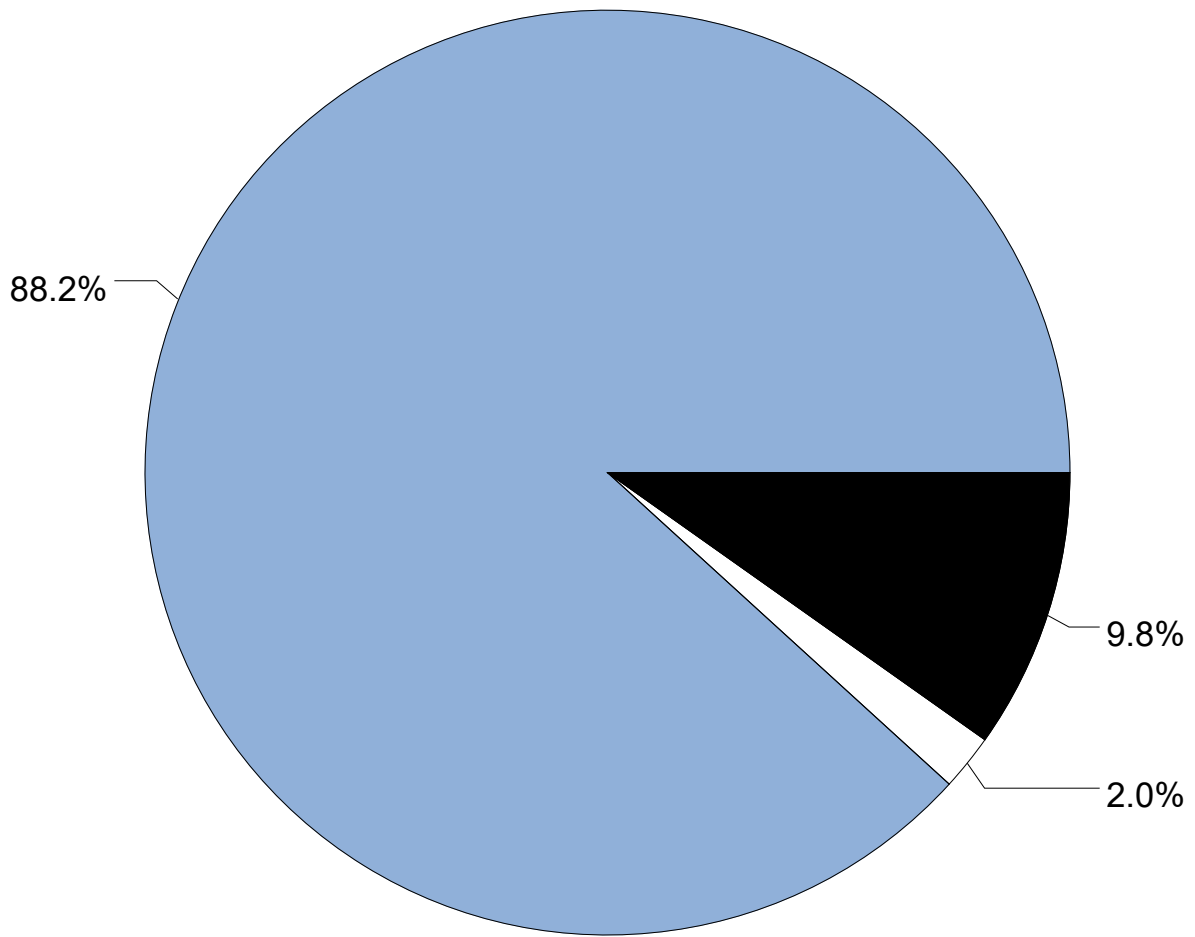


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	15 (34.1)	13 (25.0)

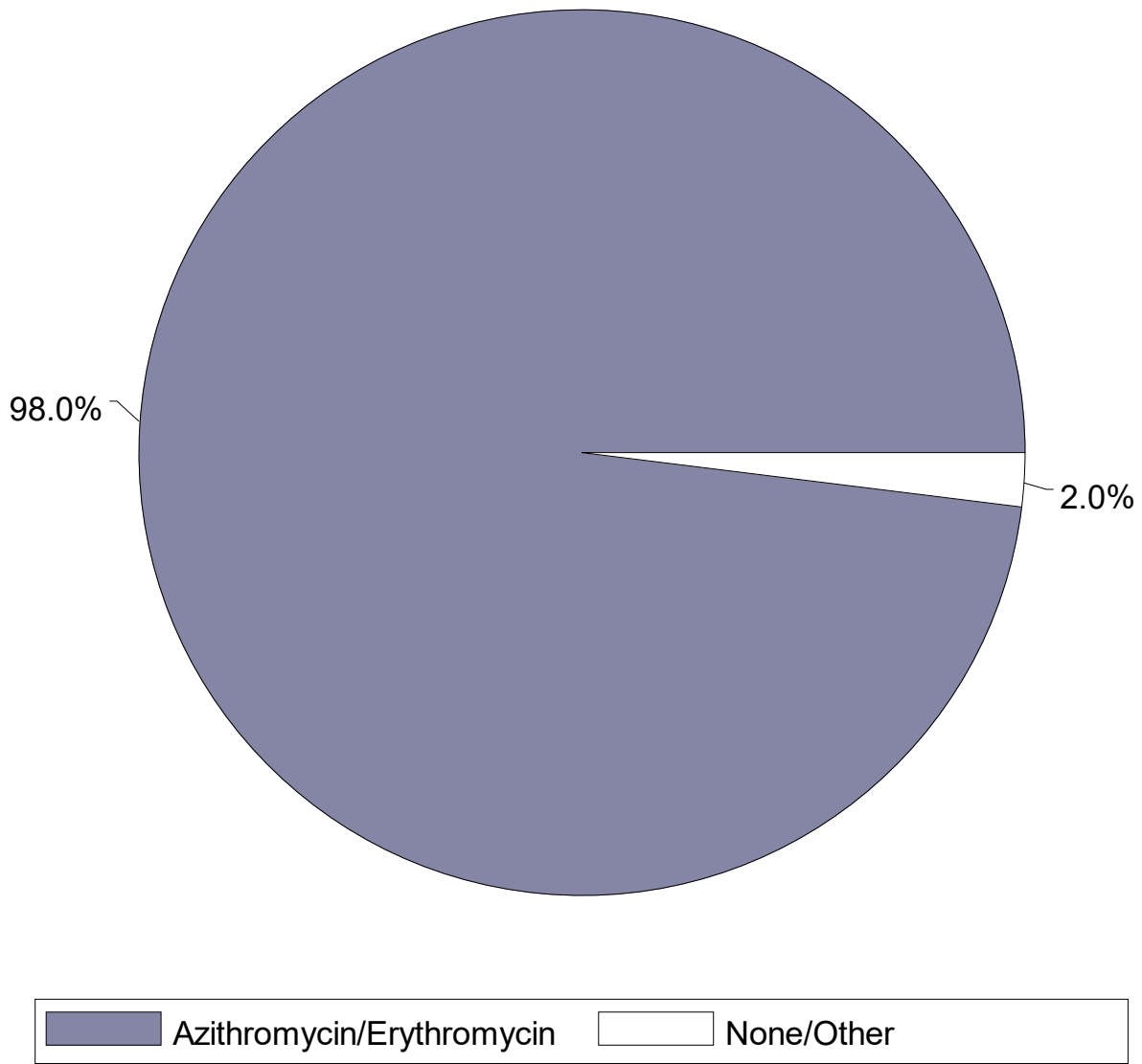
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2020



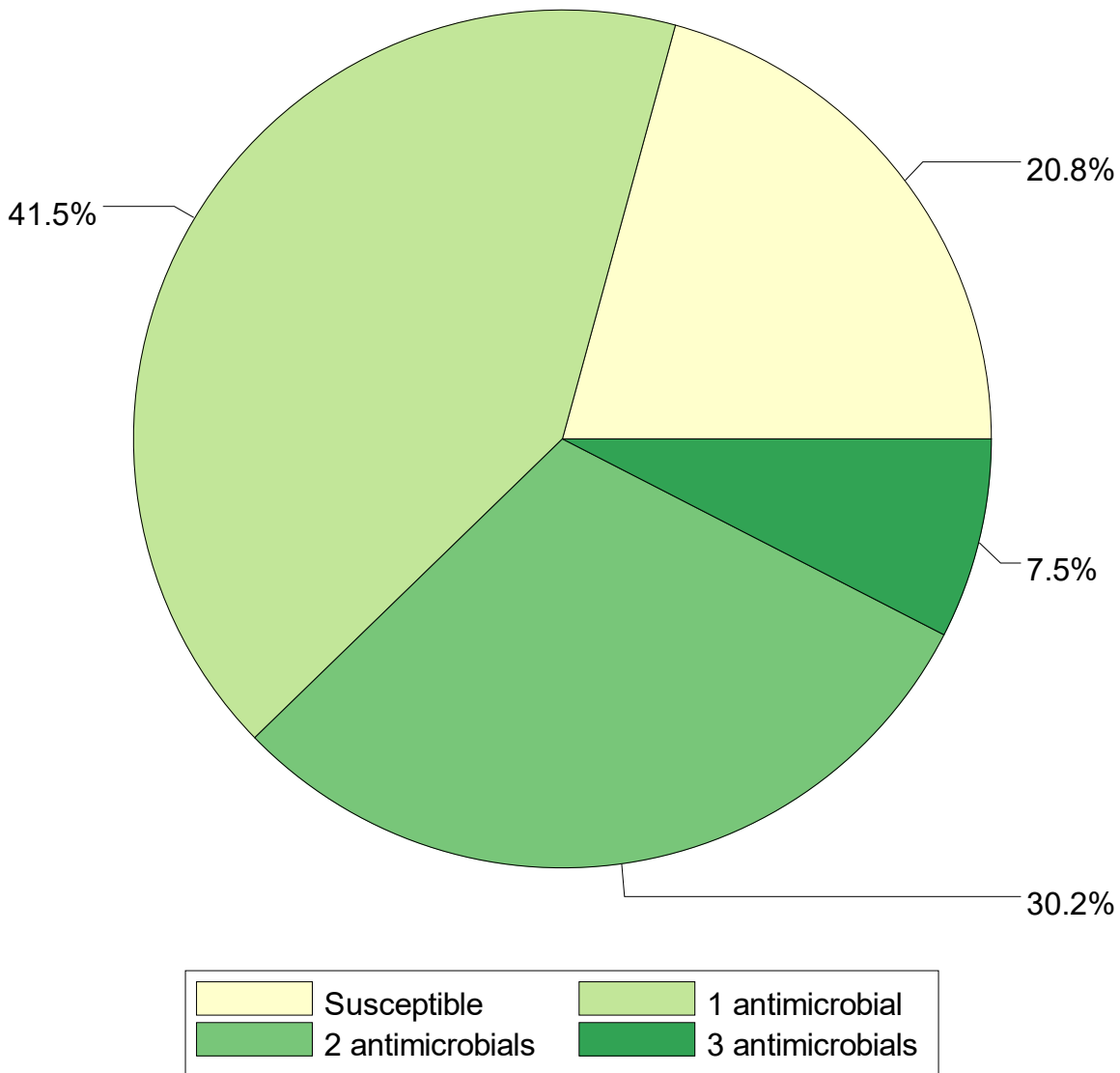
Primary Treatment	Count	Percentage
None	5	9.8
Ceftriaxone 250 mg	45	88.2
Azithromycin 2gm	1	2.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	50	98.0
None/Other	1	2.0

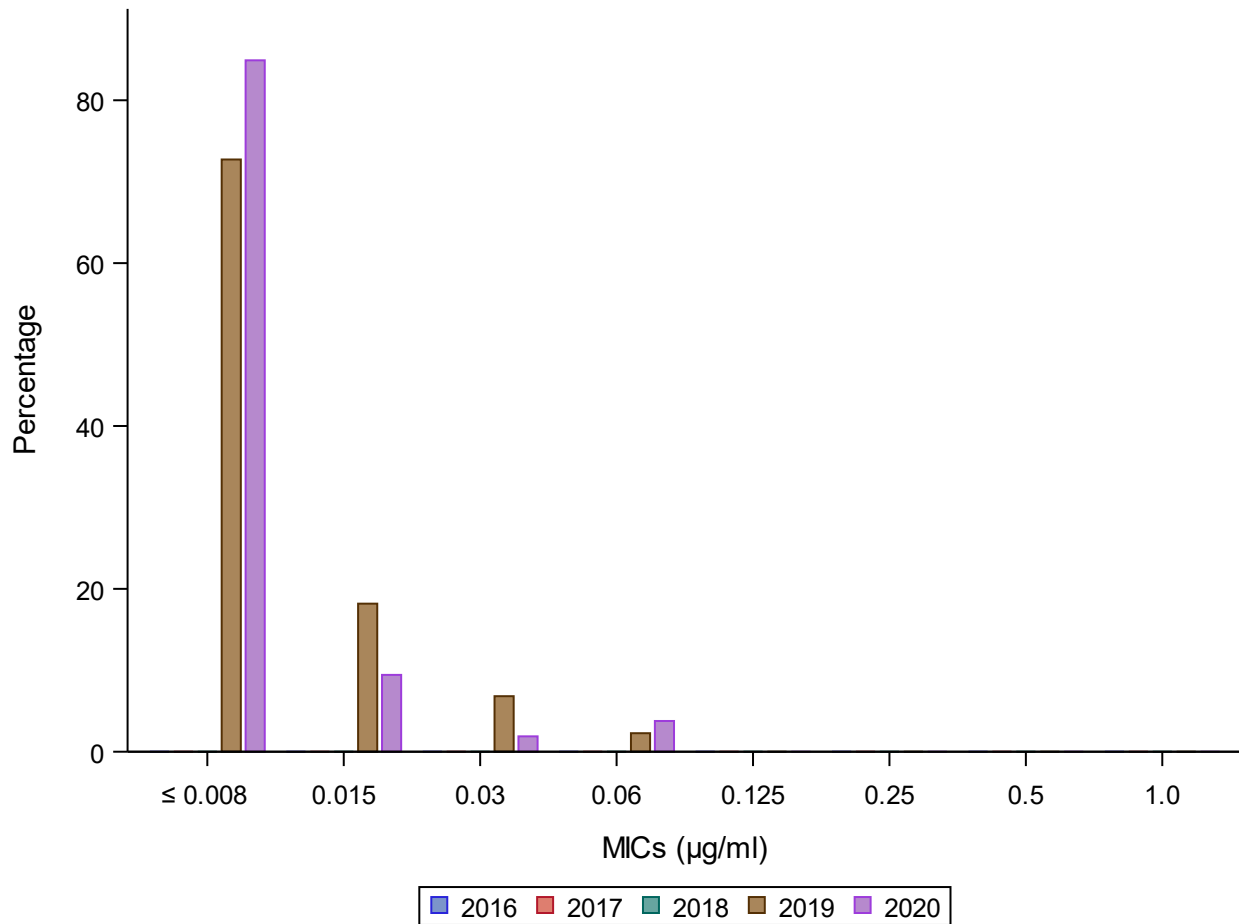
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	11	20.8
1 antimicrobial	22	41.5
2 antimicrobials	16	30.2
3 antimicrobials	4	7.5
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

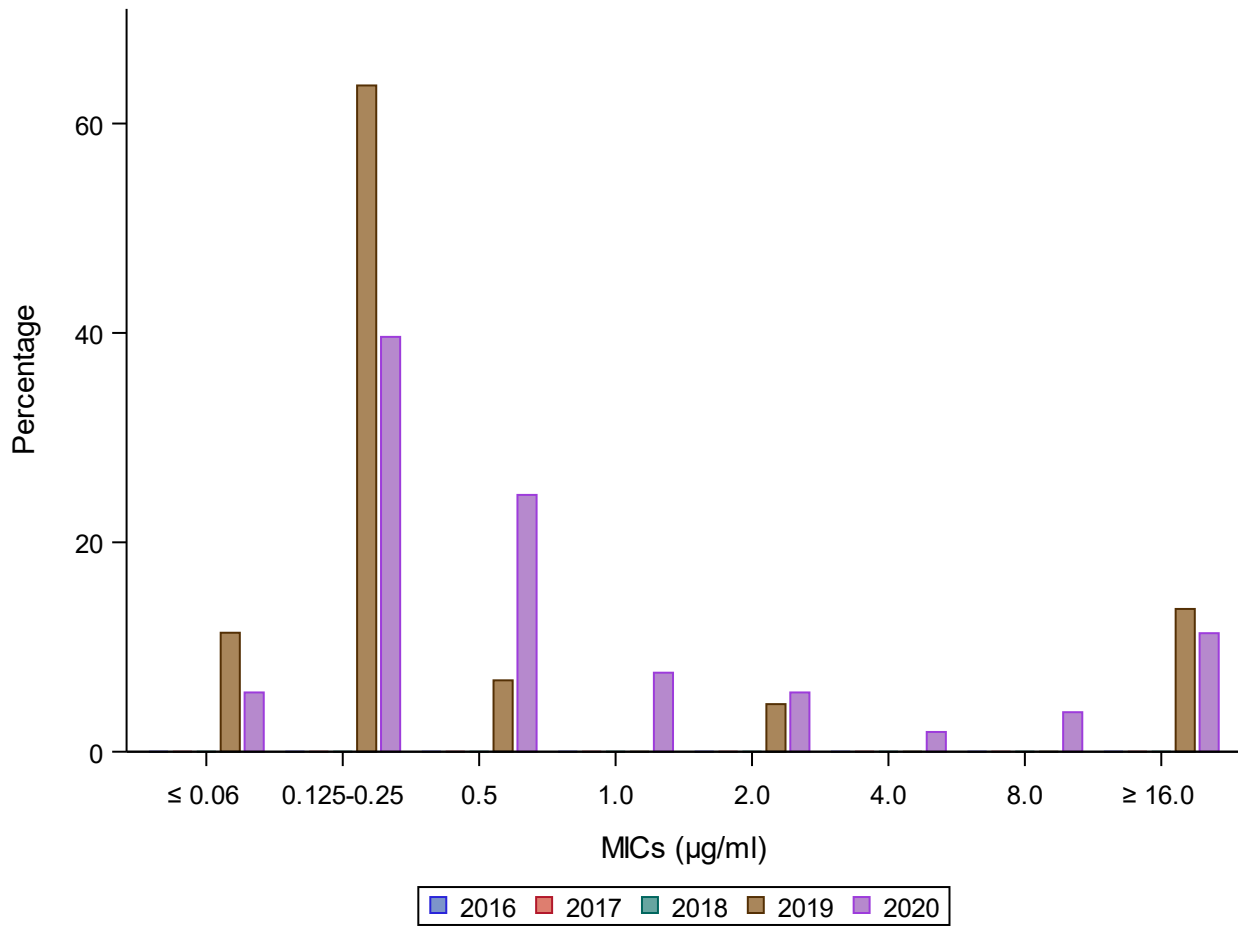
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2016-2020



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
2016	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
2017	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
2018	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
2019	32 (72.7)	8 (18.2)	3 (6.8)	1 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	44
2020	45 (84.9)	5 (9.4)	1 (1.9)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	53

Note: Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

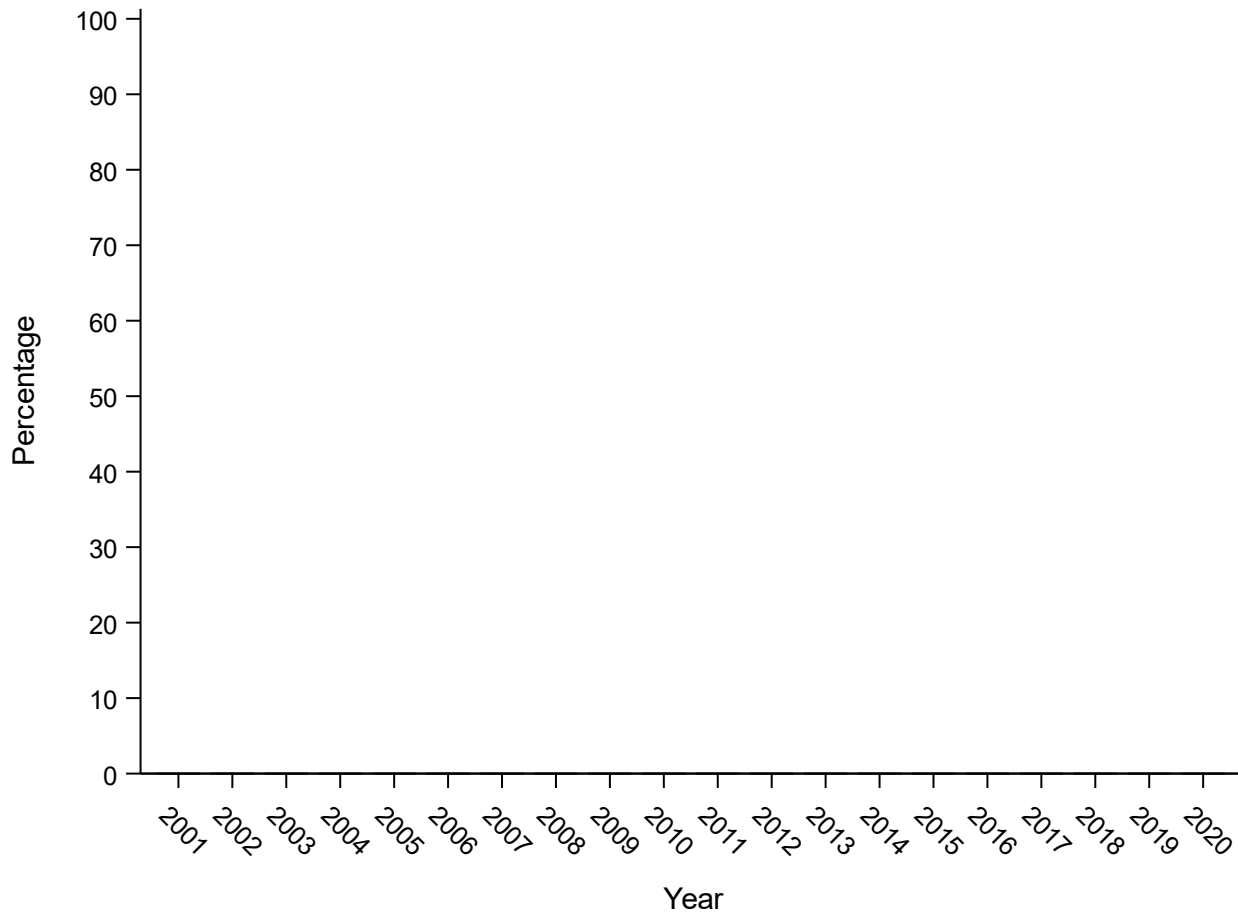
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2016-2020



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
2016	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
2017	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
2018	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
2019	5 (11.4)	28 (63.6)	3 (6.8)	0 (0.0)	2 (4.5)	0 (0.0)	0 (0.0)	6 (13.6)	44
2020	3 (5.7)	21 (39.6)	13 (24.5)	4 (7.5)	3 (5.7)	1 (1.9)	2 (3.8)	6 (11.3)	53

Note: Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2001-2020

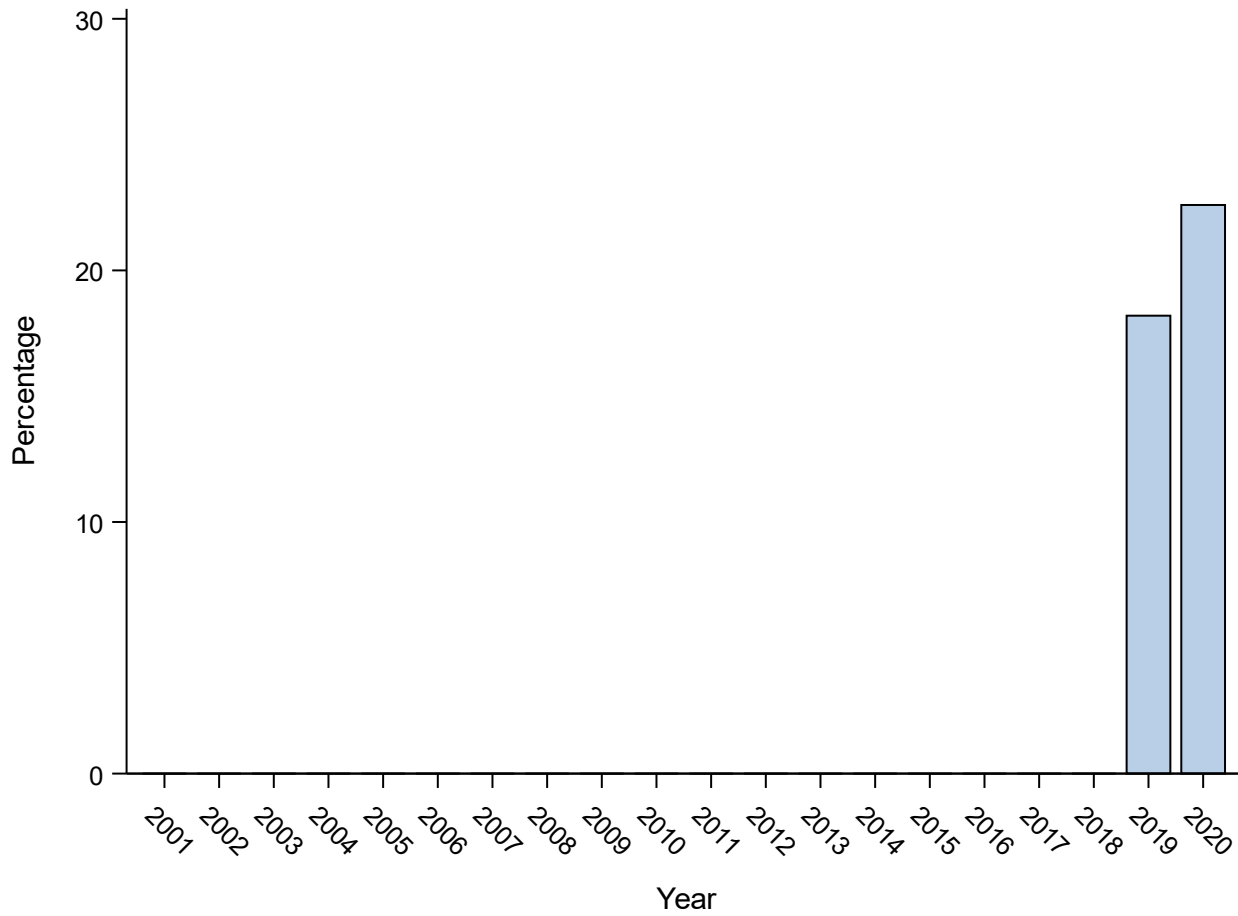


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2001-2020

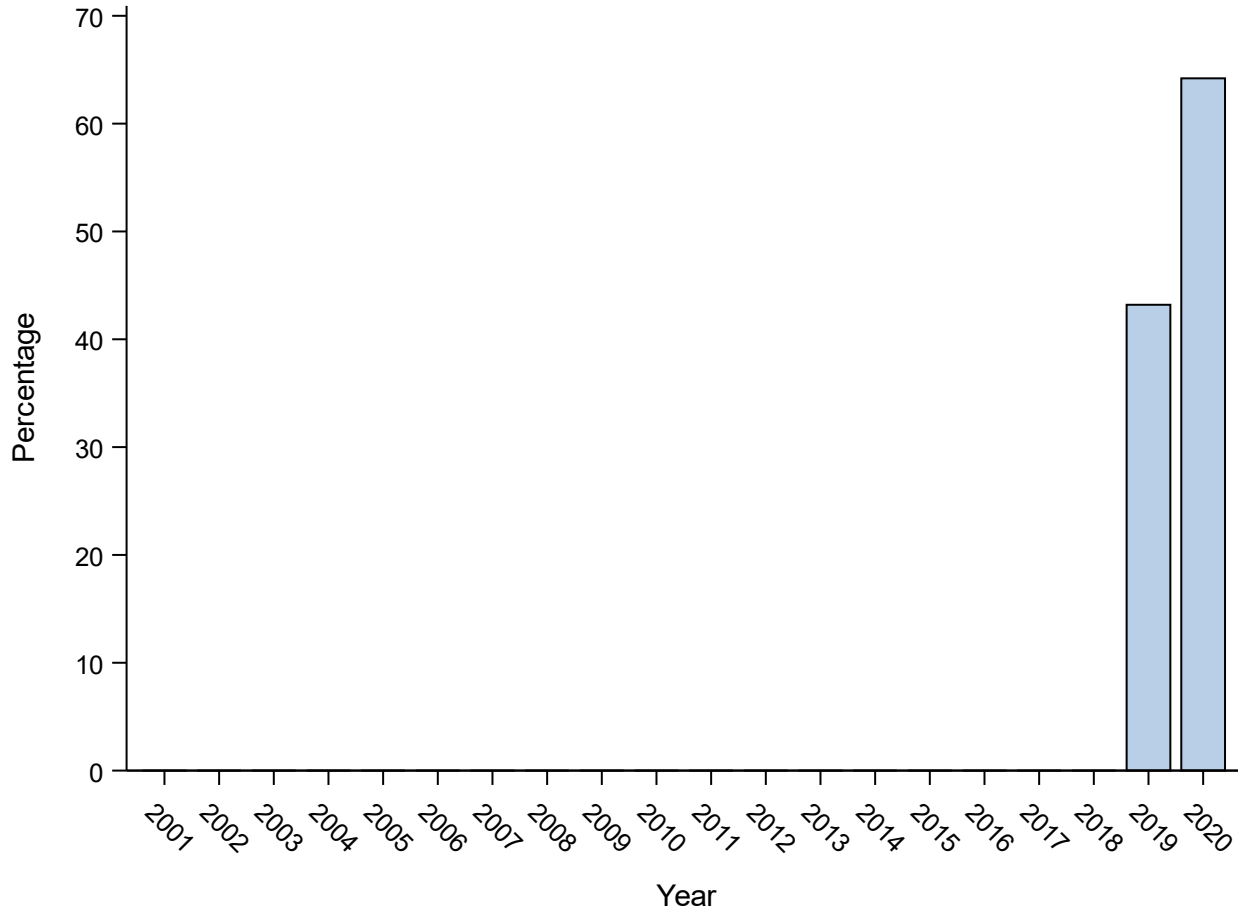


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (18.2)	12 (22.6)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Camden, New Jersey, 2001-2020

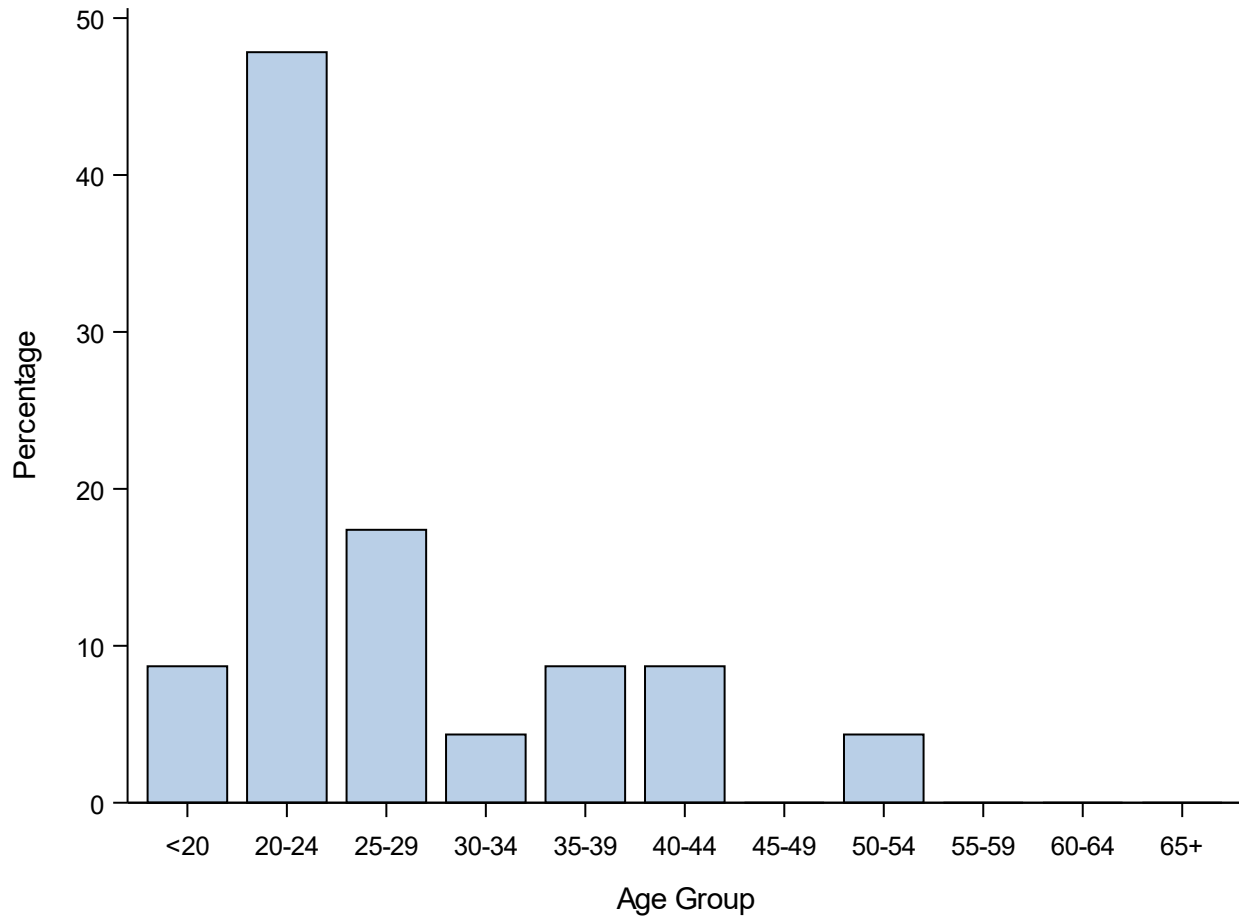


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	19 (43.2)	34 (64.2)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2019-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

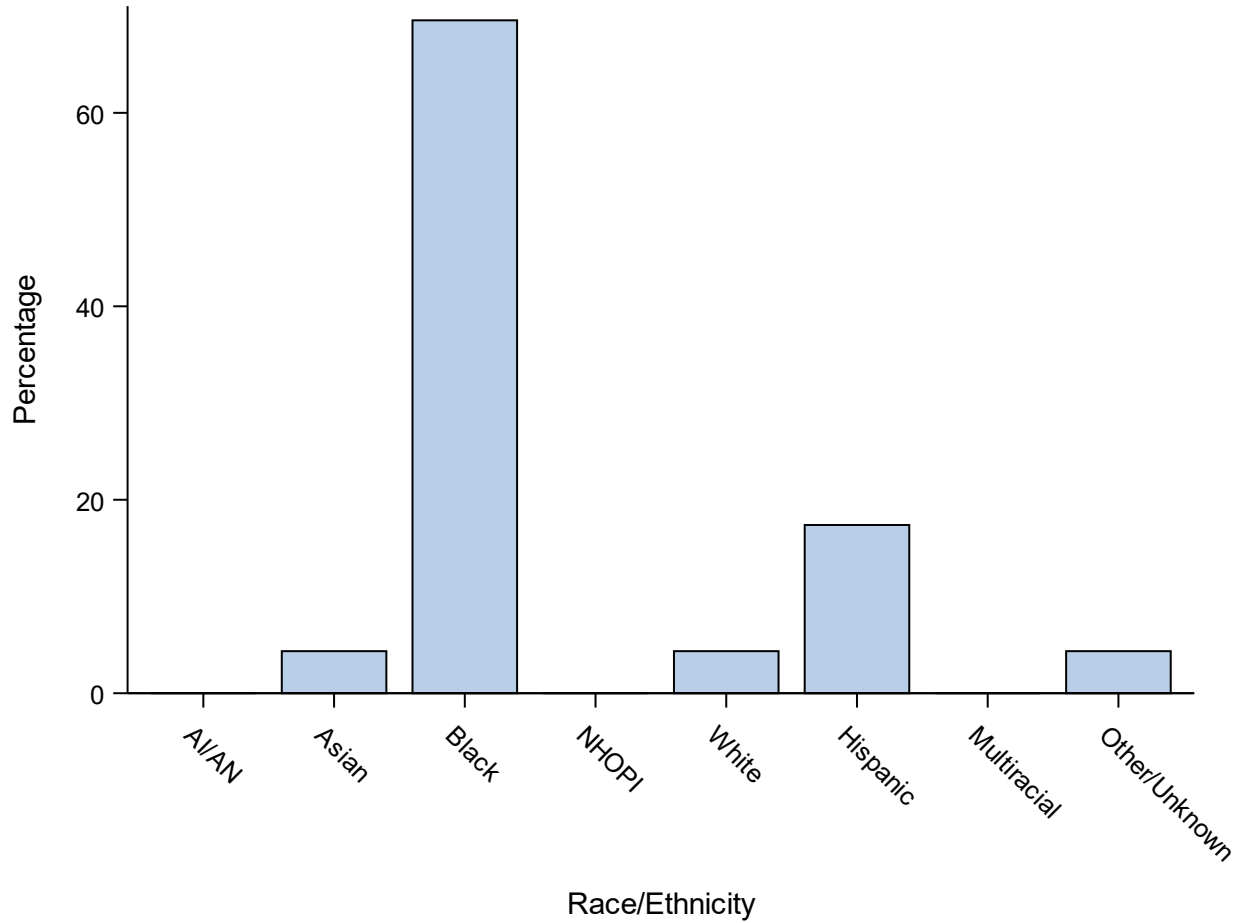
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (8.7)	11 (47.8)	4 (17.4)	1 (4.3)	2 (8.7)	2 (8.7)	0 (0.0)	1 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)	23

Note: Cases with unknown age were excluded.

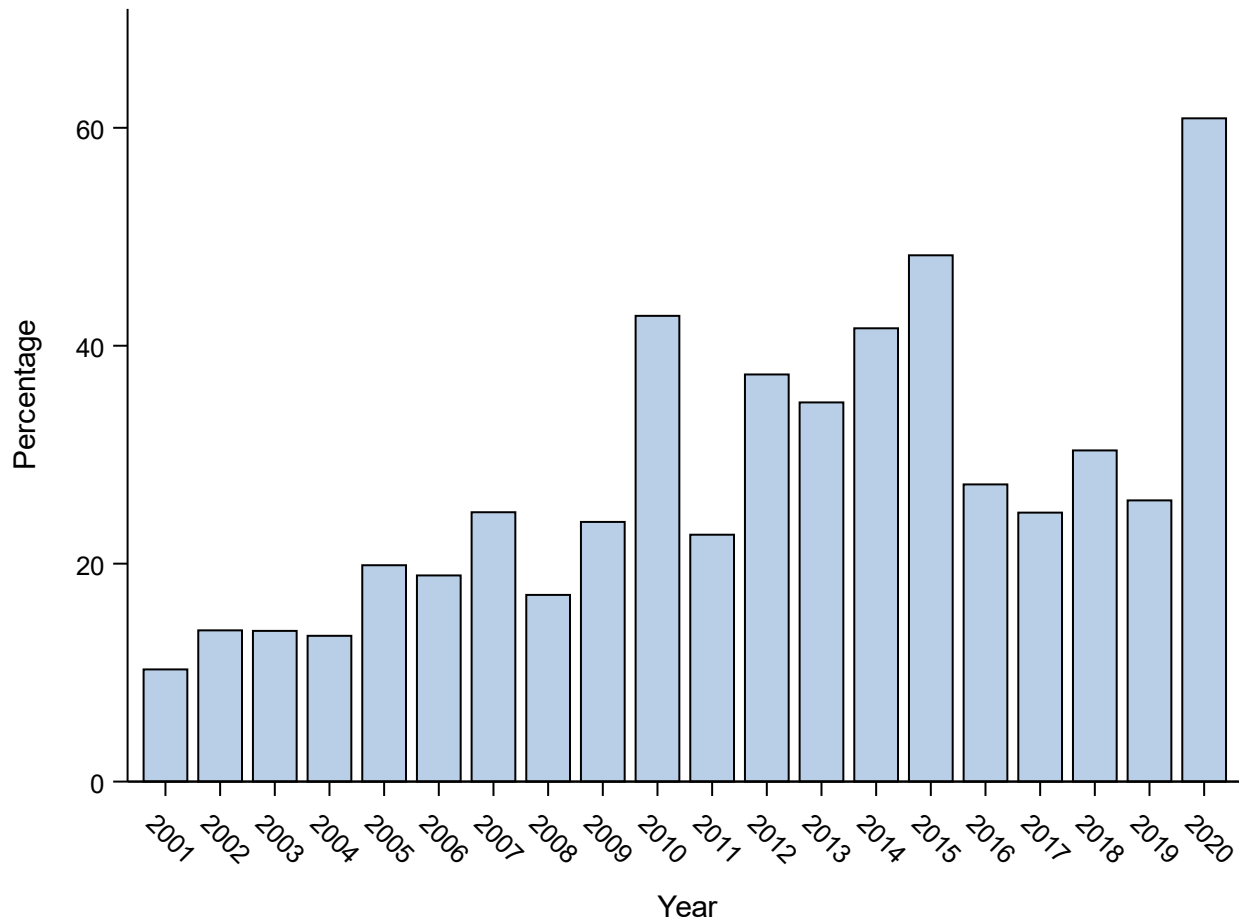
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	1 (4.3)	16 (69.6)	0 (0.0)	1 (4.3)	4 (17.4)	0 (0.0)	1 (4.3)	23

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2001-2020

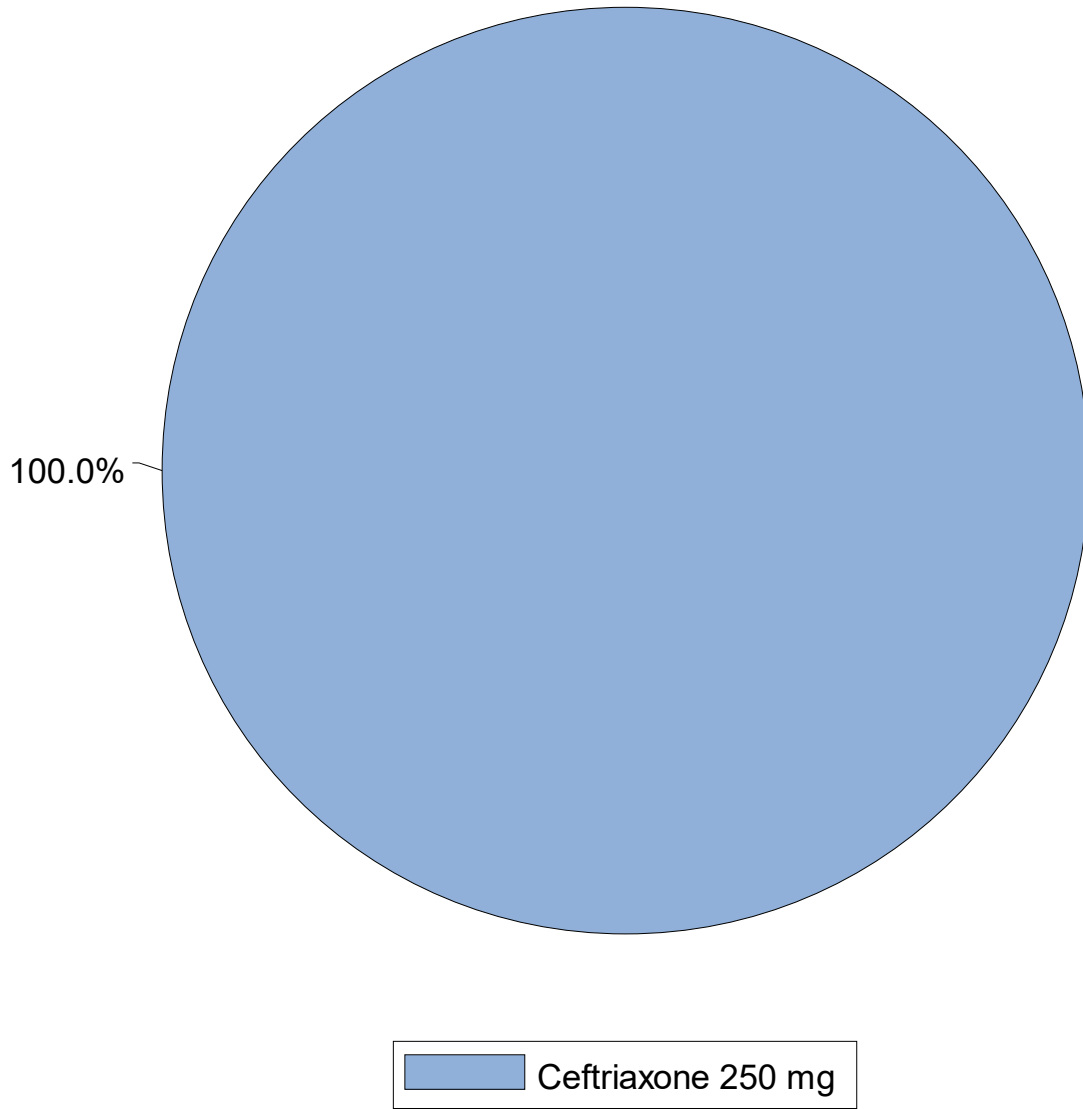


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
28 (10.3)	39 (13.9)	39 (13.8)	40 (13.4)	55 (19.9)	56 (18.9)	66 (24.7)	43 (17.1)	56 (23.8)	53 (42.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
58 (22.7)	102 (37.4)	103 (34.8)	52 (41.6)	71 (48.3)	33 (27.3)	39 (24.7)	31 (30.4)	32 (25.8)	14 (60.9)

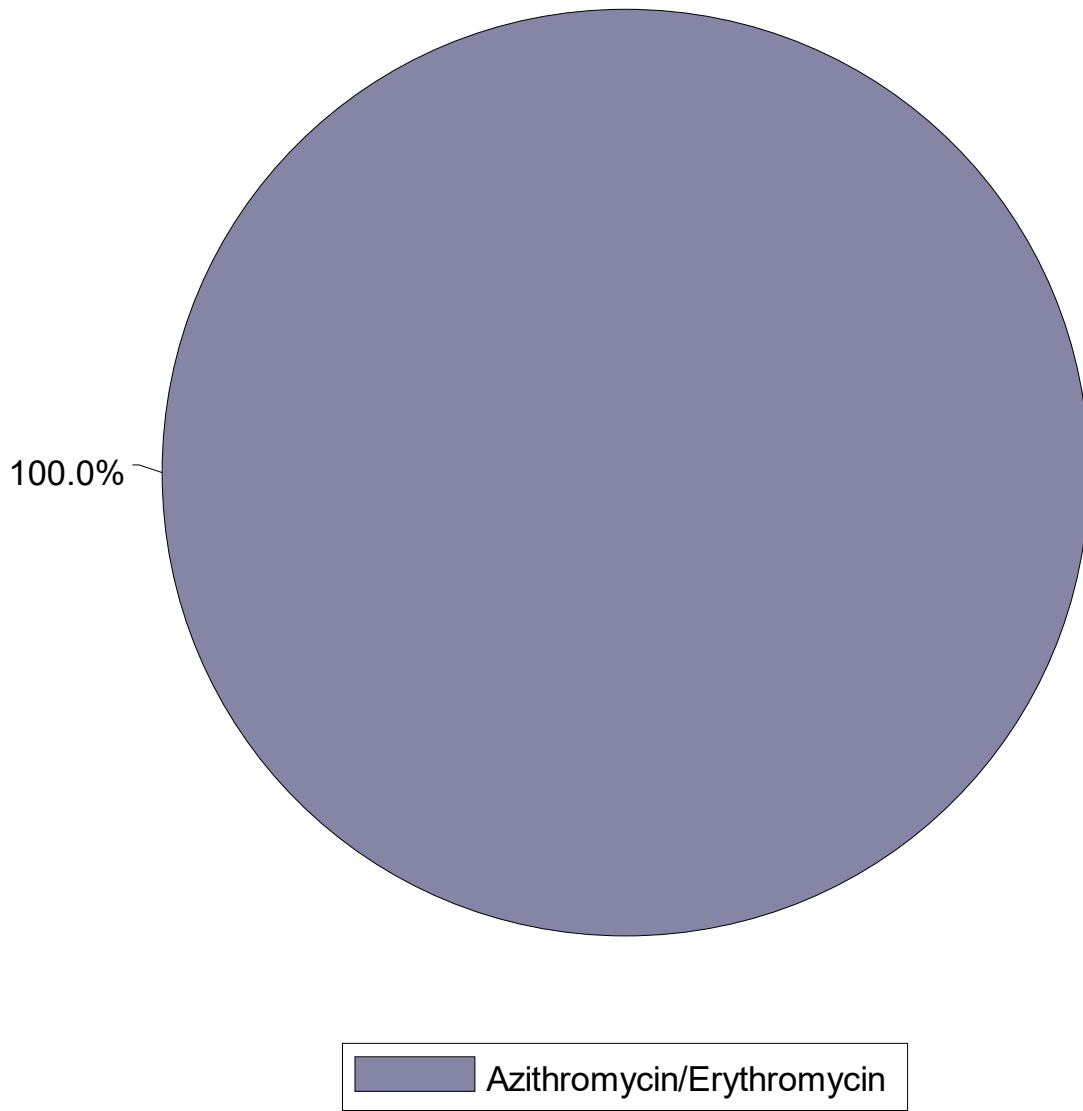
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2020



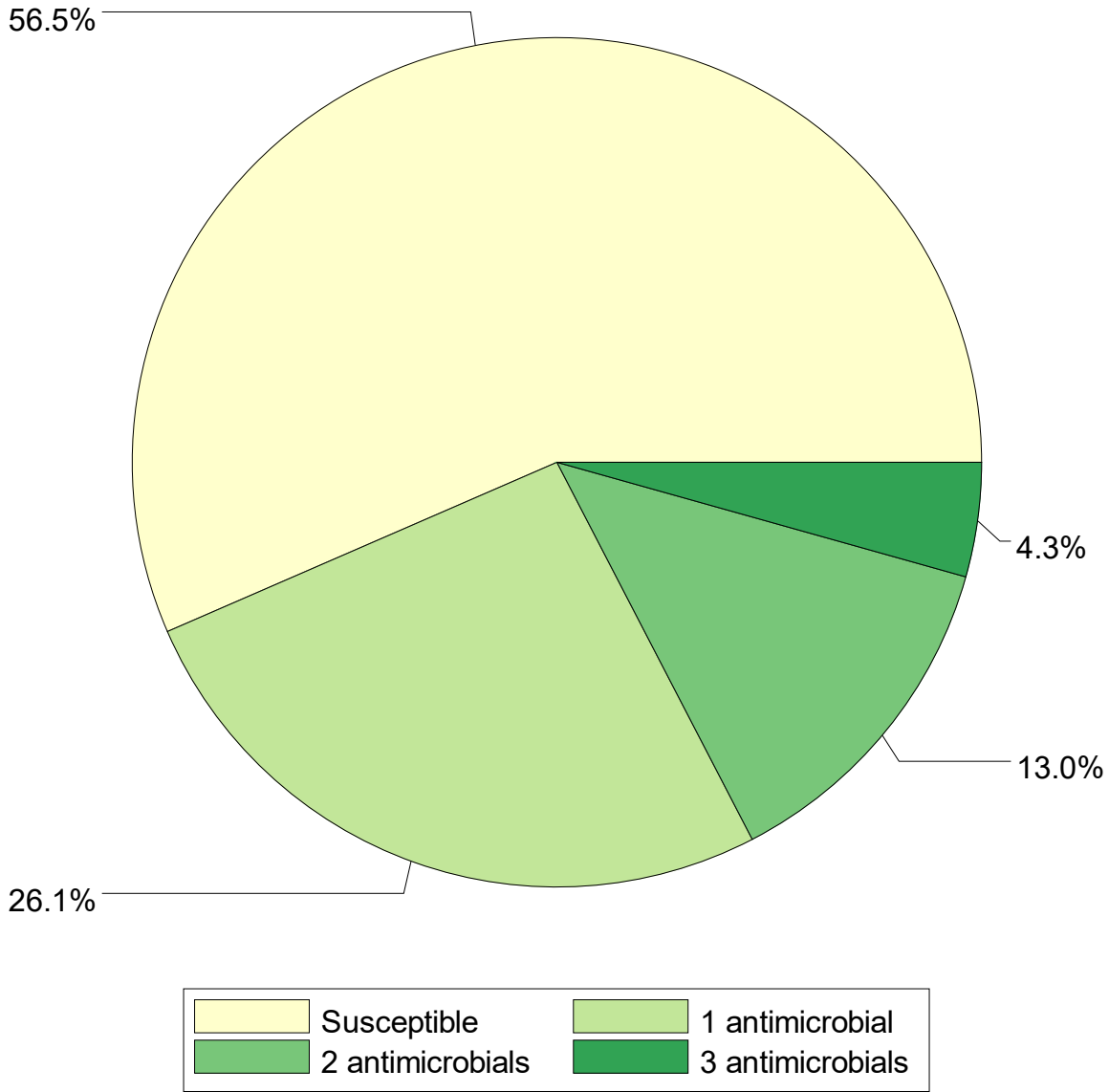
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	22	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	22	100.0

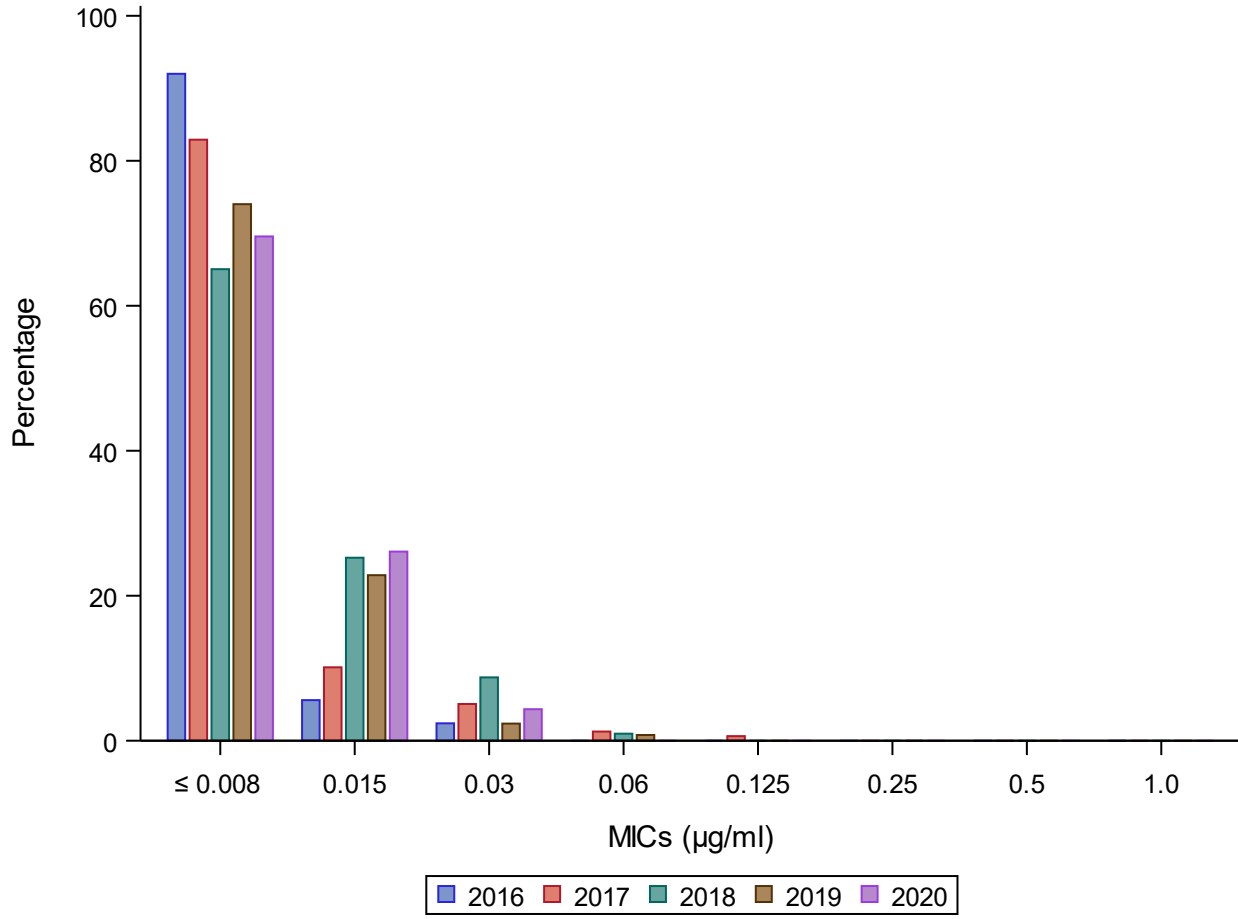
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	13	56.5
1 antimicrobial	6	26.1
2 antimicrobials	3	13.0
3 antimicrobials	1	4.3
4+ antimicrobials	0	0.0

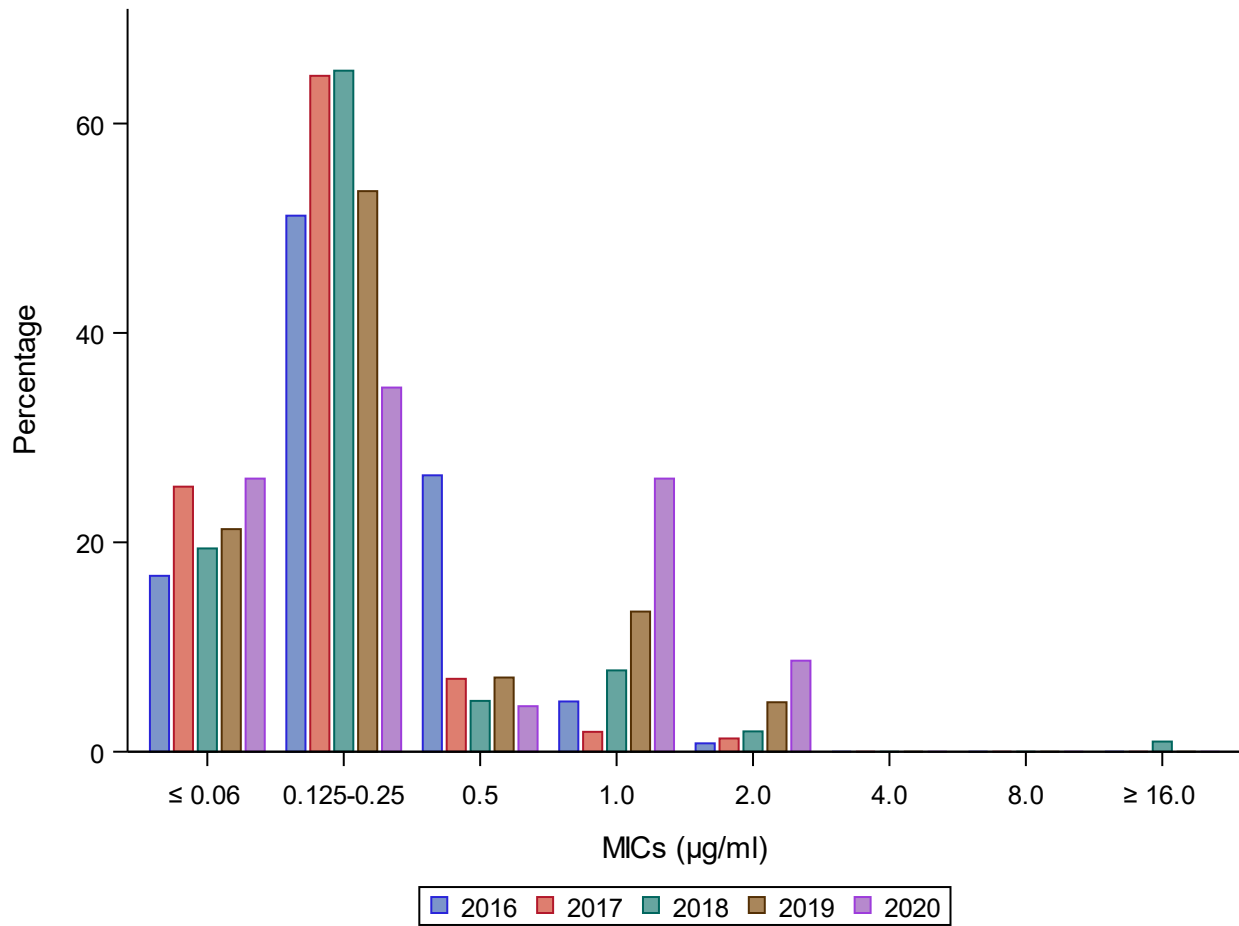
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g}/\text{mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g}/\text{mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g}/\text{mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2016-2020



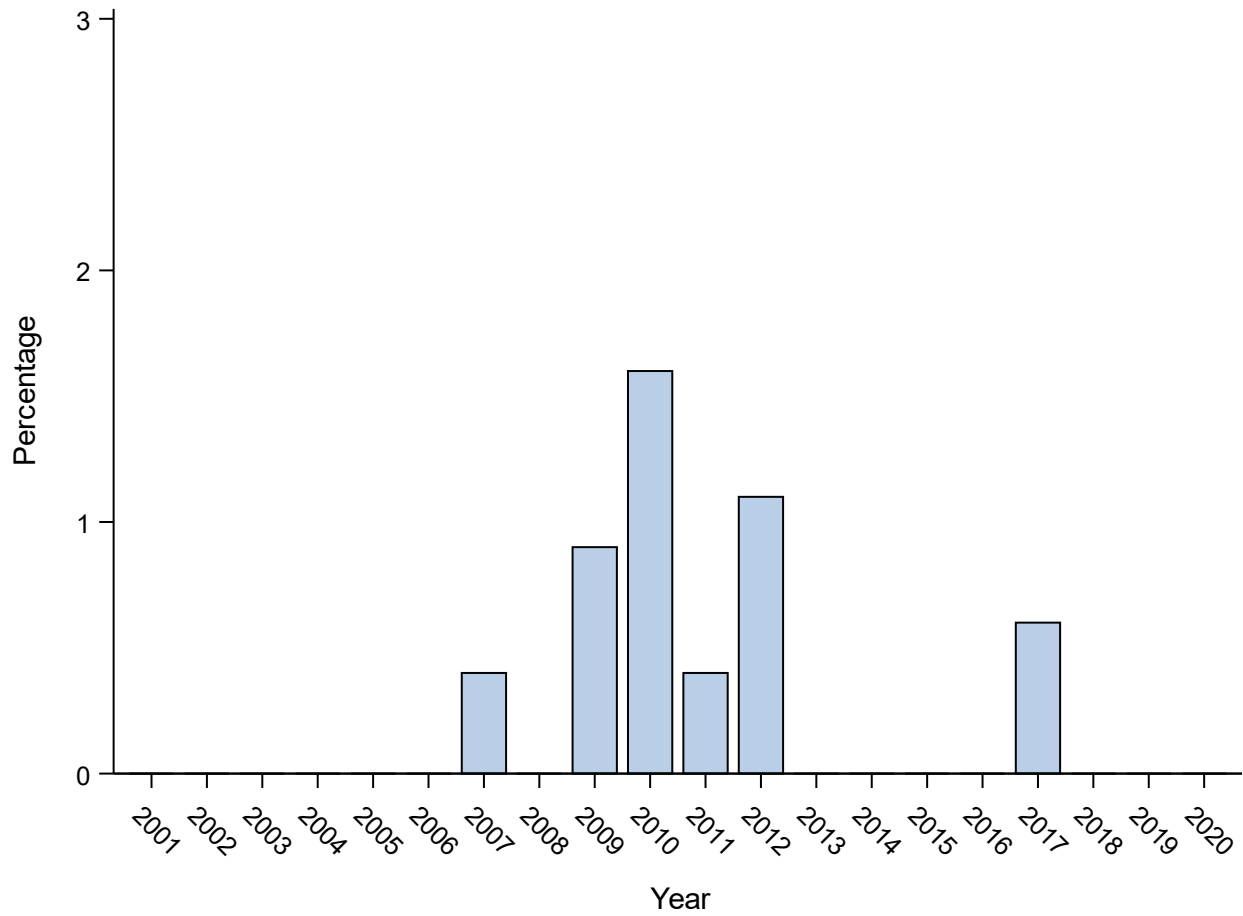
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	115 (92.0)	7 (5.6)	3 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	125
2017	131 (82.9)	16 (10.1)	8 (5.1)	2 (1.3)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	158
2018	67 (65.0)	26 (25.2)	9 (8.7)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	103
2019	94 (74.0)	29 (22.8)	3 (2.4)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	127
2020	16 (69.6)	6 (26.1)	1 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	23

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2016-2020



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
2016	21 (16.8)	64 (51.2)	33 (26.4)	6 (4.8)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	125
2017	40 (25.3)	102 (64.6)	11 (7.0)	3 (1.9)	2 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	158
2018	20 (19.4)	67 (65.0)	5 (4.9)	8 (7.8)	2 (1.9)	0 (0.0)	0 (0.0)	1 (1.0)	103
2019	27 (21.3)	68 (53.5)	9 (7.1)	17 (13.4)	6 (4.7)	0 (0.0)	0 (0.0)	0 (0.0)	127
2020	6 (26.1)	8 (34.8)	1 (4.3)	6 (26.1)	2 (8.7)	0 (0.0)	0 (0.0)	0 (0.0)	23

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2001-2020

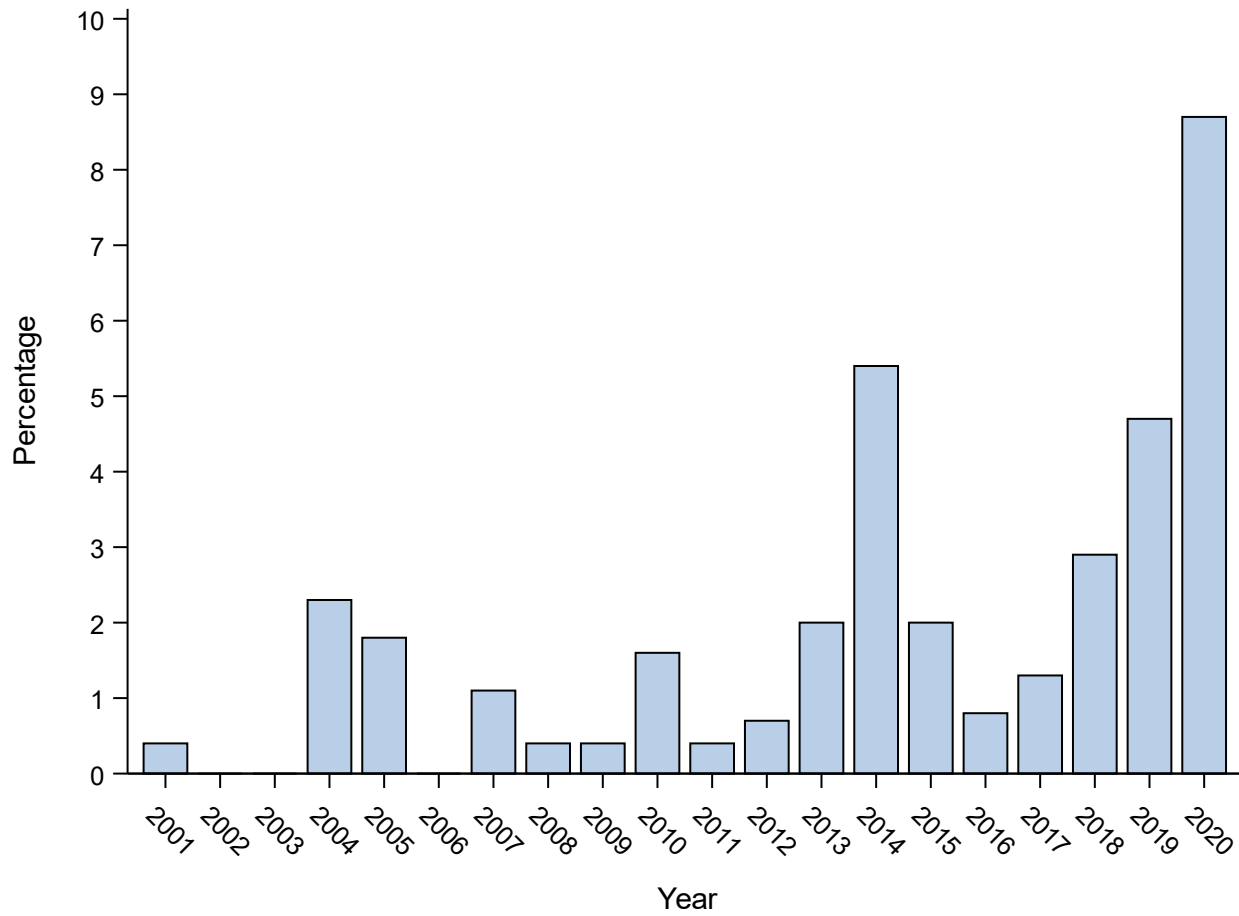


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	2 (0.9)	2 (1.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.4)	3 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Chicago, Illinois, 2001-2020

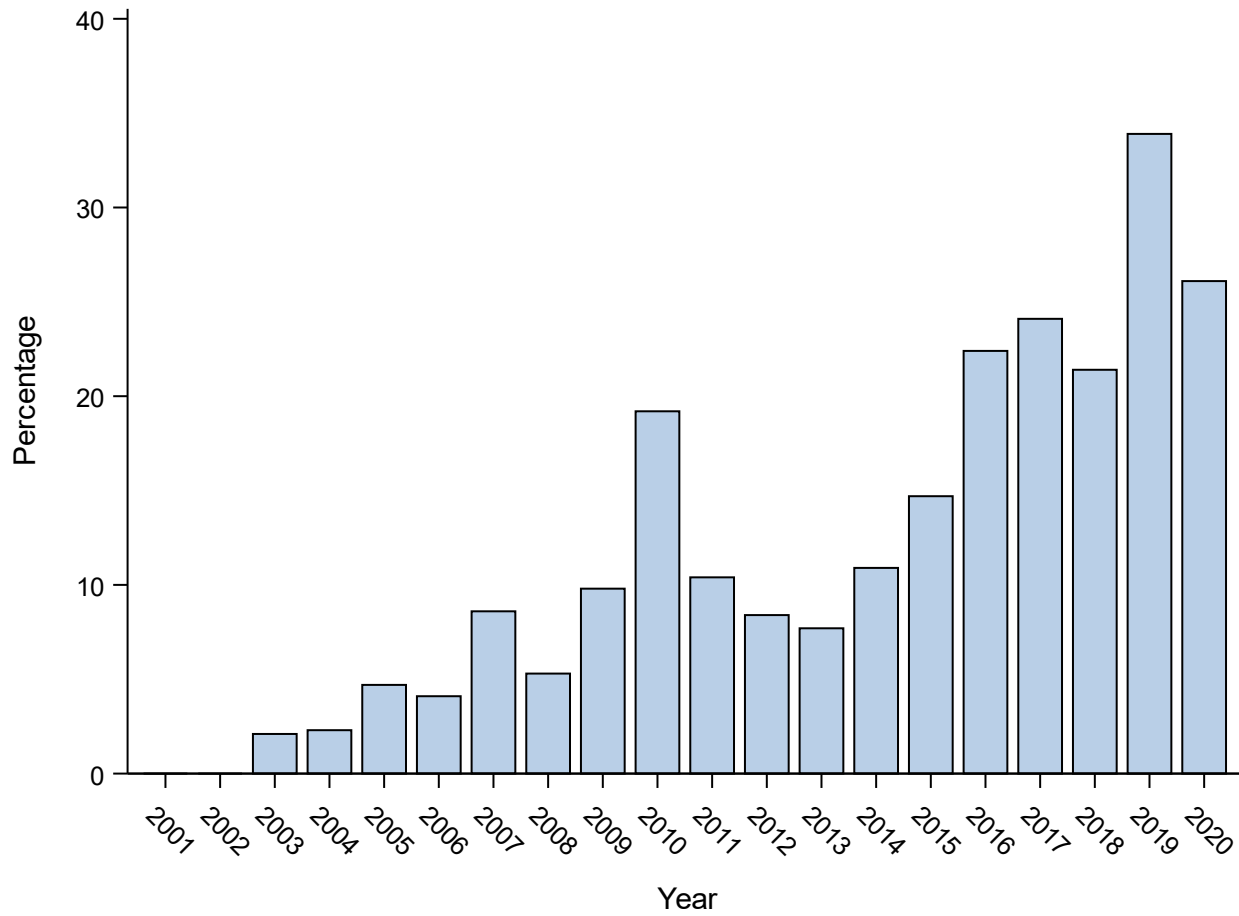


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.4)	0 (0.0)	0 (0.0)	7 (2.3)	5 (1.8)	0 (0.0)	3 (1.1)	1 (0.4)	1 (0.4)	2 (1.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.4)	2 (0.7)	6 (2.0)	7 (5.4)	3 (2.0)	1 (0.8)	2 (1.3)	3 (2.9)	6 (4.7)	2 (8.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Chicago, Illinois, 2001-2020

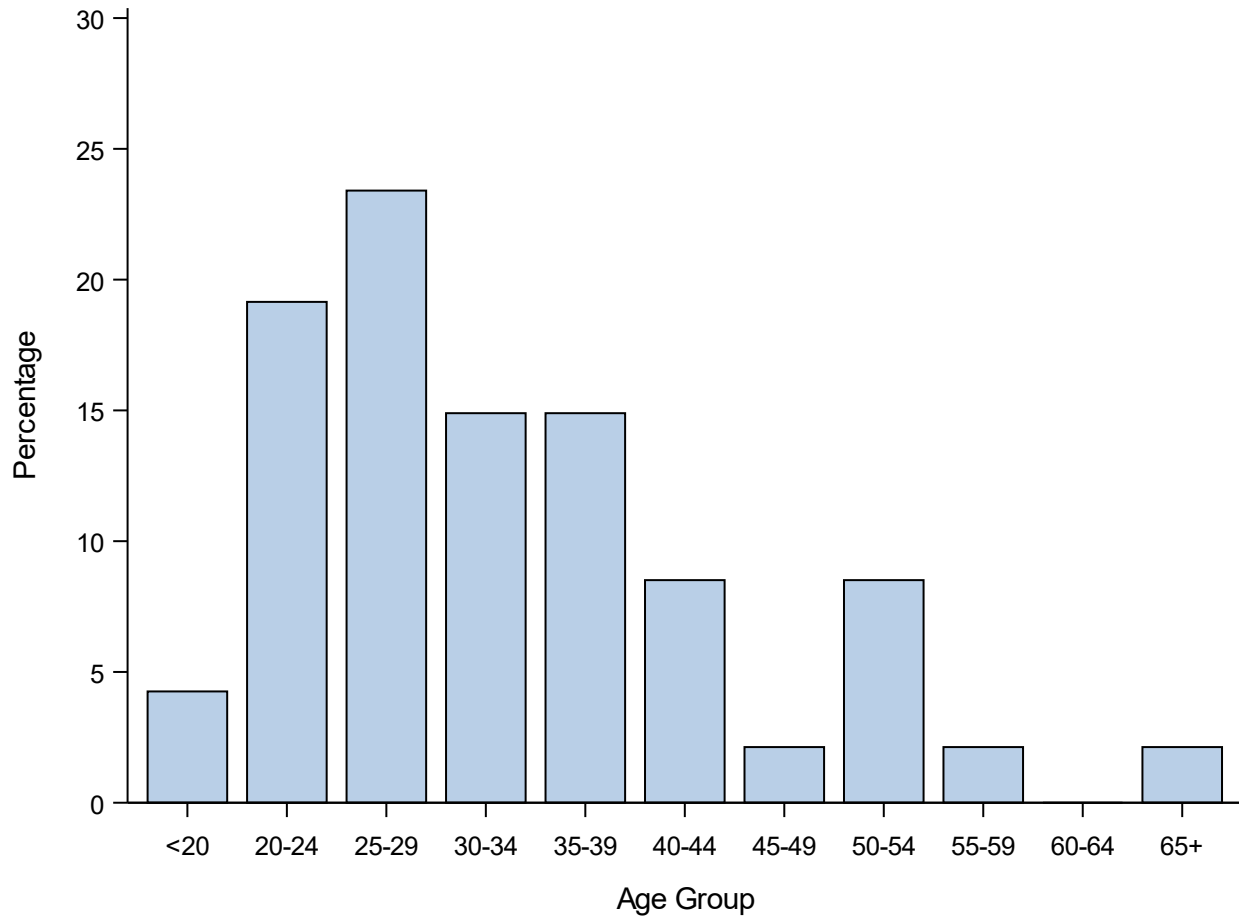


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	6 (2.1)	7 (2.3)	13 (4.7)	12 (4.1)	23 (8.6)	14 (5.3)	23 (9.8)	24 (19.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
28 (10.4)	23 (8.4)	23 (7.7)	14 (10.9)	22 (14.7)	28 (22.4)	38 (24.1)	22 (21.4)	43 (33.9)	6 (26.1)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$.

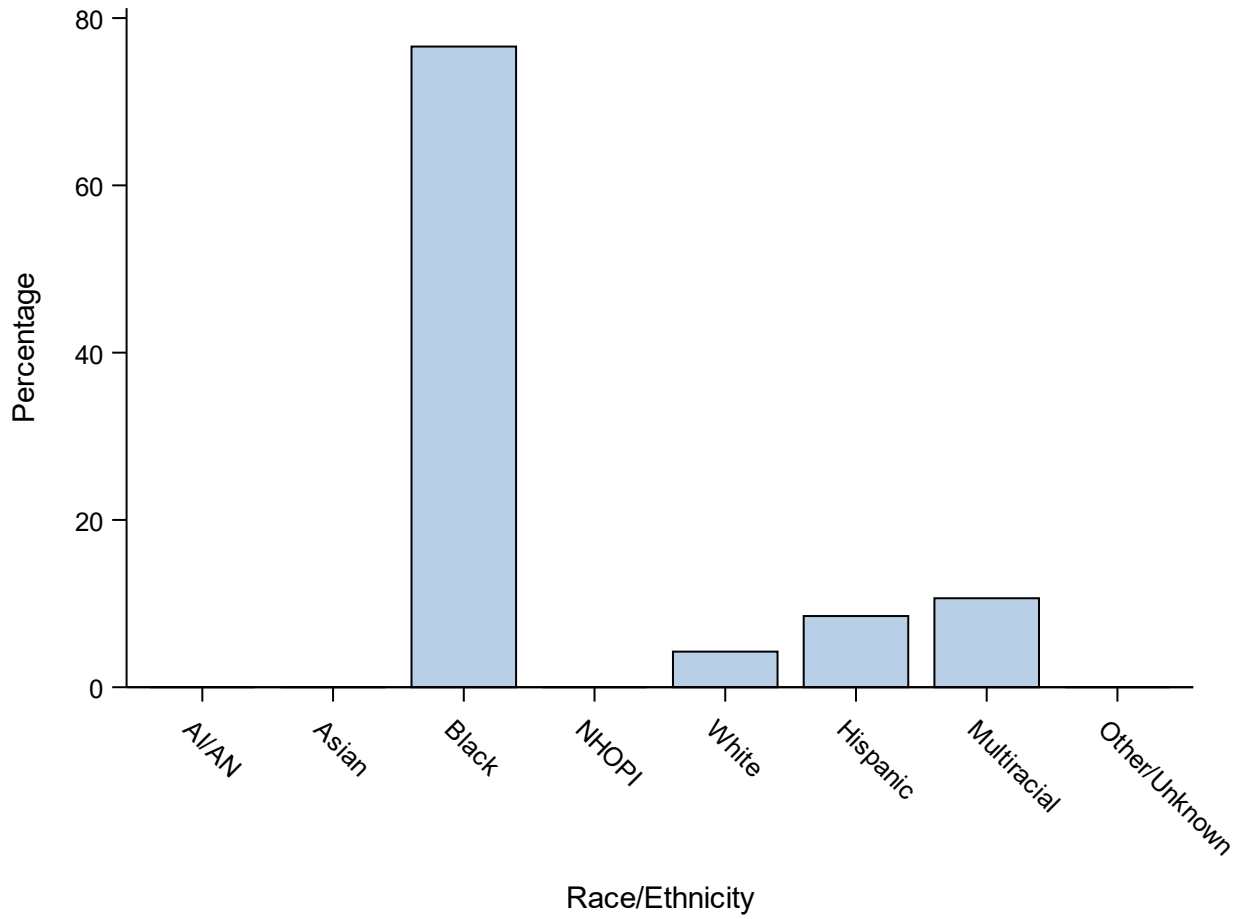
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (4.3)	9 (19.1)	11 (23.4)	7 (14.9)	7 (14.9)	4 (8.5)	1 (2.1)	4 (8.5)	1 (2.1)	0 (0.0)	1 (2.1)	47

Note: Cases with unknown age were excluded.

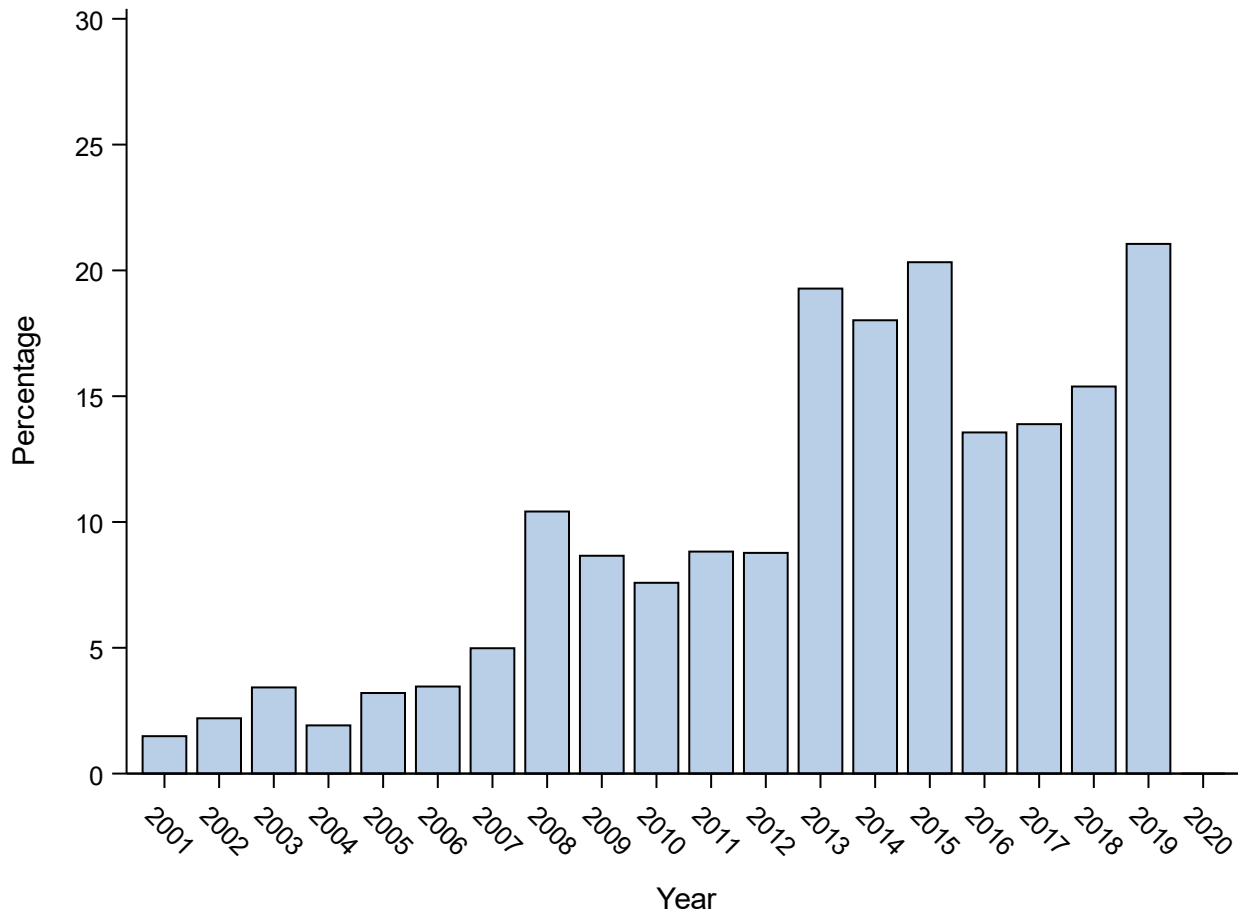
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	36 (76.6)	0 (0.0)	2 (4.3)	4 (8.5)	5 (10.6)	0 (0.0)	47

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2001-2020

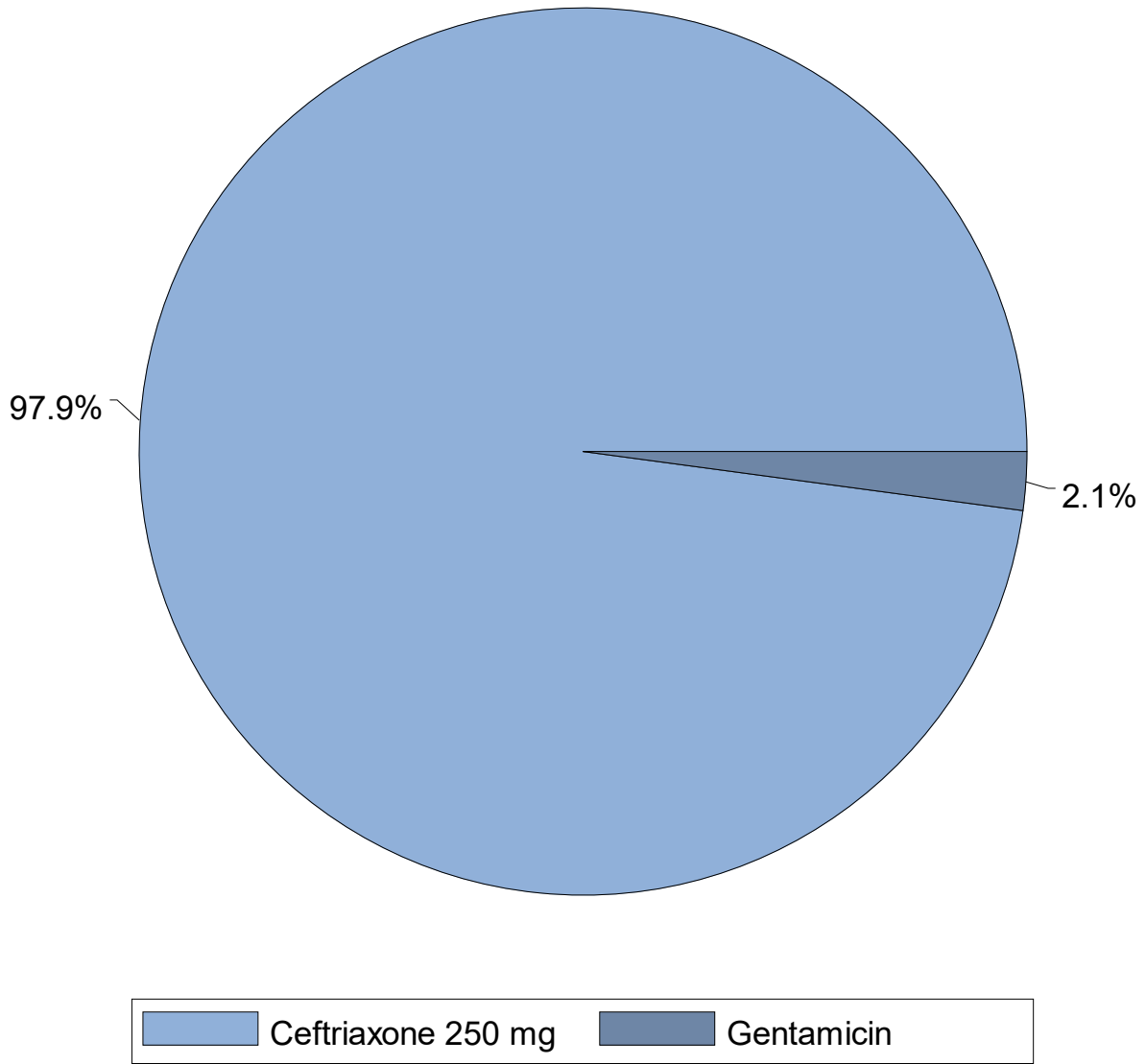


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
4 (1.5)	6 (2.2)	10 (3.4)	5 (1.9)	9 (3.2)	10 (3.5)	14 (5.0)	25 (10.4)	20 (8.7)	16 (7.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
18 (8.8)	15 (8.8)	32 (19.3)	20 (18.0)	25 (20.3)	16 (13.6)	10 (13.9)	6 (15.4)	4 (21.1)	0 (0.0)

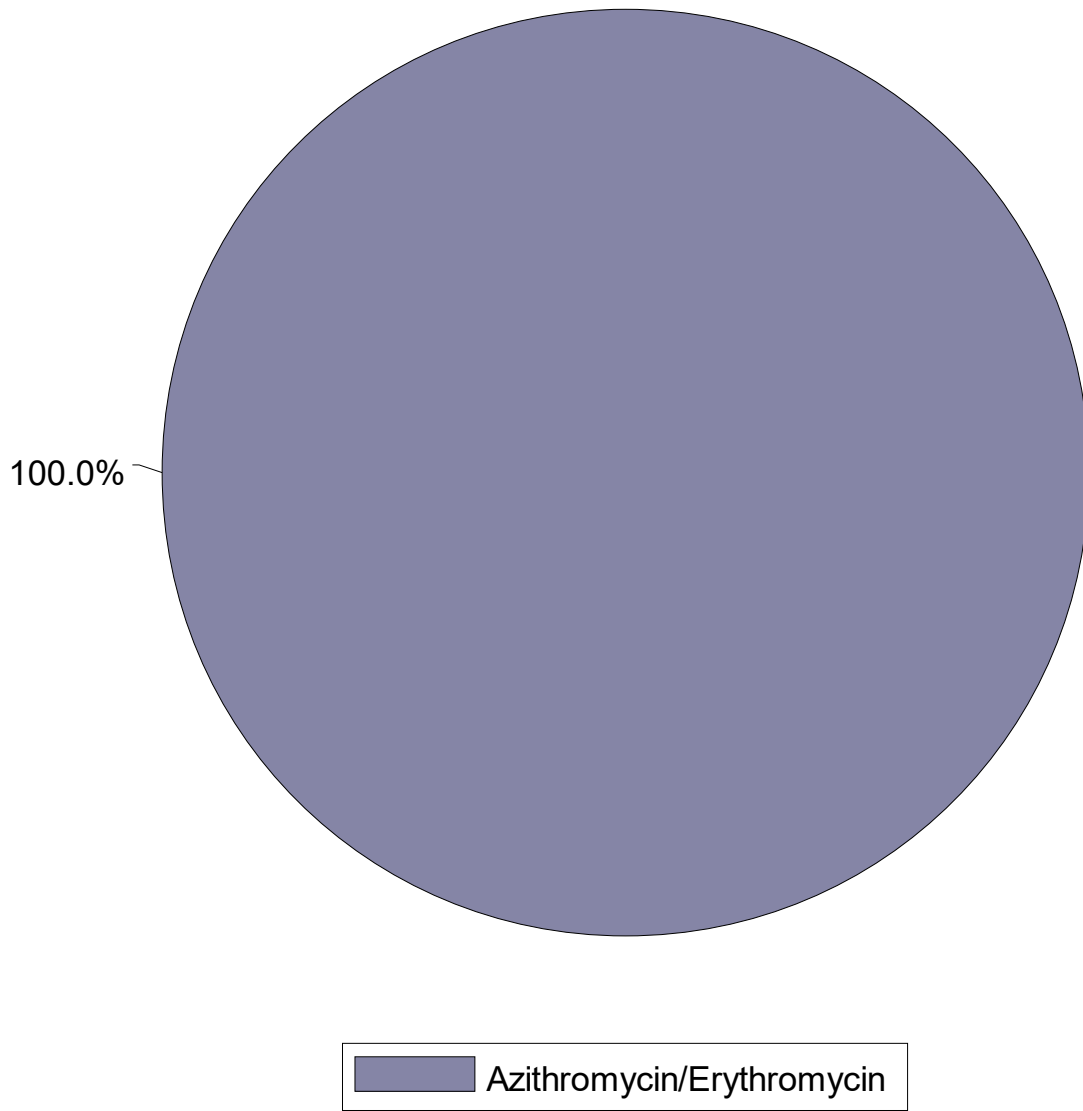
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2020



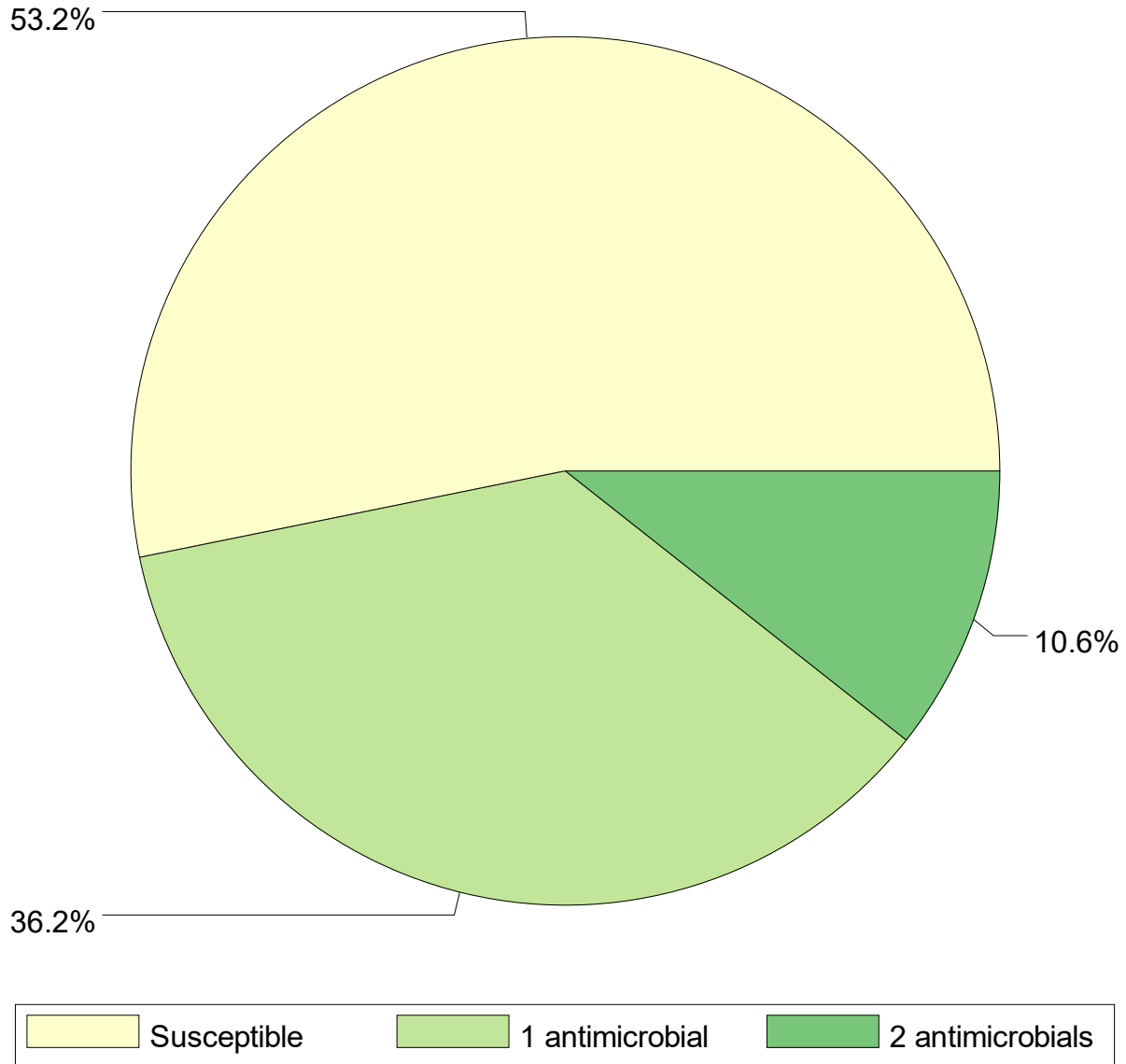
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	46	97.9
Gentamicin	1	2.1

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	47	100.0

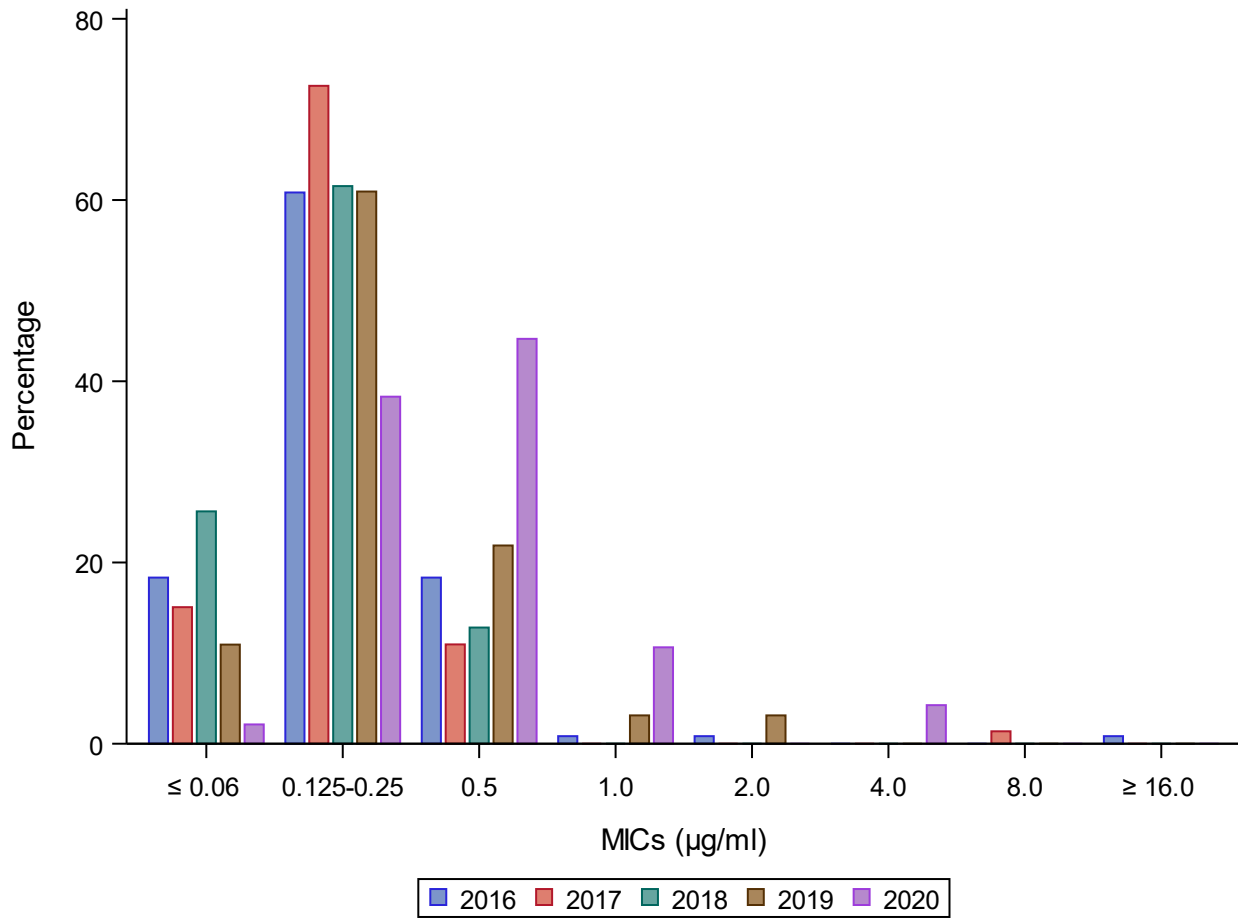
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	25	53.2
1 antimicrobial	17	36.2
2 antimicrobials	5	10.6
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

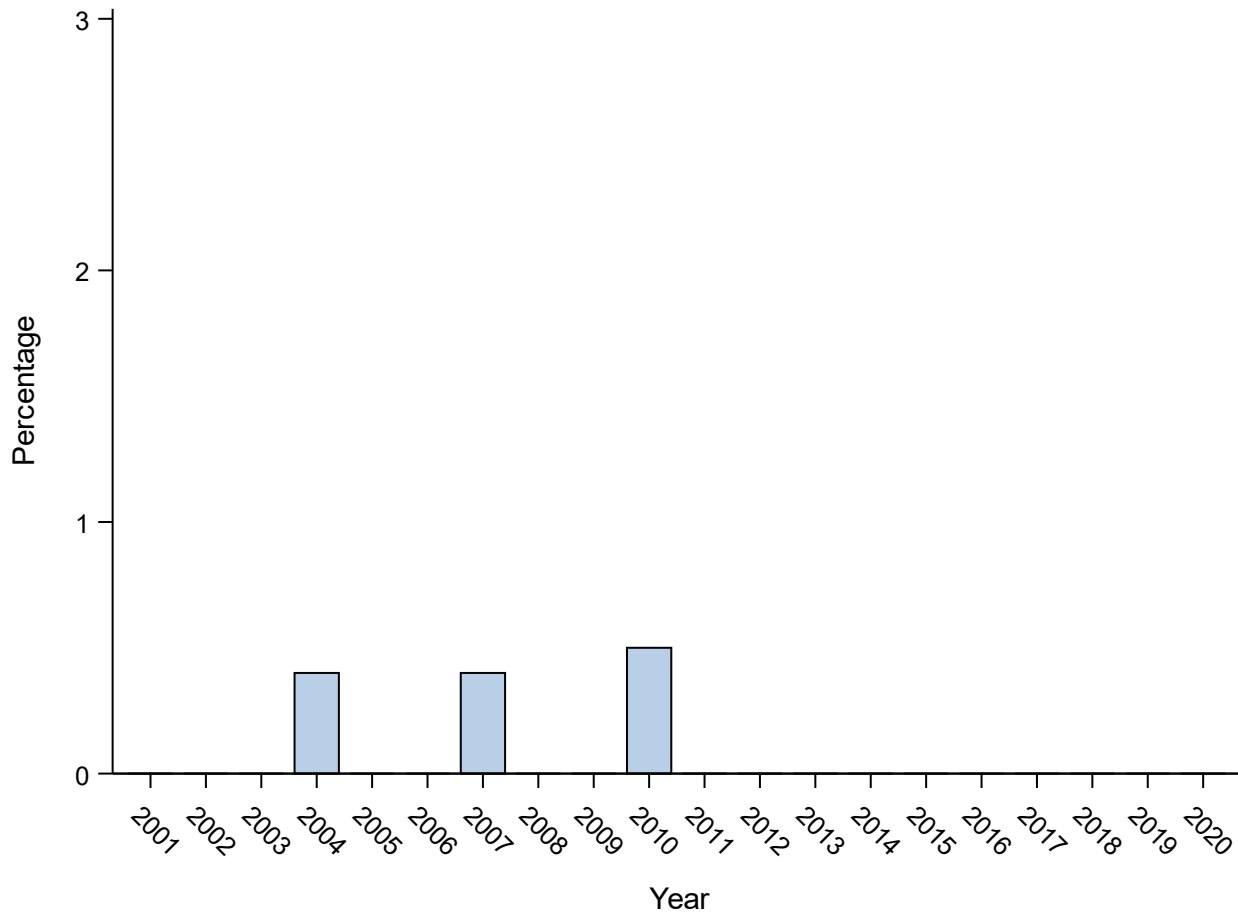
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g}/\text{mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g}/\text{mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g}/\text{mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2016-2020



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
2016	22 (18.3)	73 (60.8)	22 (18.3)	1 (0.8)	1 (0.8)	0 (0.0)	0 (0.0)	1 (0.8)	120
2017	11 (15.1)	53 (72.6)	8 (11.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.4)	0 (0.0)	73
2018	10 (25.6)	24 (61.5)	5 (12.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	39
2019	7 (10.9)	39 (60.9)	14 (21.9)	2 (3.1)	2 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	64
2020	1 (2.1)	18 (38.3)	21 (44.7)	5 (10.6)	0 (0.0)	2 (4.3)	0 (0.0)	0 (0.0)	47

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2001-2020

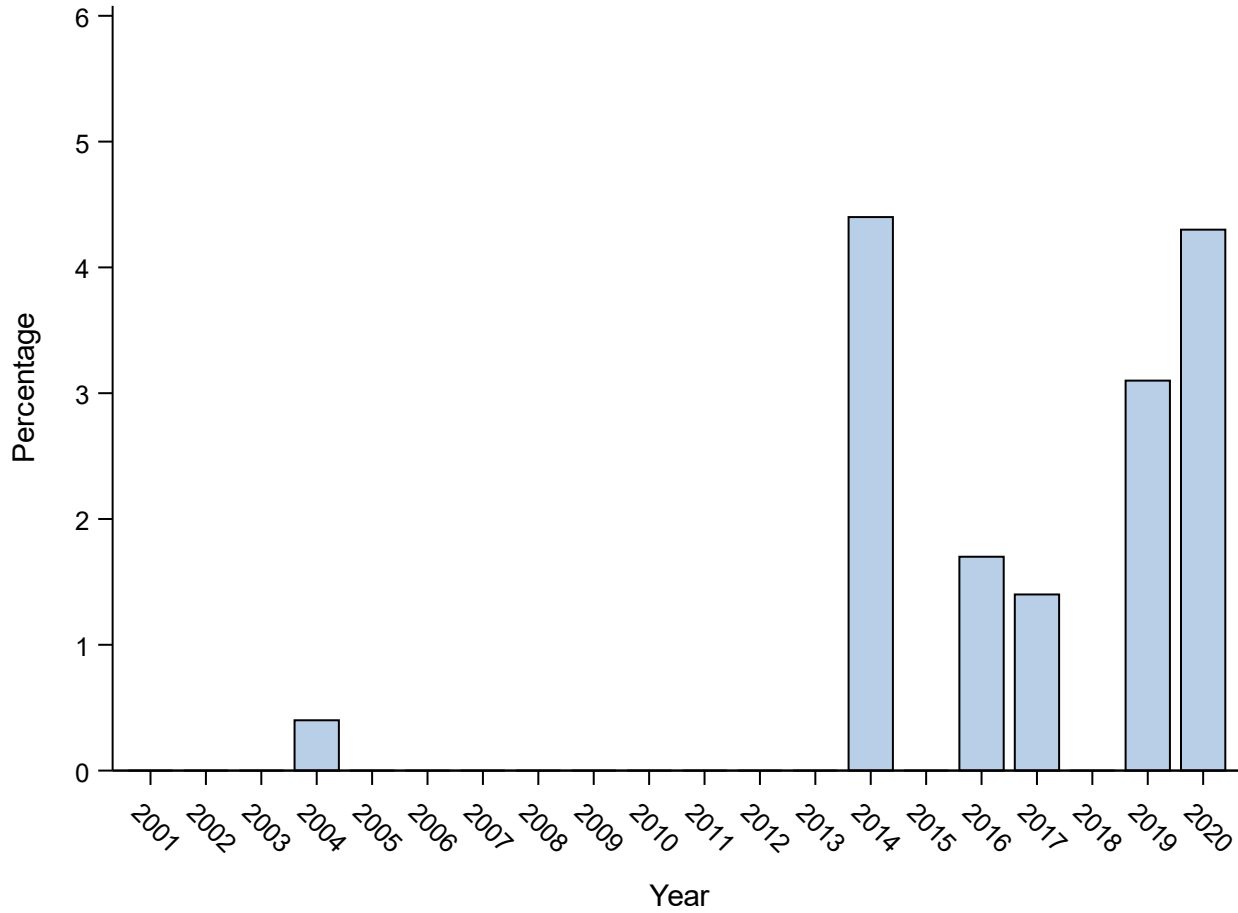


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.5)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2001-2020

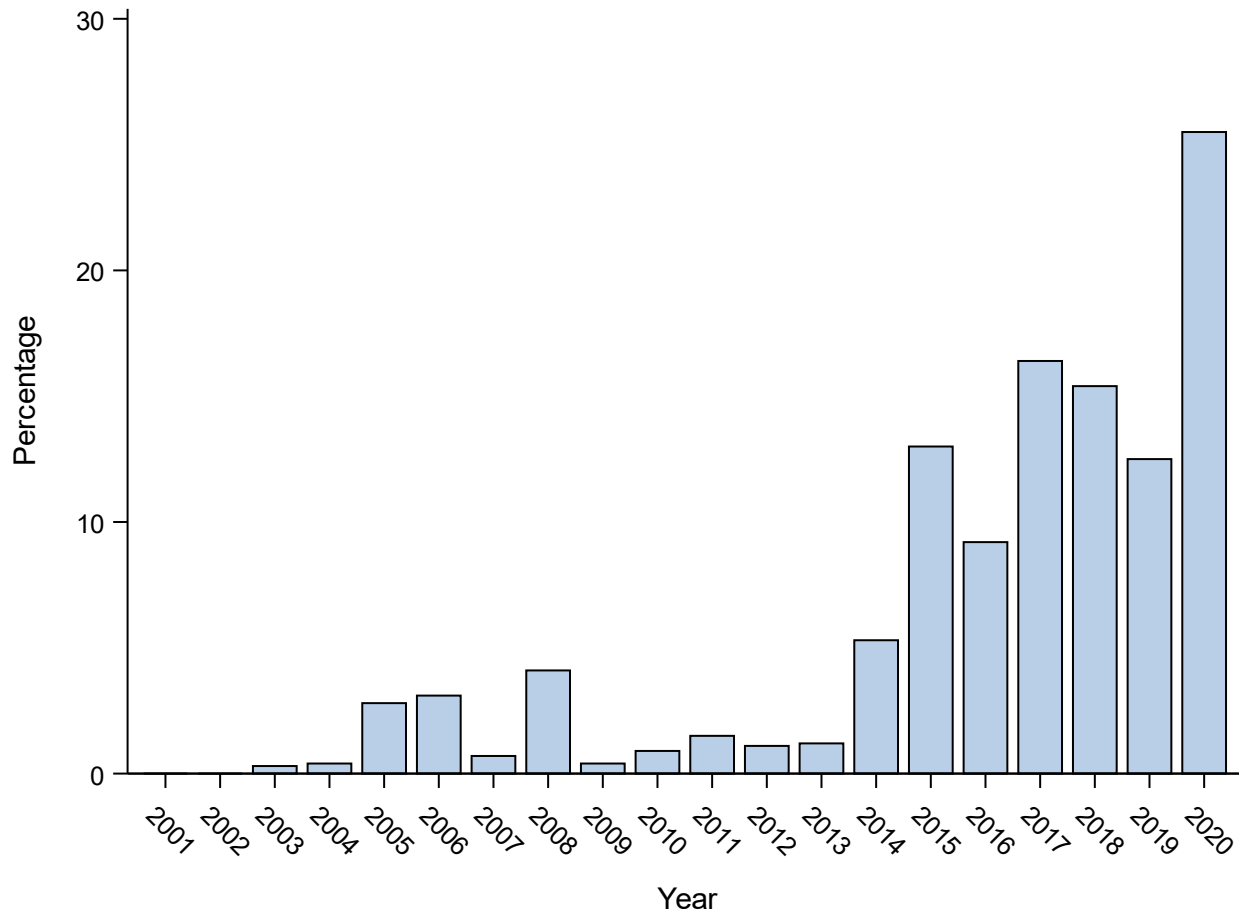


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	5 (4.4)	0 (0.0)	2 (1.7)	1 (1.4)	0 (0.0)	2 (3.1)	2 (4.3)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Cleveland, Ohio, 2001-2020

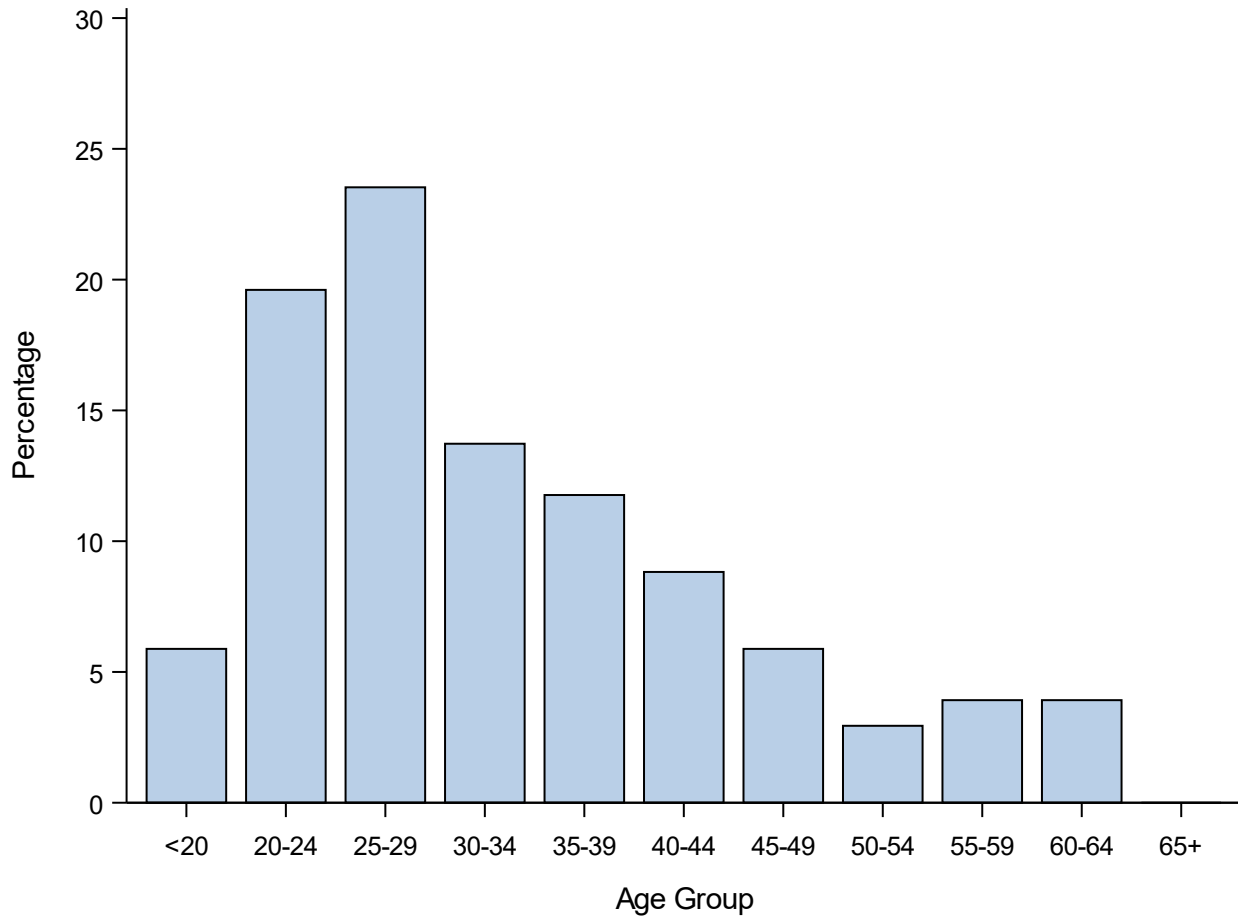


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.3)	1 (0.4)	8 (2.8)	9 (3.1)	2 (0.7)	10 (4.1)	1 (0.4)	2 (0.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
3 (1.5)	2 (1.1)	2 (1.2)	6 (5.3)	16 (13.0)	11 (9.2)	12 (16.4)	6 (15.4)	8 (12.5)	12 (25.5)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

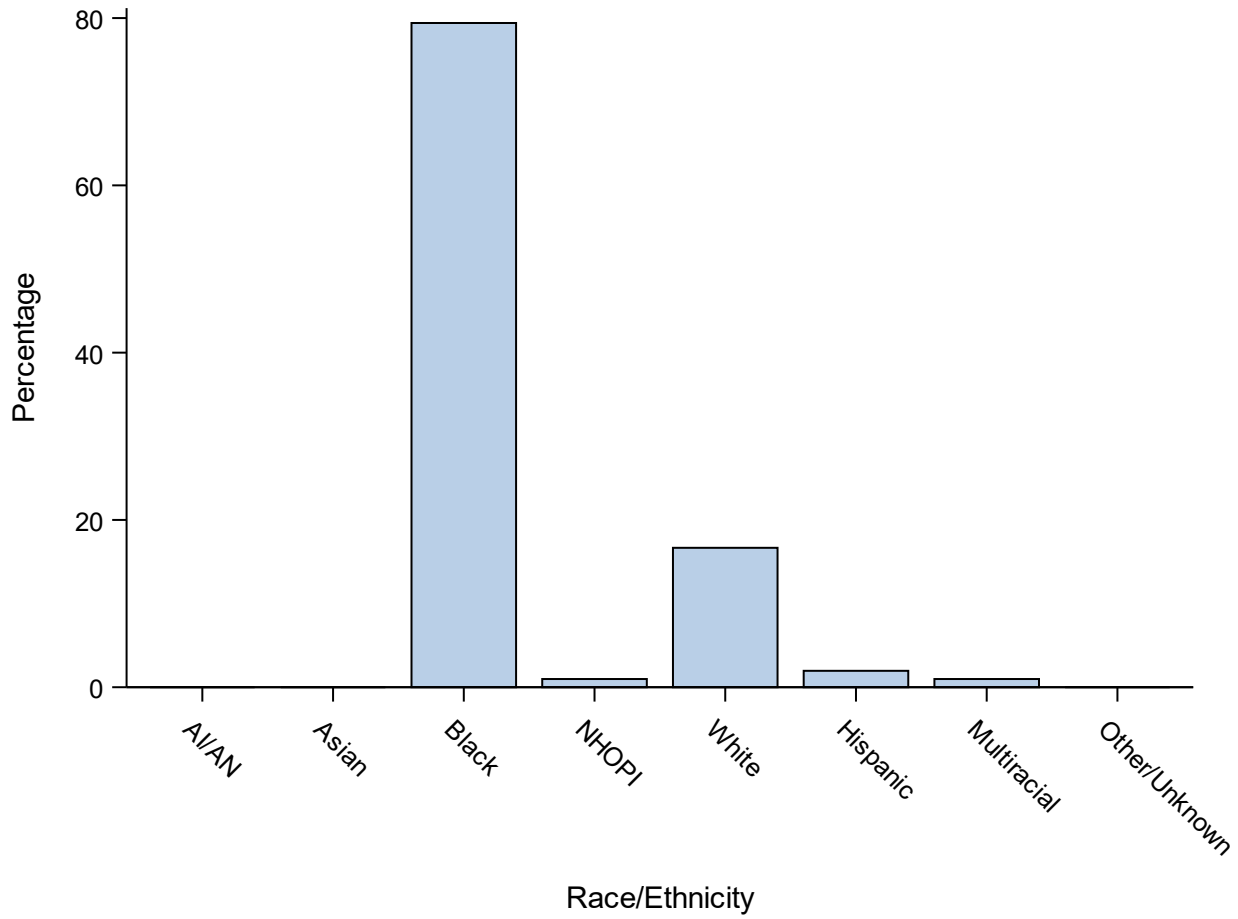
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
6 (5.9)	20 (19.6)	24 (23.5)	14 (13.7)	12 (11.8)	9 (8.8)	6 (5.9)	3 (2.9)	4 (3.9)	4 (3.9)	0 (0.0)	102

Note: Cases with unknown age were excluded.

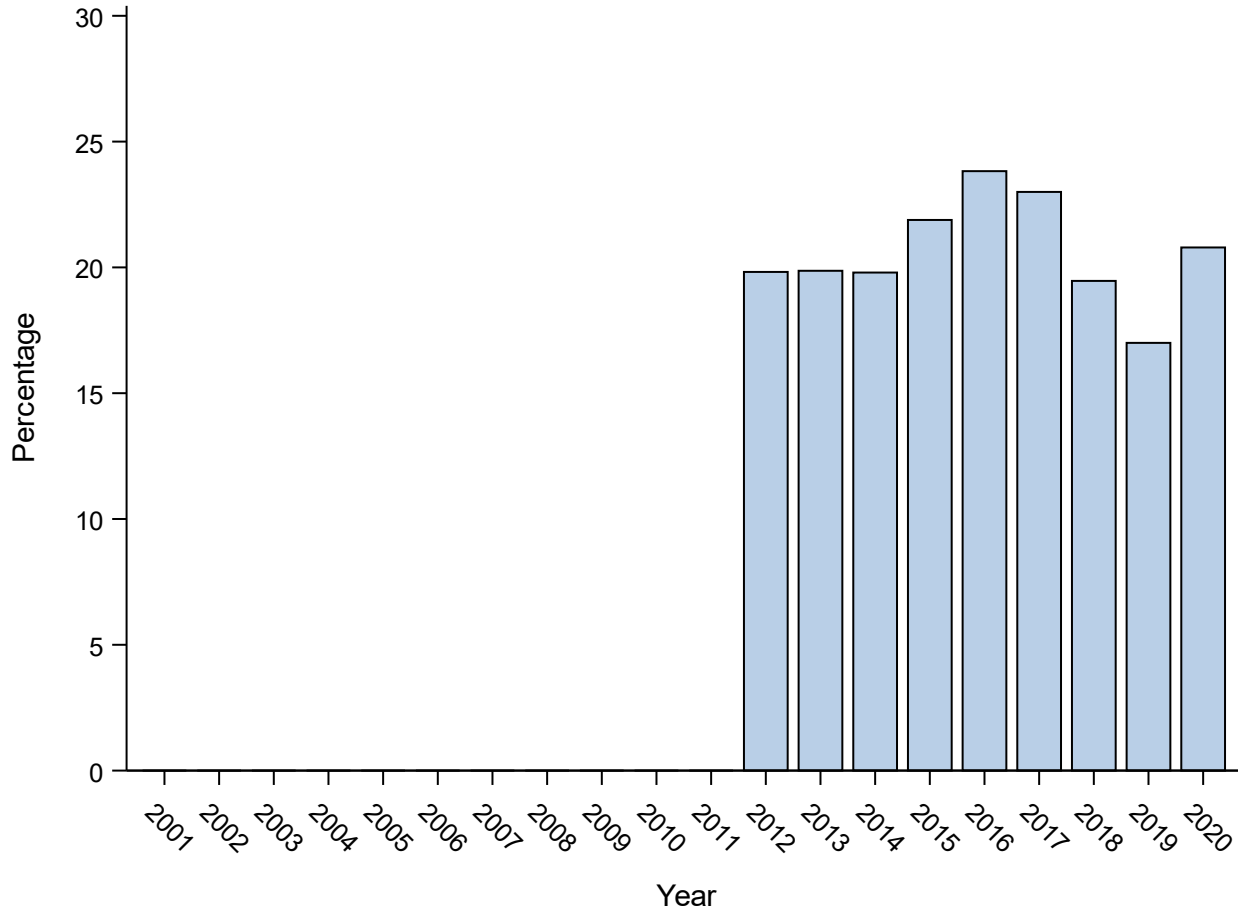
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	81 (79.4)	1 (1.0)	17 (16.7)	2 (2.0)	1 (1.0)	0 (0.0)	102

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2001-2020

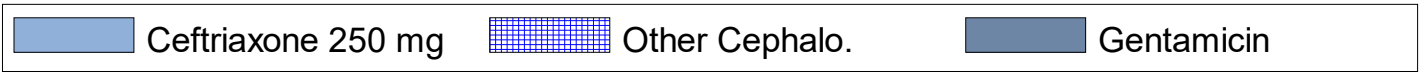
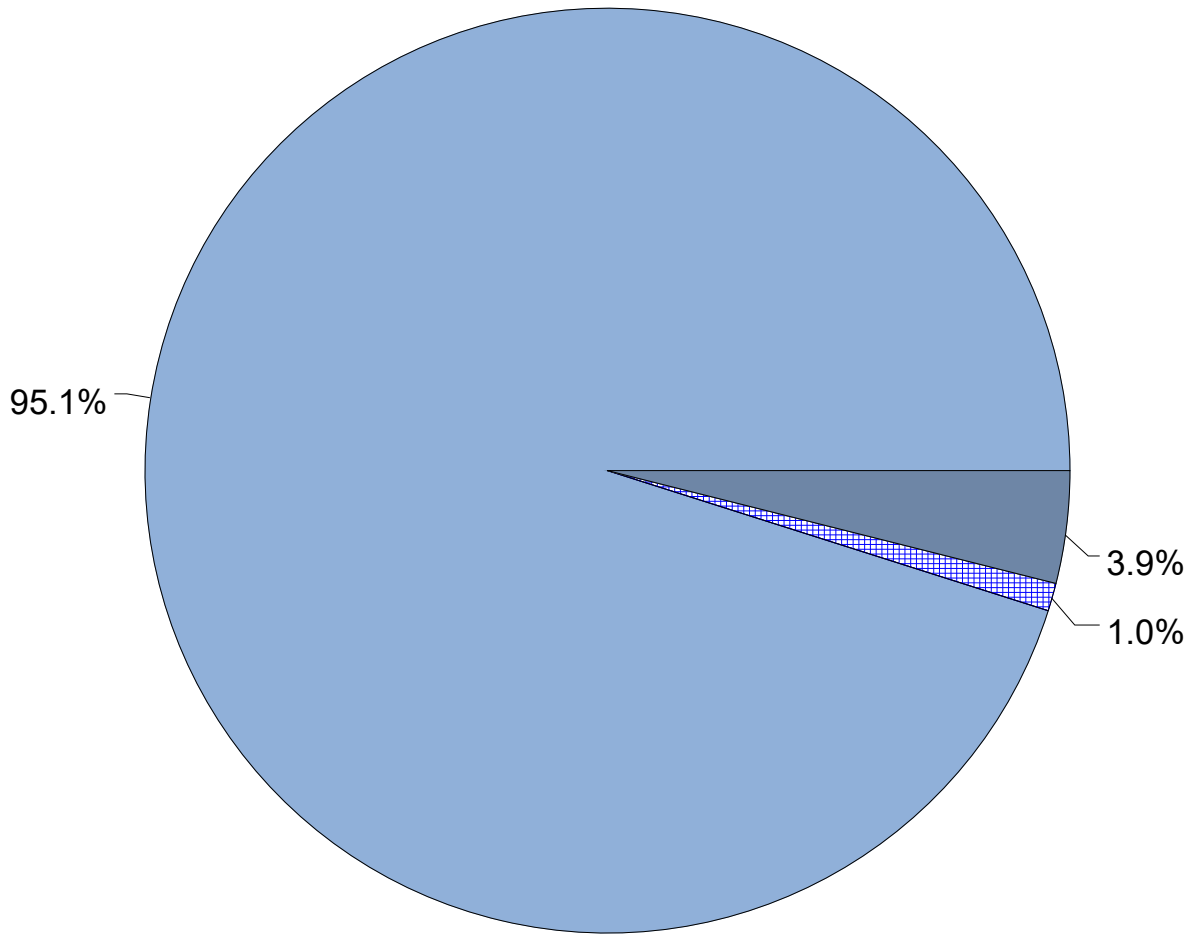


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	22 (19.8)	59 (19.9)	58 (19.8)	65 (21.9)	71 (23.8)	69 (23.0)	58 (19.5)	51 (17.0)	21 (20.8)

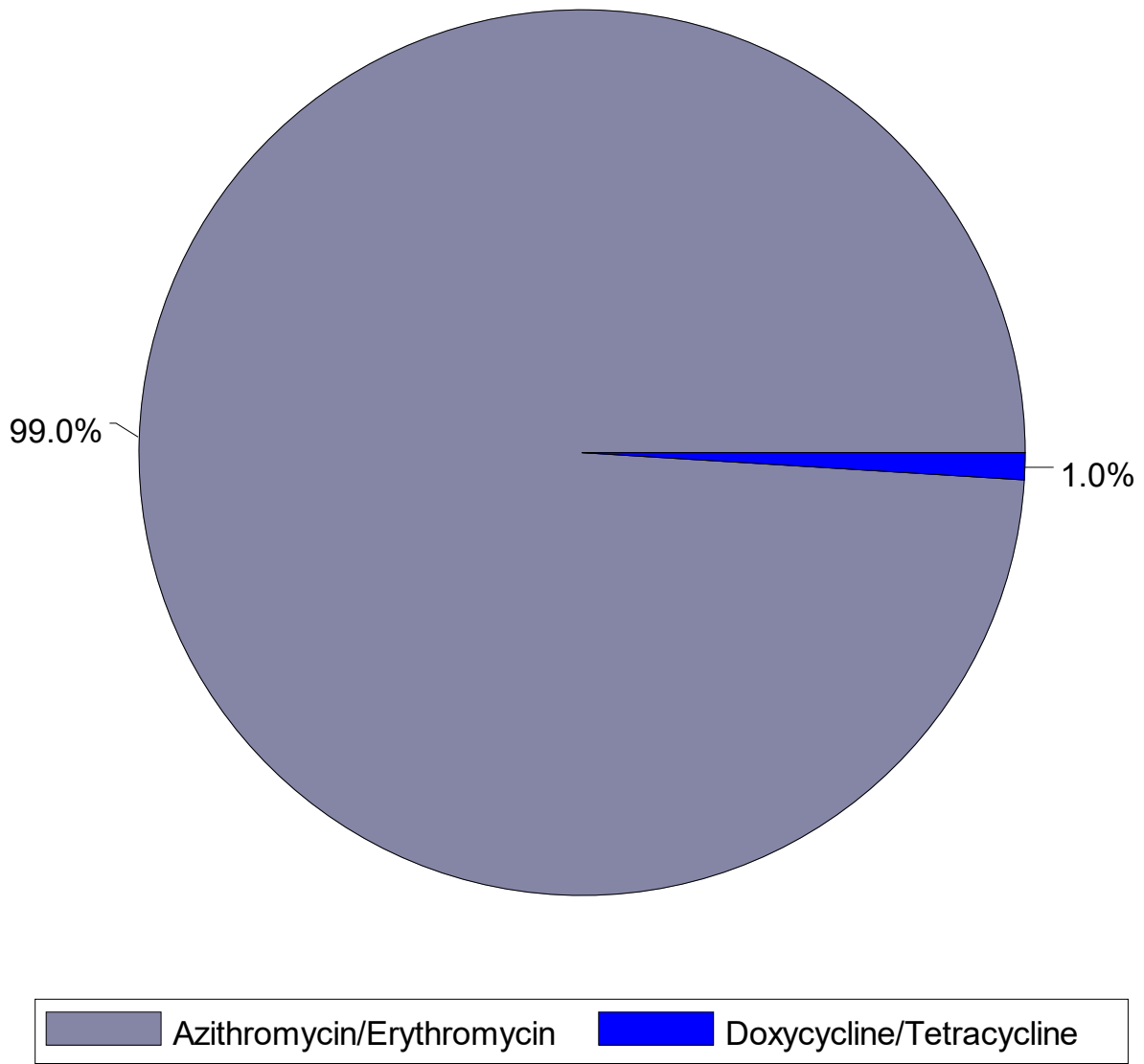
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2020



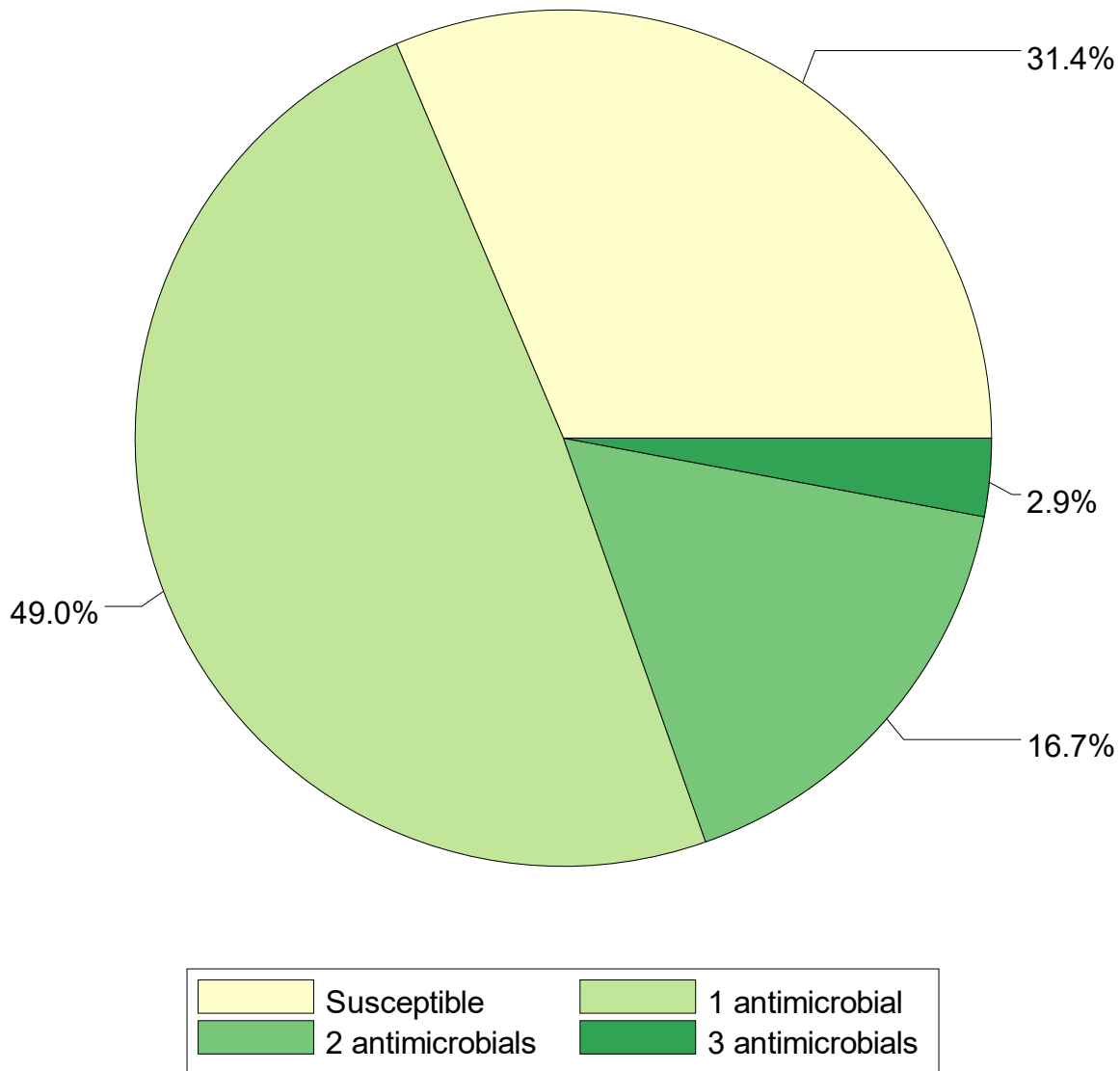
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	97	95.1
Gentamicin	4	3.9
Other Cephalo.	1	1.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	101	99.0
Doxycycline/Tetracycline	1	1.0

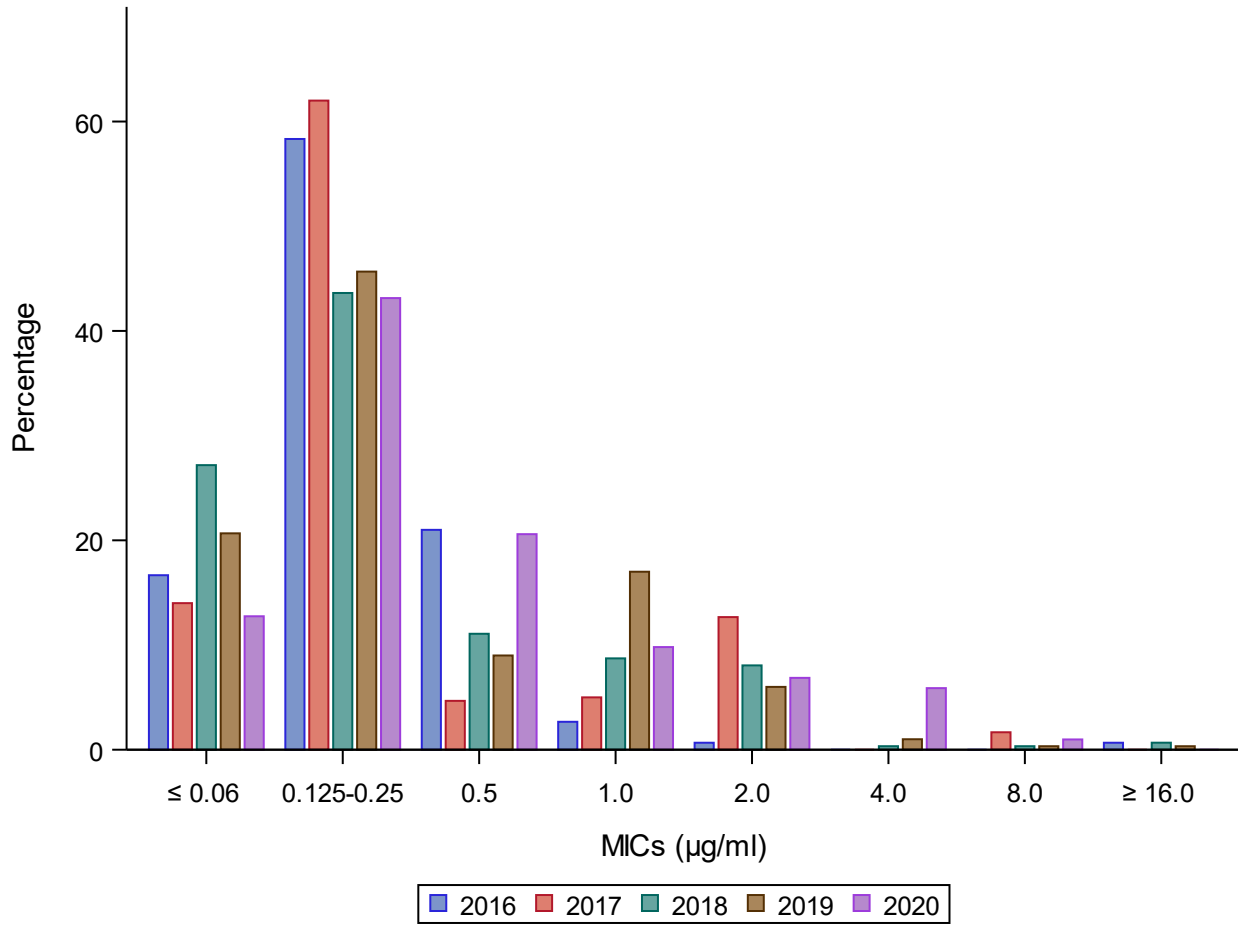
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	32	31.4
1 antimicrobial	50	49.0
2 antimicrobials	17	16.7
3 antimicrobials	3	2.9
4+ antimicrobials	0	0.0

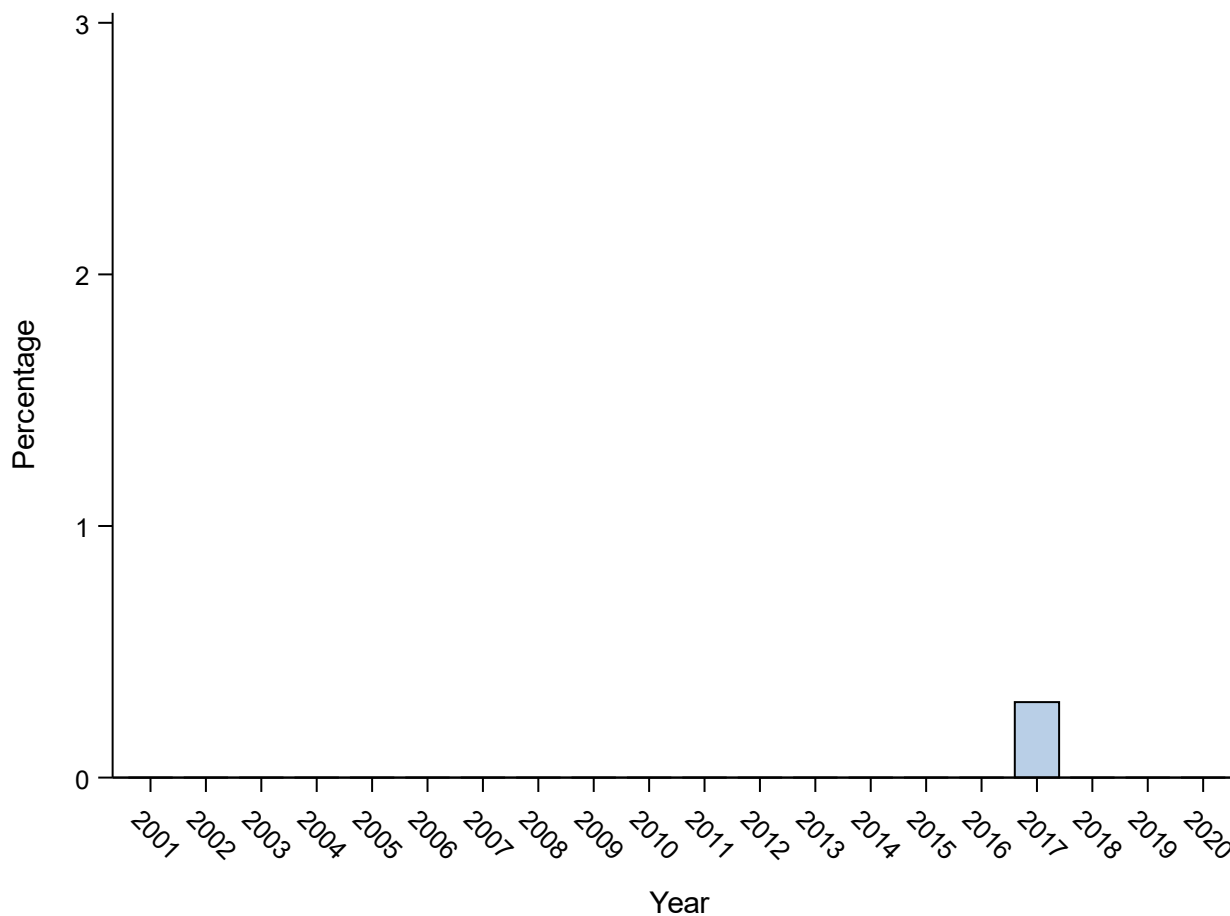
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g}/\text{mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g}/\text{mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g}/\text{mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g}/\text{mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2016-2020



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
2016	50 (16.7)	175 (58.3)	63 (21.0)	8 (2.7)	2 (0.7)	0 (0.0)	0 (0.0)	2 (0.7)	300
2017	42 (14.0)	186 (62.0)	14 (4.7)	15 (5.0)	38 (12.7)	0 (0.0)	5 (1.7)	0 (0.0)	300
2018	81 (27.2)	130 (43.6)	33 (11.1)	26 (8.7)	24 (8.1)	1 (0.3)	1 (0.3)	2 (0.7)	298
2019	62 (20.7)	137 (45.7)	27 (9.0)	51 (17.0)	18 (6.0)	3 (1.0)	1 (0.3)	1 (0.3)	300
2020	13 (12.7)	44 (43.1)	21 (20.6)	10 (9.8)	7 (6.9)	6 (5.9)	1 (1.0)	0 (0.0)	102

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2001-2020

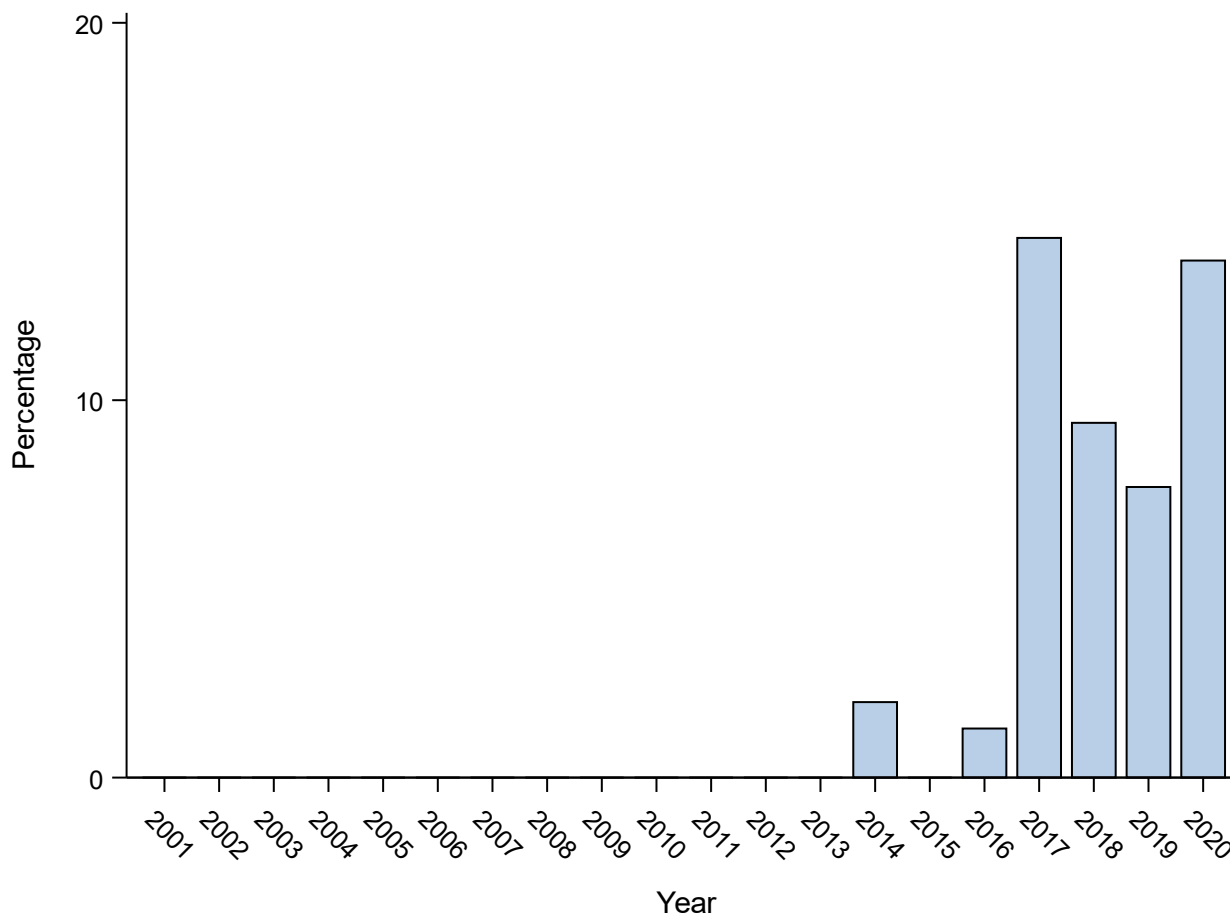


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2001-2020

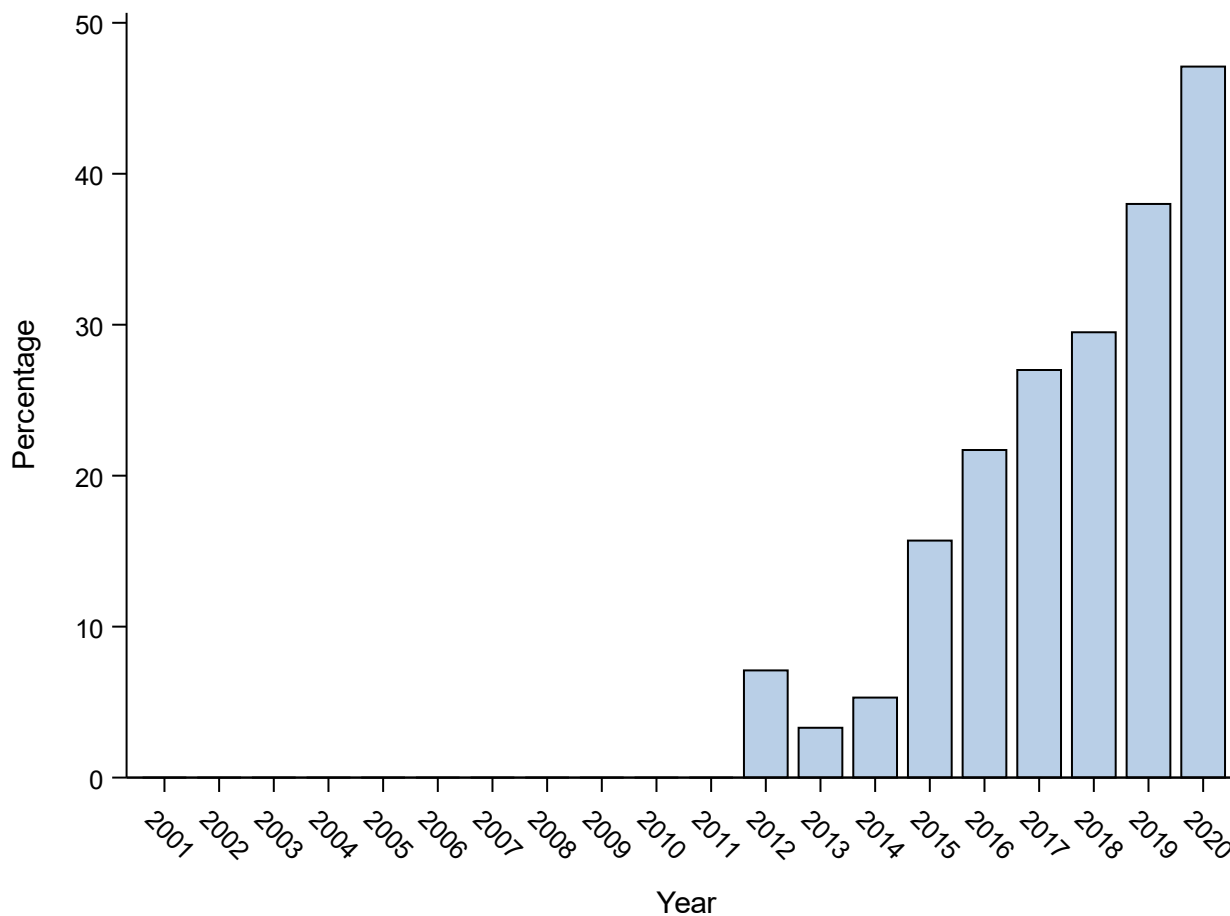


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	6 (2.0)	0 (0.0)	4 (1.3)	43 (14.3)	28 (9.4)	23 (7.7)	14 (13.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Columbus, Ohio, 2001-2020

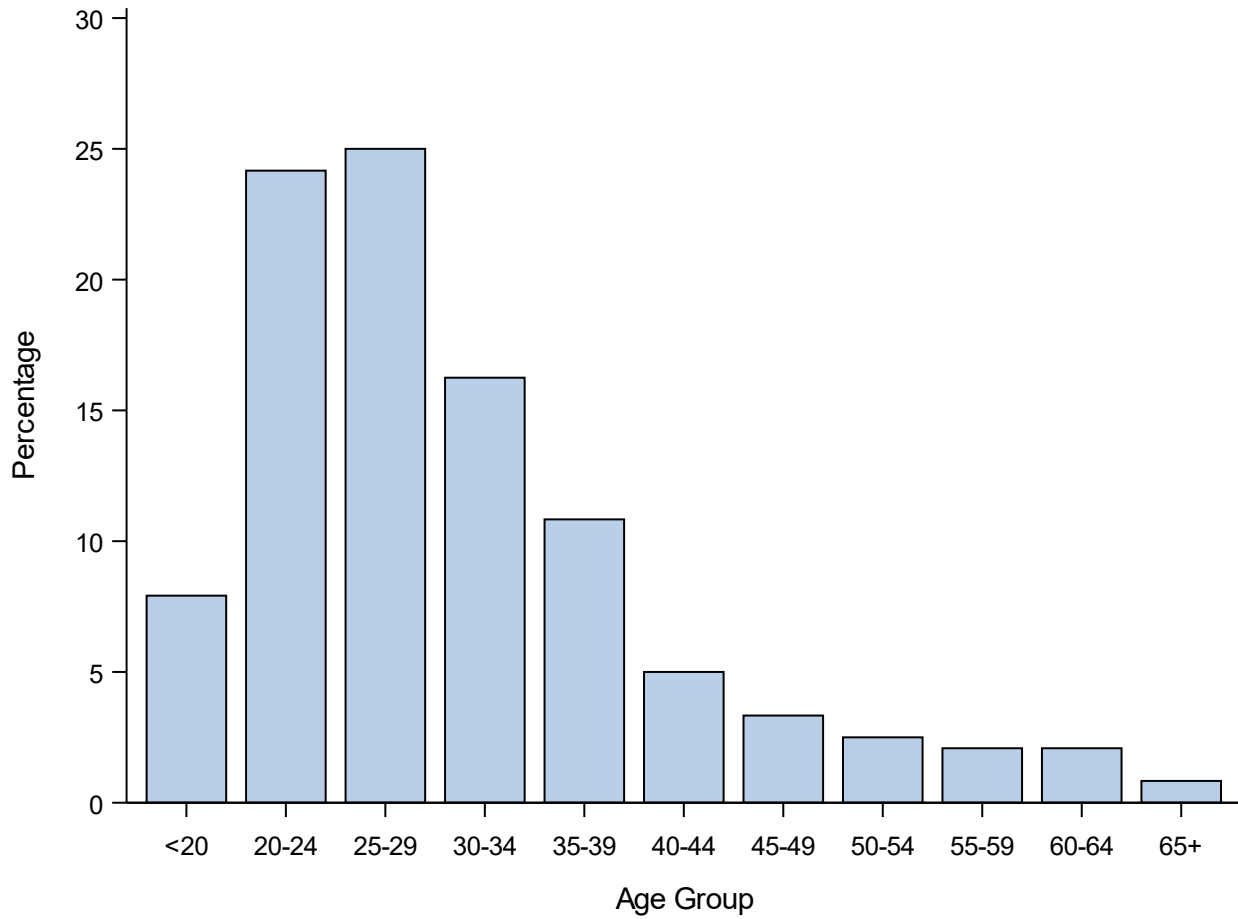


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	8 (7.1)	10 (3.3)	16 (5.3)	47 (15.7)	65 (21.7)	81 (27.0)	88 (29.5)	114 (38.0)	48 (47.1)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

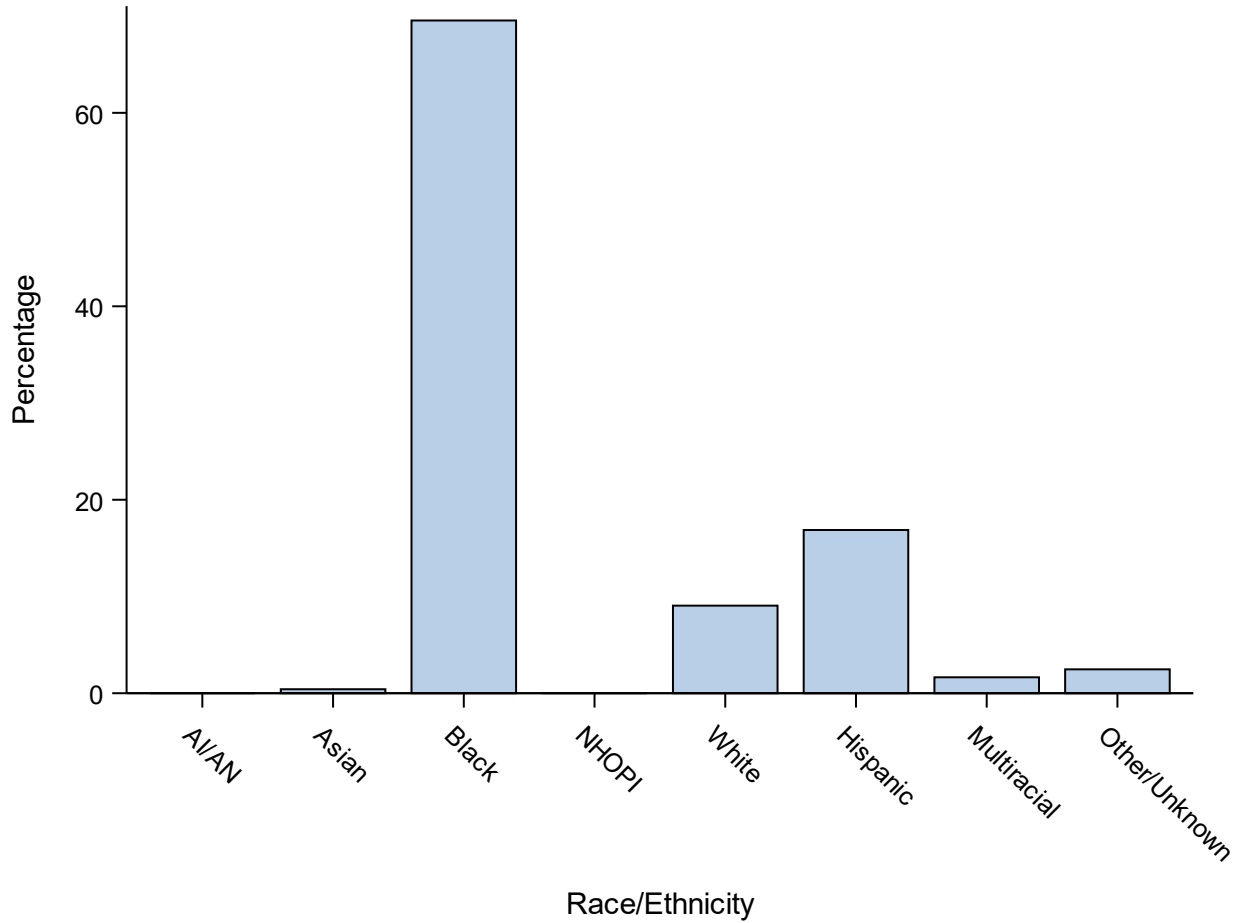
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
19 (7.9)	58 (24.2)	60 (25.0)	39 (16.3)	26 (10.8)	12 (5.0)	8 (3.3)	6 (2.5)	5 (2.1)	5 (2.1)	2 (0.8)	240

Note: Cases with unknown age were excluded.

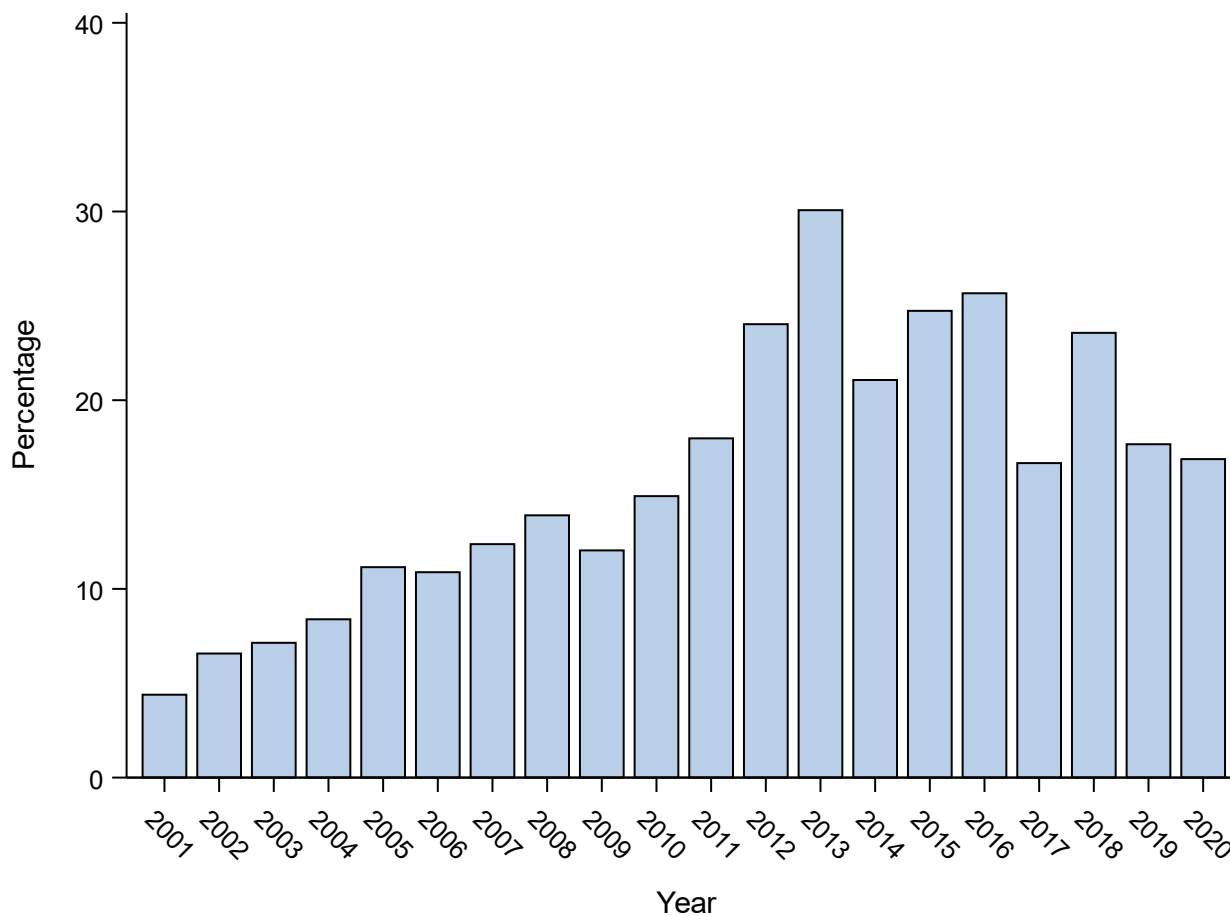
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	1 (0.4)	169 (69.5)	0 (0.0)	22 (9.1)	41 (16.9)	4 (1.6)	6 (2.5)	243

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2001-2020

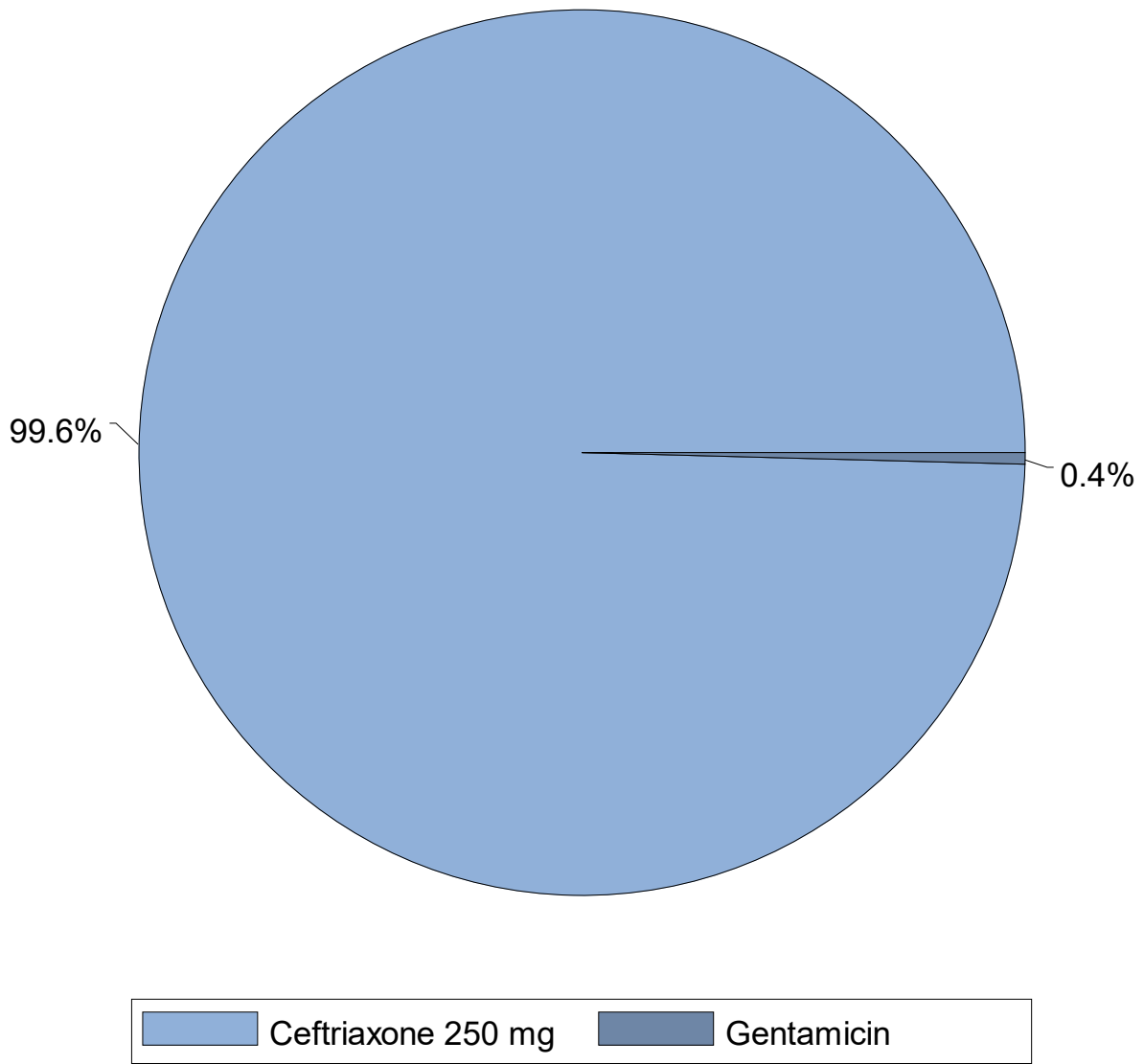


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
13 (4.4)	19 (6.6)	21 (7.1)	25 (8.4)	31 (11.2)	32 (10.9)	36 (12.4)	41 (13.9)	36 (12.0)	44 (14.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
48 (18.0)	68 (24.0)	86 (30.1)	63 (21.1)	70 (24.7)	77 (25.7)	47 (16.7)	70 (23.6)	53 (17.7)	40 (16.9)

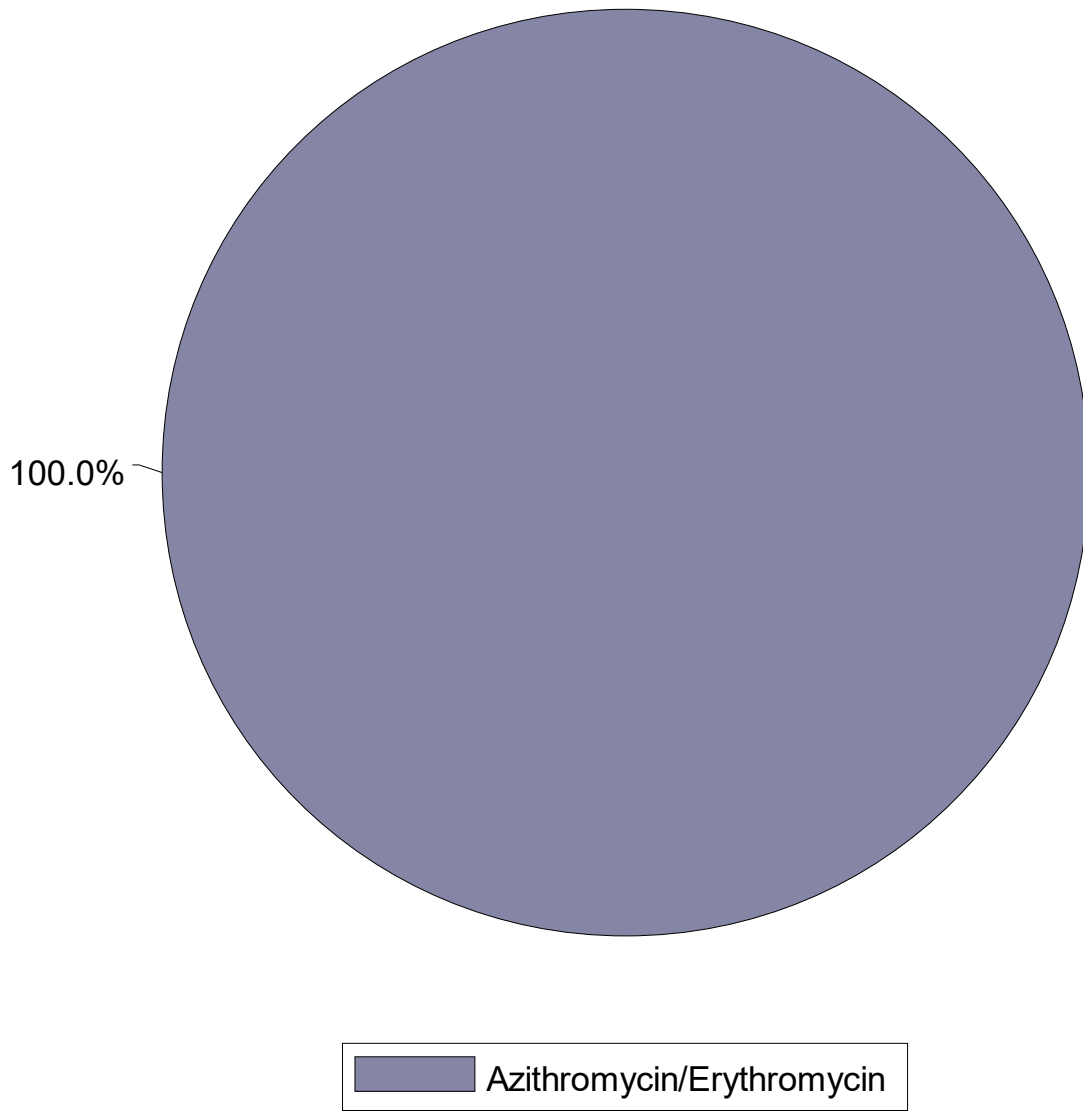
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2020



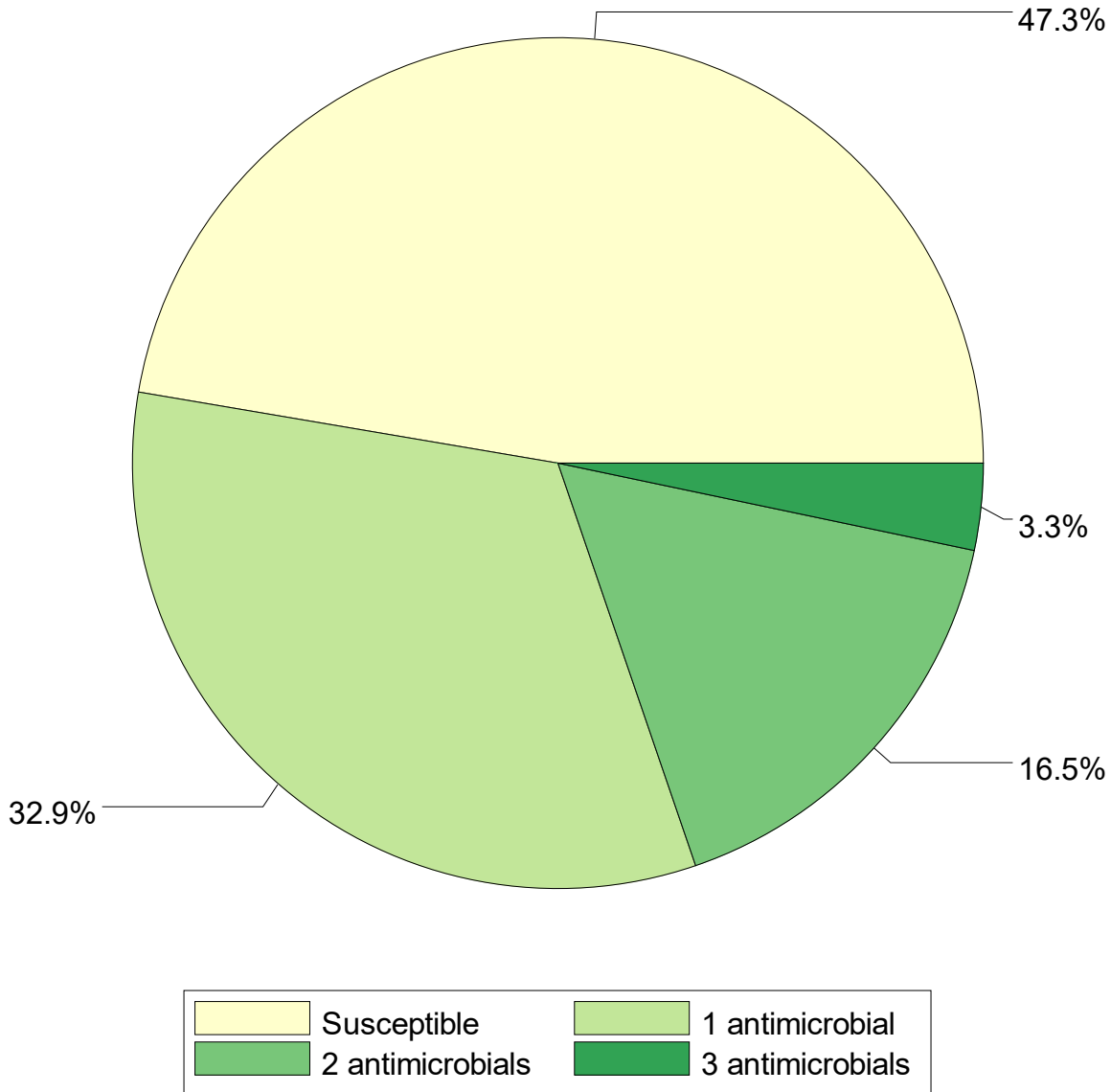
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	239	99.6
Gentamicin	1	0.4

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	240	100.0

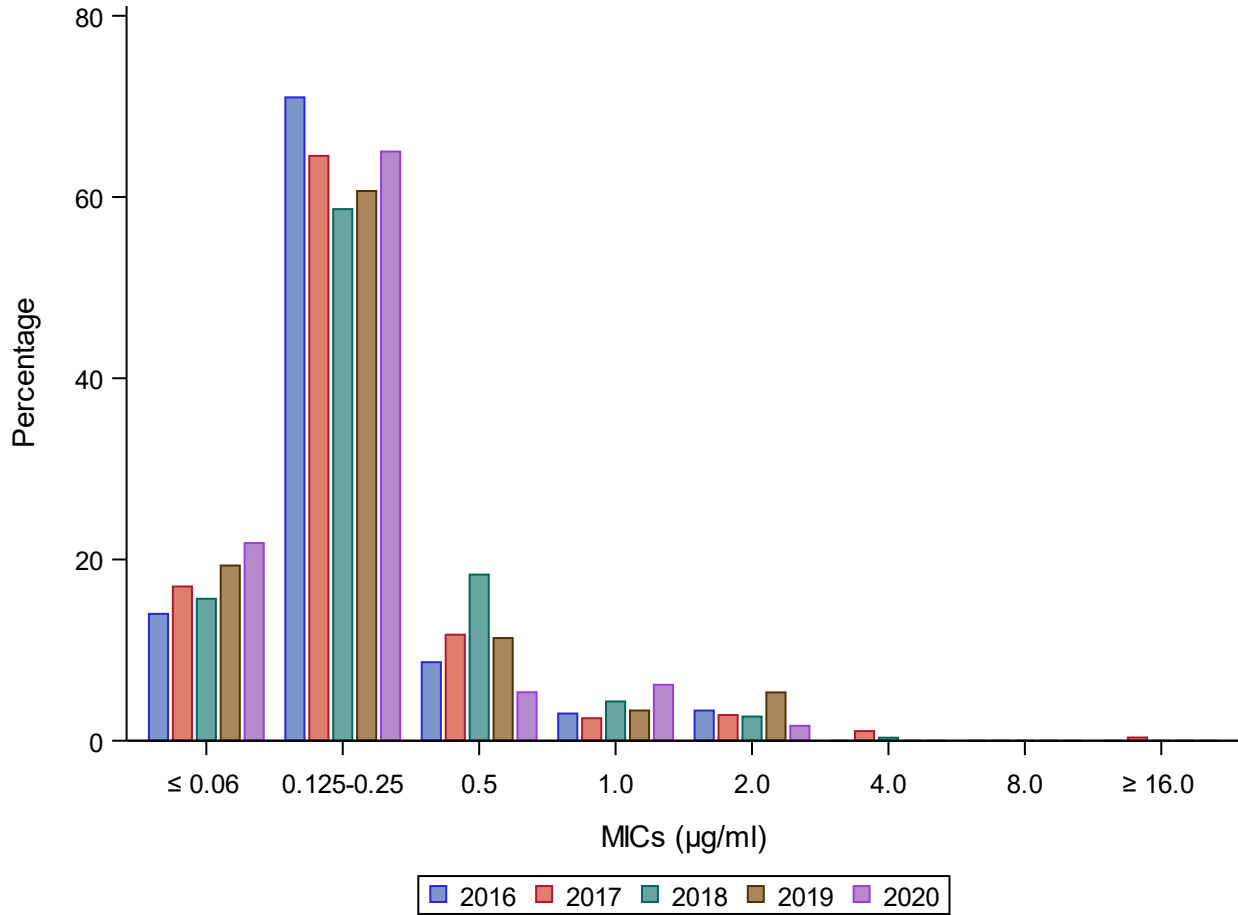
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	115	47.3
1 antimicrobial	80	32.9
2 antimicrobials	40	16.5
3 antimicrobials	8	3.3
4+ antimicrobials	0	0.0

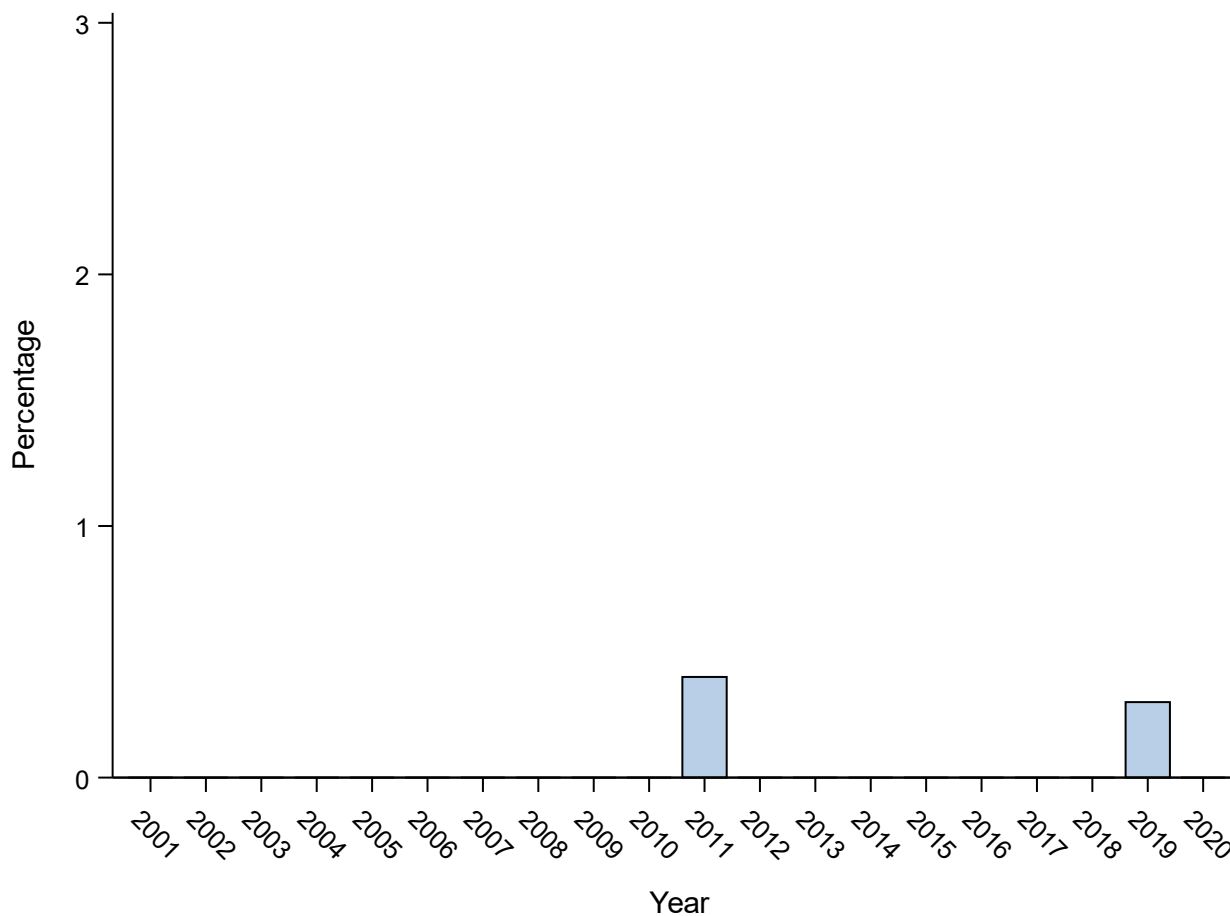
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/mL}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2016-2020



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
2016	42 (14.0)	213 (71.0)	26 (8.7)	9 (3.0)	10 (3.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	48 (17.0)	182 (64.5)	33 (11.7)	7 (2.5)	8 (2.8)	3 (1.1)	0 (0.0)	1 (0.4)	282
2018	47 (15.7)	176 (58.7)	55 (18.3)	13 (4.3)	8 (2.7)	1 (0.3)	0 (0.0)	0 (0.0)	300
2019	58 (19.3)	182 (60.7)	34 (11.3)	10 (3.3)	16 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2020	53 (21.8)	158 (65.0)	13 (5.3)	15 (6.2)	4 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	243

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2001-2020

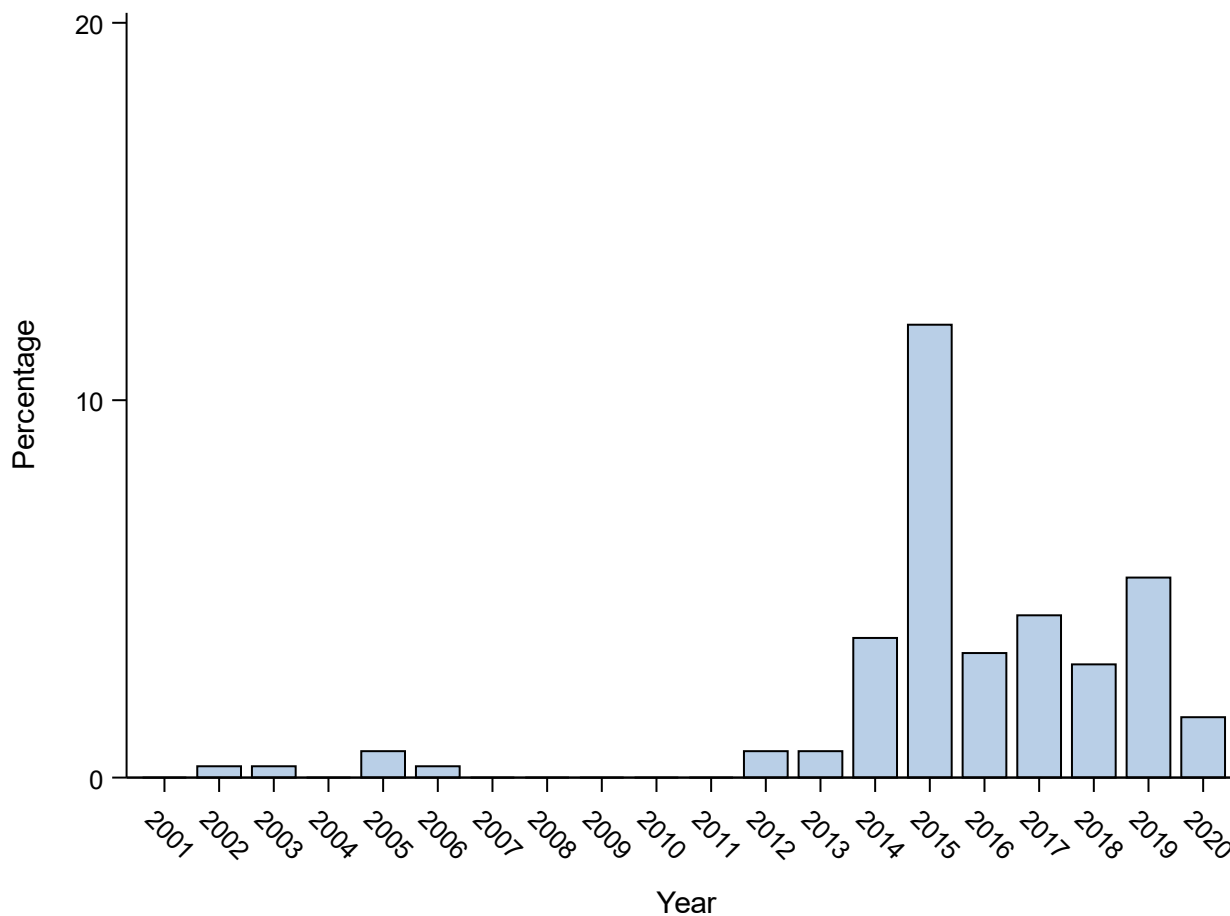


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Dallas, Texas, 2001-2020

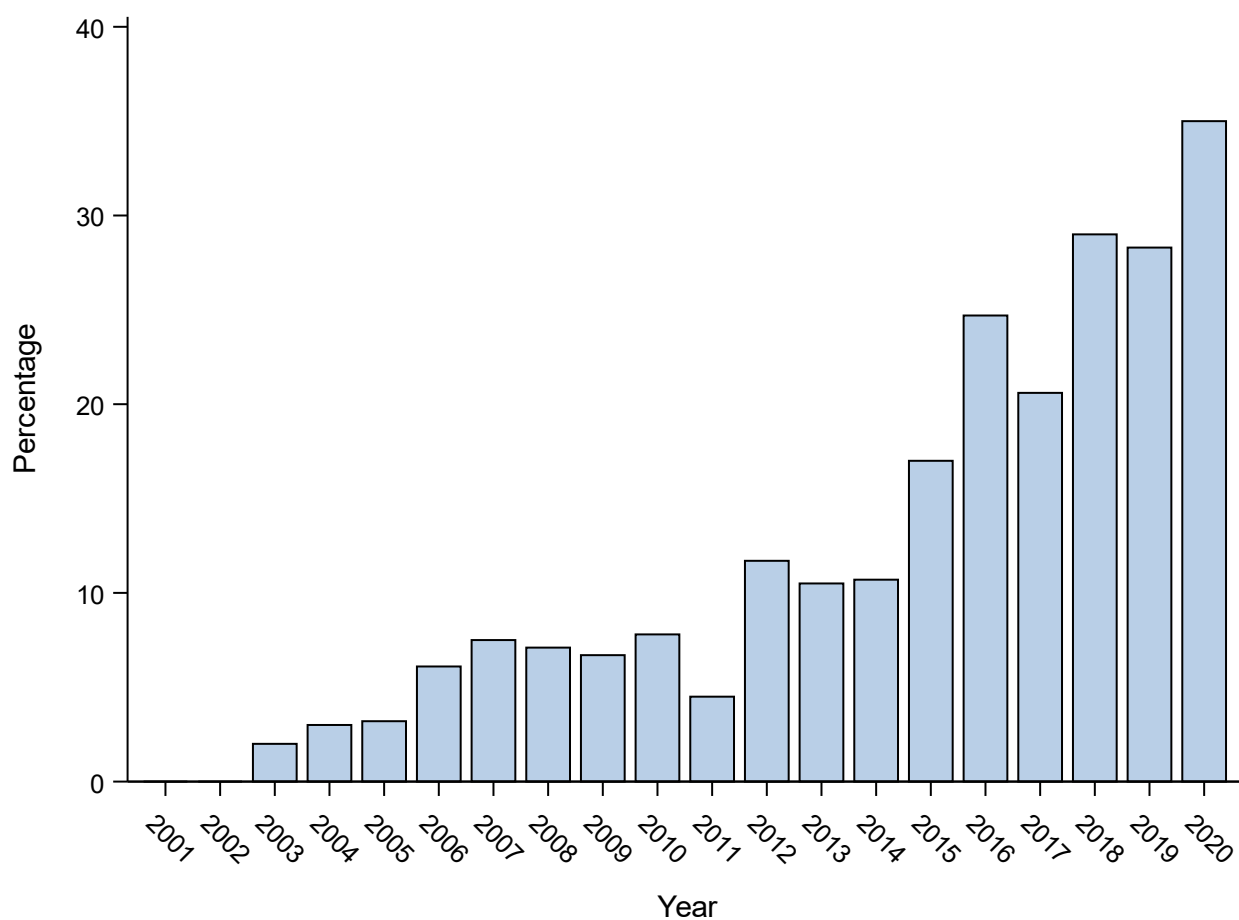


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.3)	1 (0.3)	0 (0.0)	2 (0.7)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	2 (0.7)	2 (0.7)	11 (3.7)	34 (12.0)	10 (3.3)	12 (4.3)	9 (3.0)	16 (5.3)	4 (1.6)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Dallas, Texas, 2001-2020

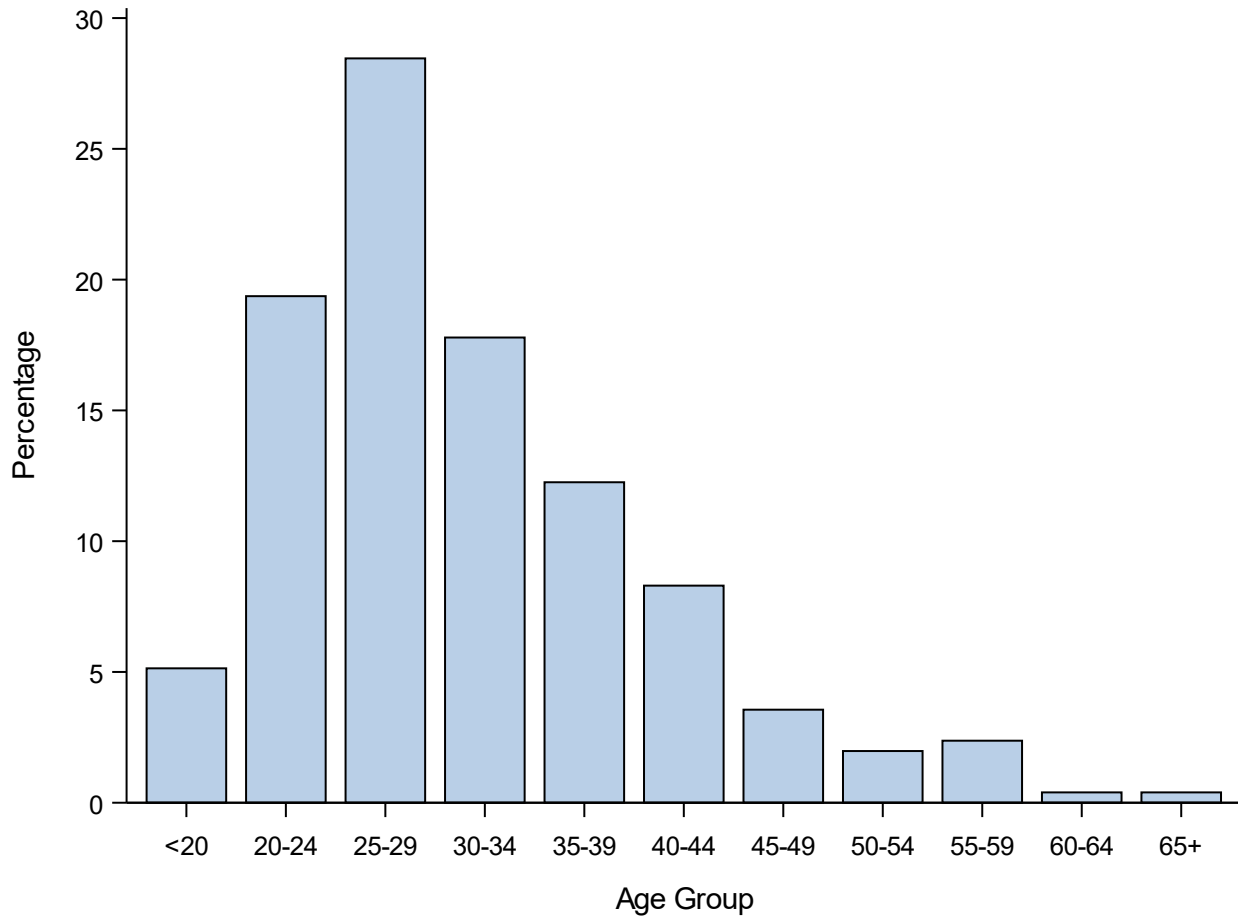


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	6 (2.0)	9 (3.0)	9 (3.2)	18 (6.1)	22 (7.5)	21 (7.1)	20 (6.7)	23 (7.8)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
12 (4.5)	33 (11.7)	30 (10.5)	32 (10.7)	48 (17.0)	74 (24.7)	58 (20.6)	87 (29.0)	85 (28.3)	85 (35.0)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

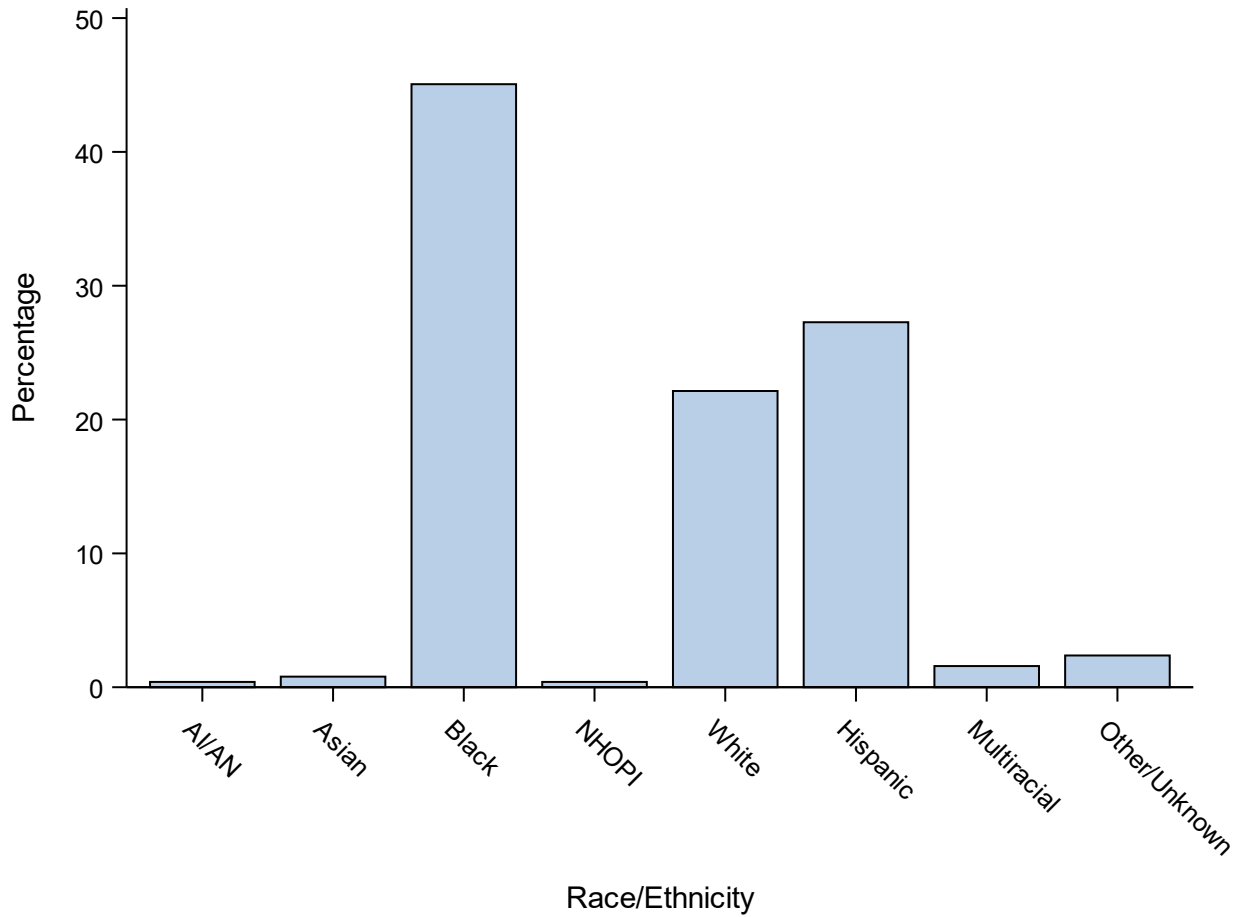
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
13 (5.1)	49 (19.4)	72 (28.5)	45 (17.8)	31 (12.3)	21 (8.3)	9 (3.6)	5 (2.0)	6 (2.4)	1 (0.4)	1 (0.4)	253

Note: Cases with unknown age were excluded.

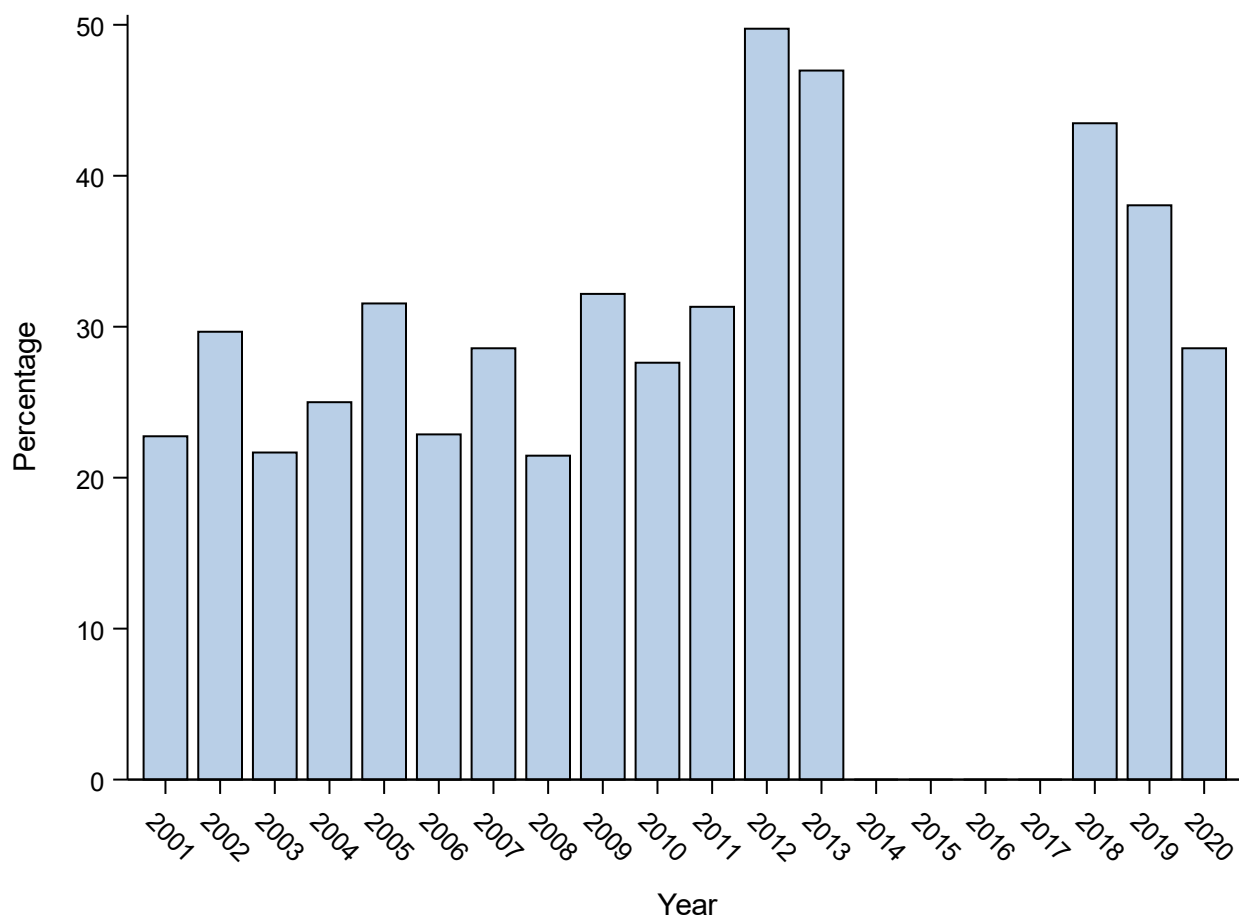
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (0.4)	2 (0.8)	114 (45.1)	1 (0.4)	56 (22.1)	69 (27.3)	4 (1.6)	6 (2.4)	253

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2001-2020

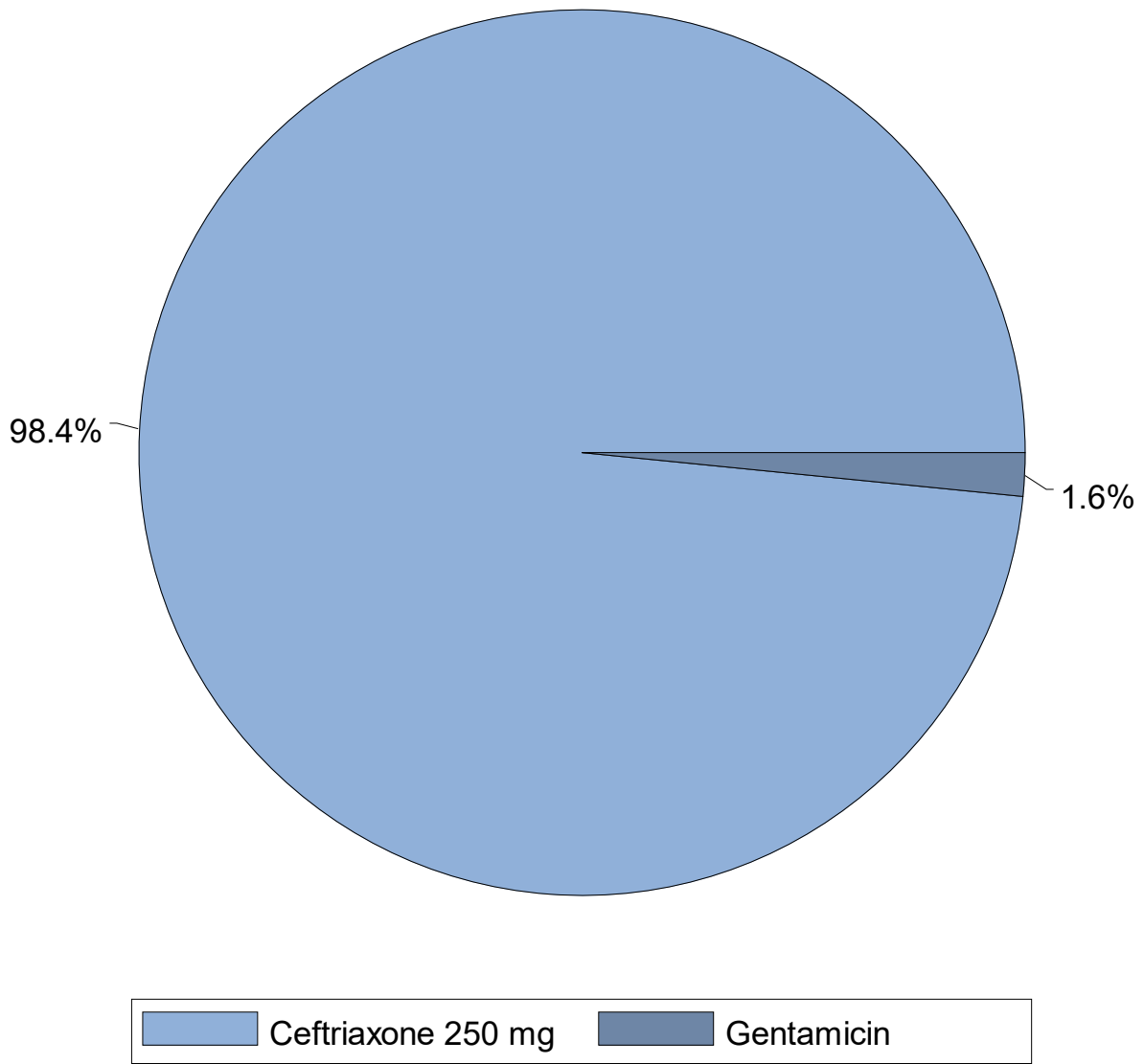


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
68 (22.7)	89 (29.7)	65 (21.7)	75 (25.0)	88 (31.5)	67 (22.9)	62 (28.6)	53 (21.5)	74 (32.2)	66 (27.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
57 (31.3)	96 (49.7)	93 (47.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	50 (43.5)	105 (38.0)	70 (28.6)

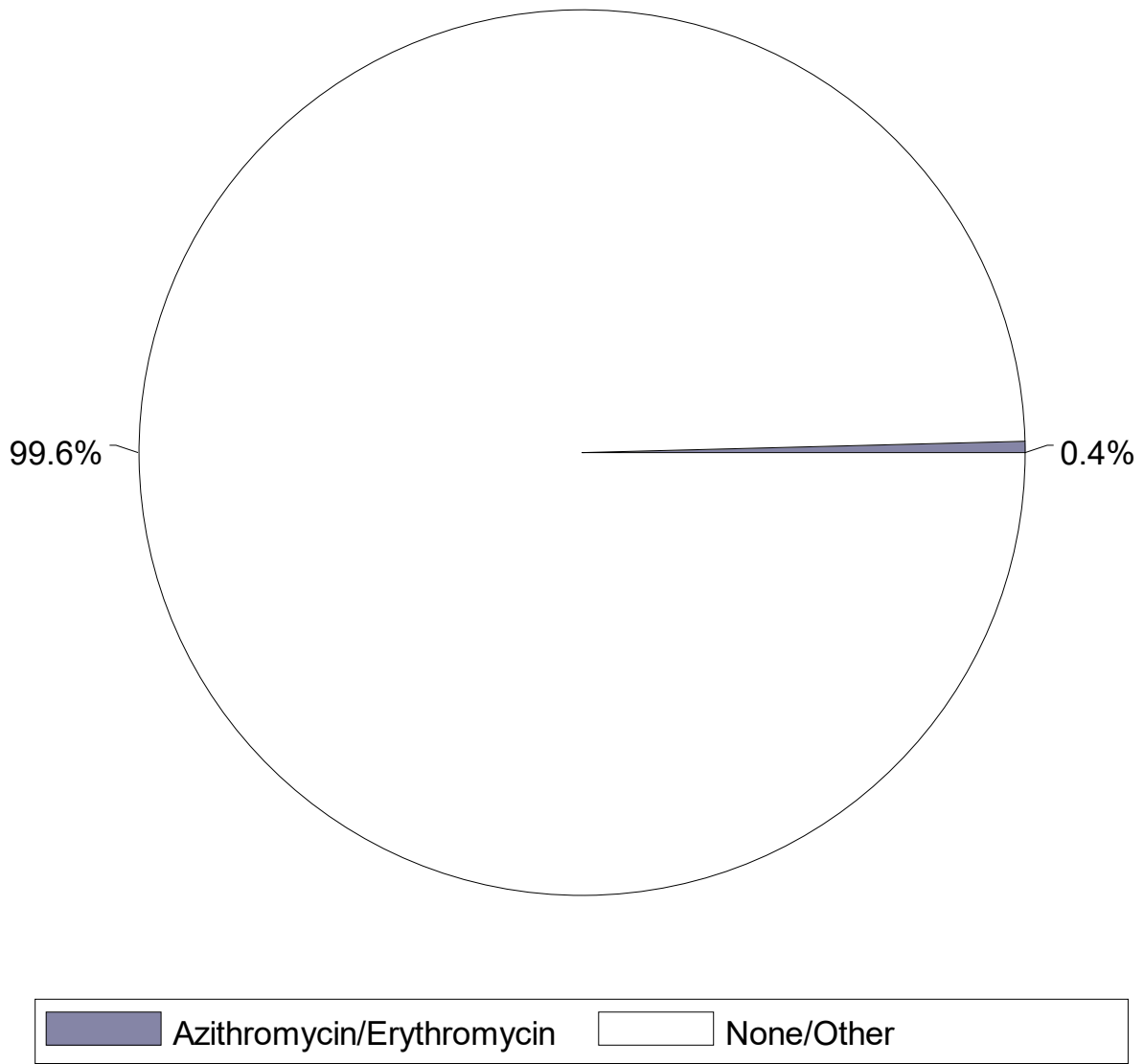
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2020



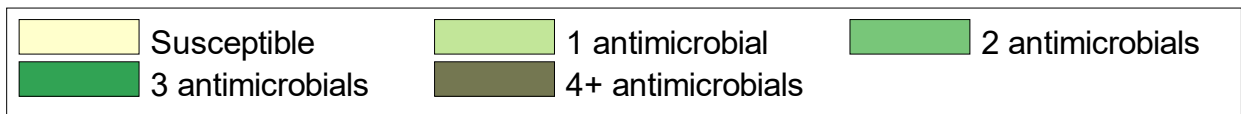
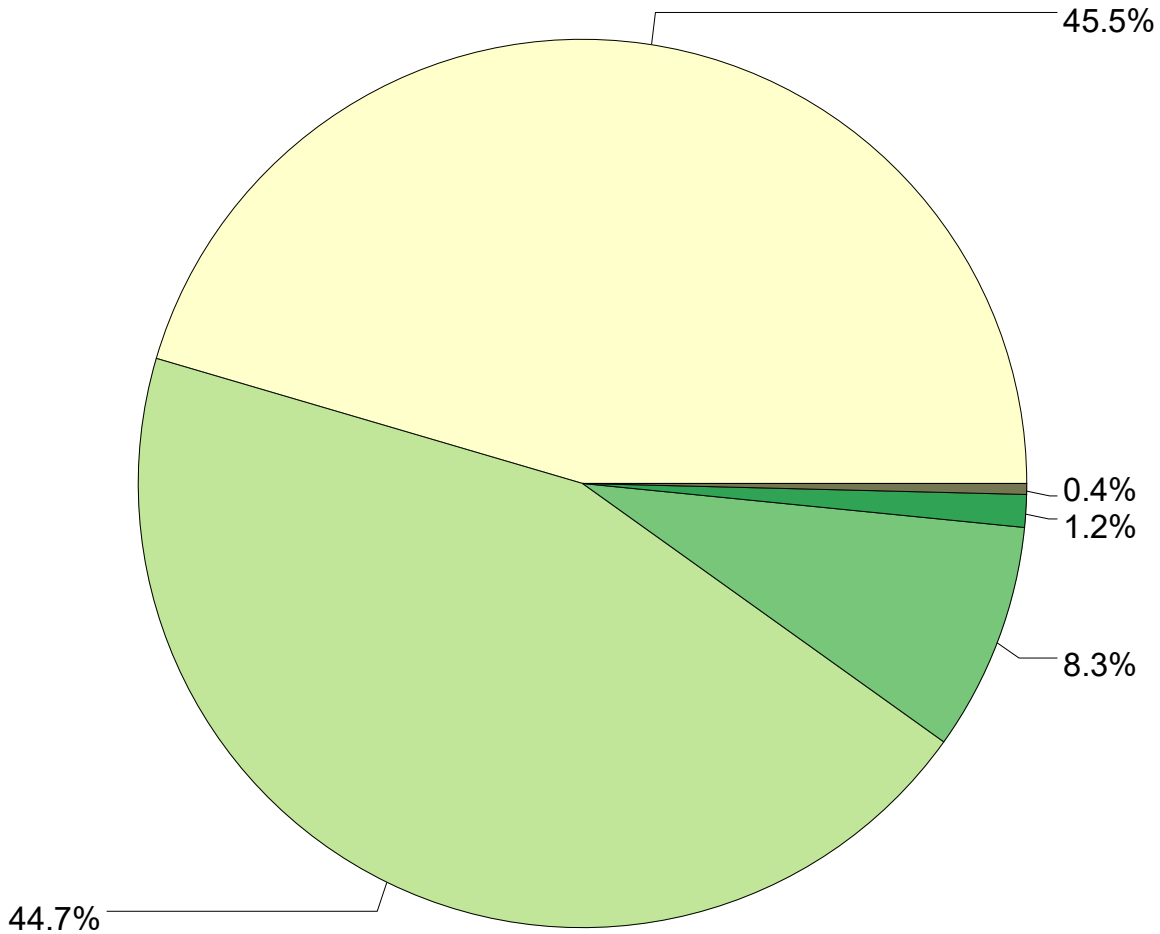
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	249	98.4
Gentamicin	4	1.6

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	1	0.4
None/Other	244	99.6

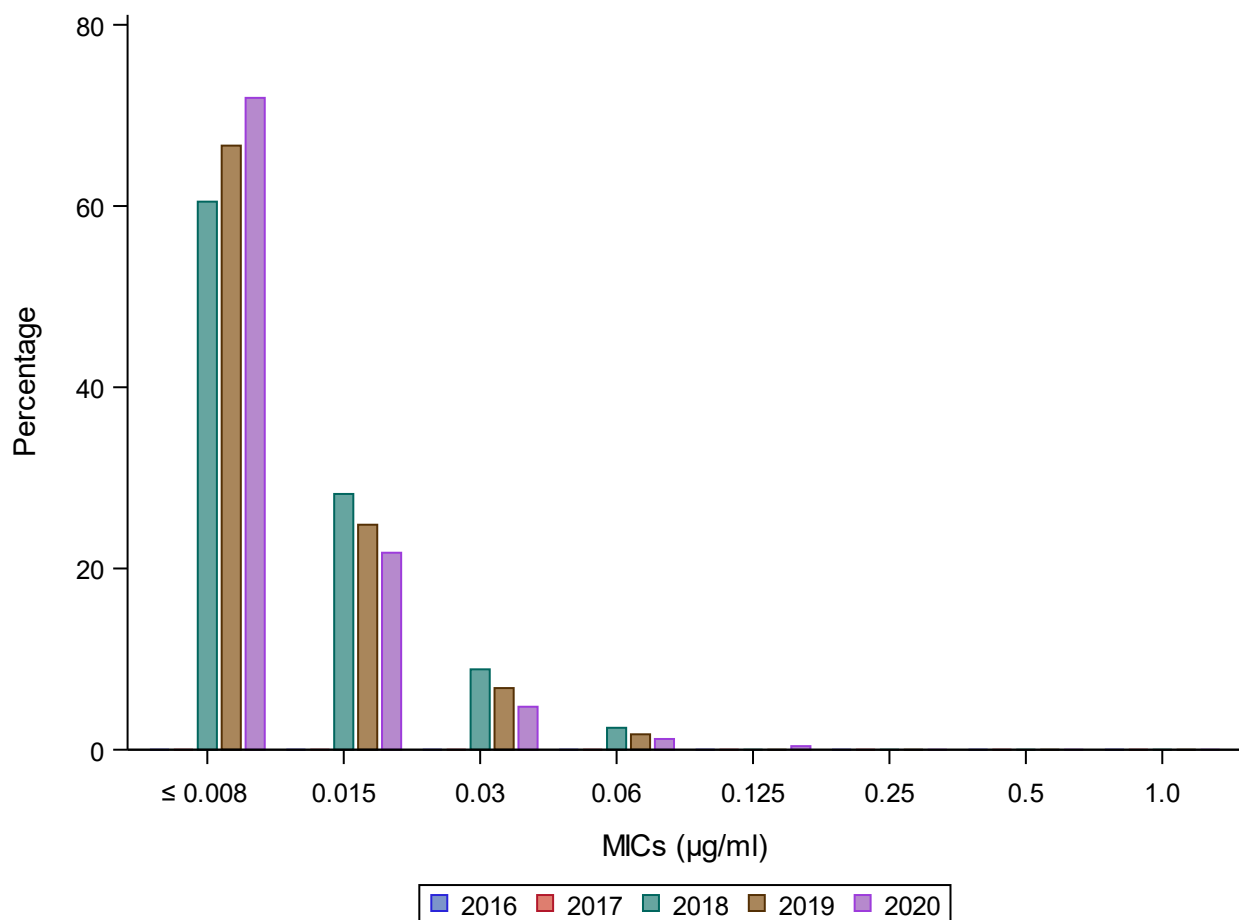
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	115	45.5
1 antimicrobial	113	44.7
2 antimicrobials	21	8.3
3 antimicrobials	3	1.2
4+ antimicrobials	1	0.4

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

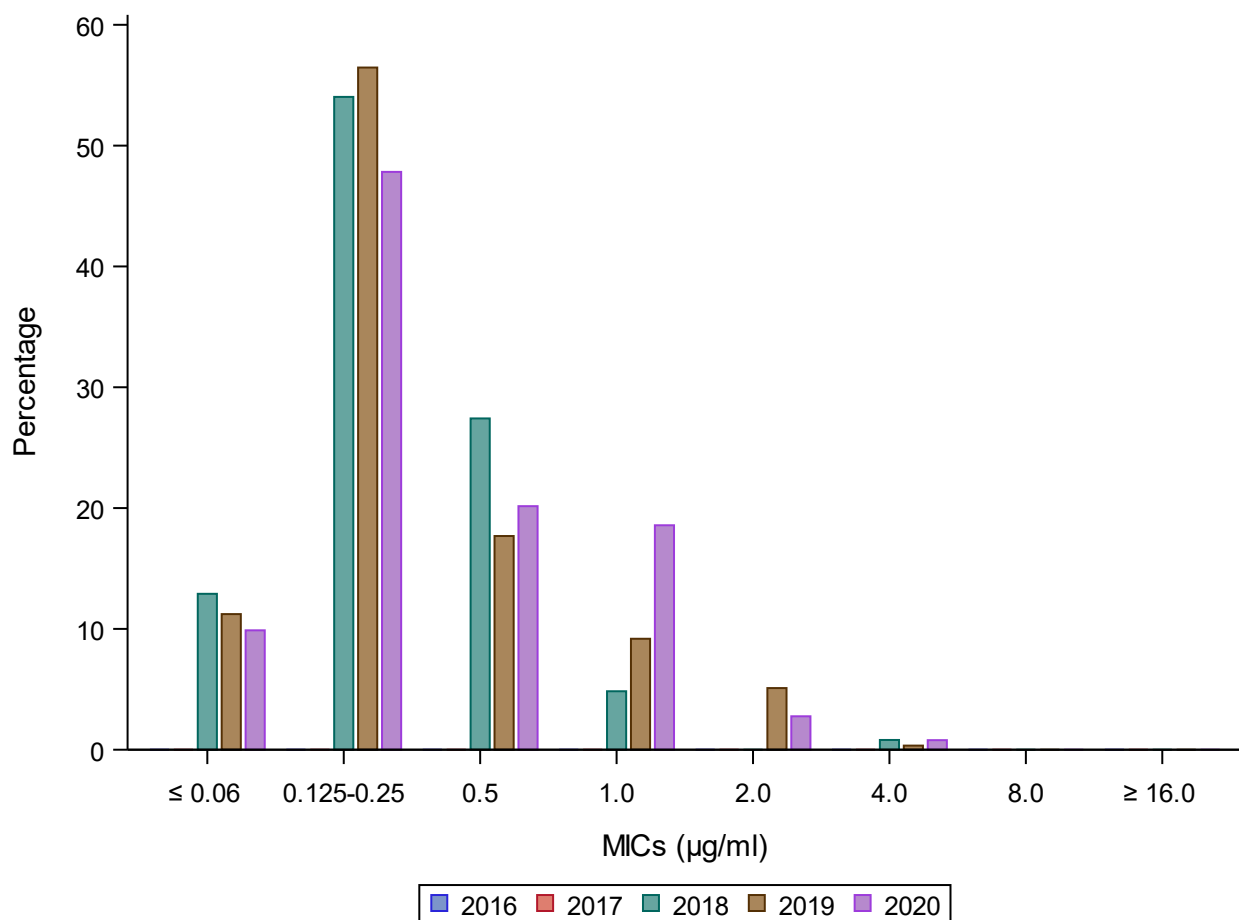
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2016-2020



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
2016	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
2017	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
2018	75 (60.5)	35 (28.2)	11 (8.9)	3 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	124
2019	196 (66.7)	73 (24.8)	20 (6.8)	5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	294
2020	182 (71.9)	55 (21.7)	12 (4.7)	3 (1.2)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	253

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

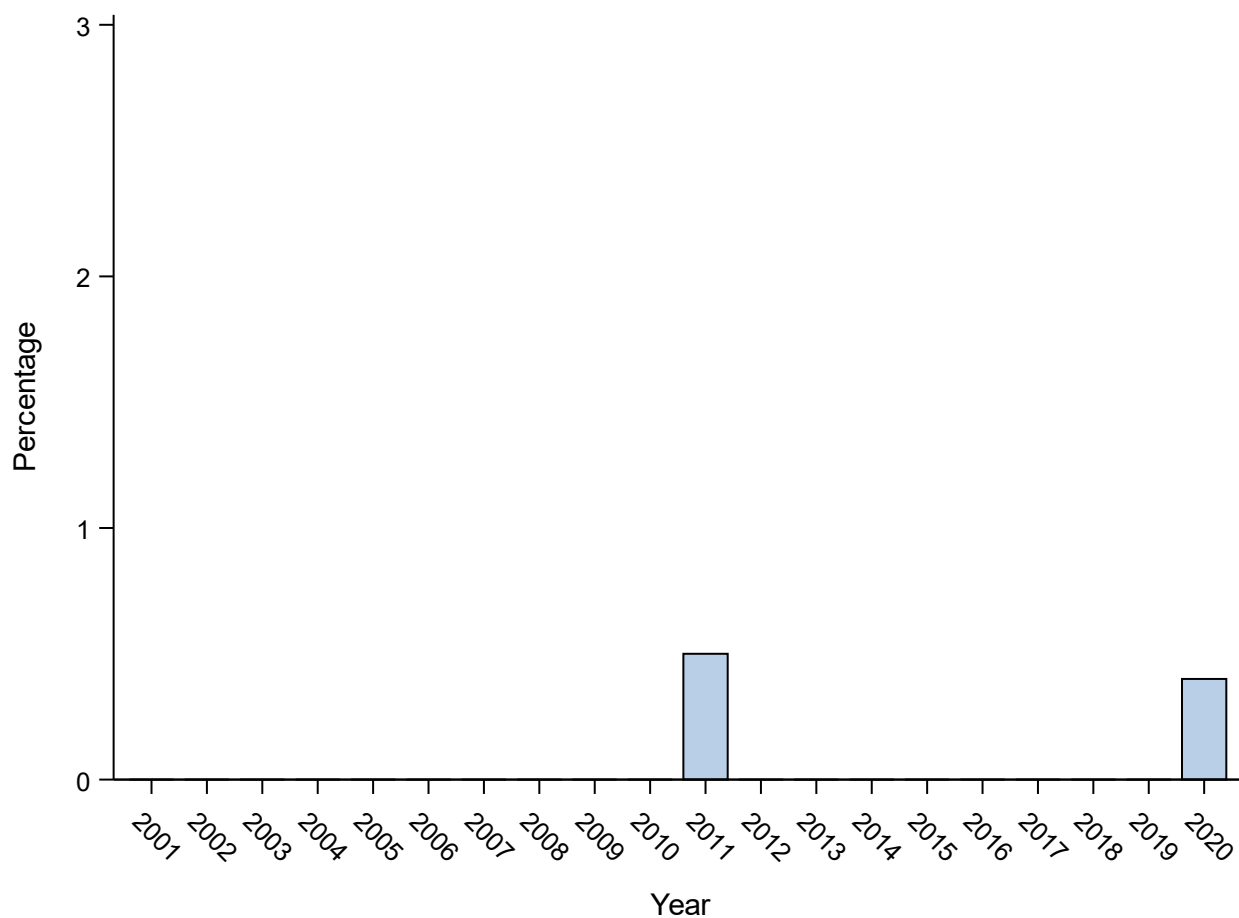
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2016-2020



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
2016	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
2017	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
2018	16 (12.9)	67 (54.0)	34 (27.4)	6 (4.8)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	124
2019	33 (11.2)	166 (56.5)	52 (17.7)	27 (9.2)	15 (5.1)	1 (0.3)	0 (0.0)	0 (0.0)	294
2020	25 (9.9)	121 (47.8)	51 (20.2)	47 (18.6)	7 (2.8)	2 (0.8)	0 (0.0)	0 (0.0)	253

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2001-2020

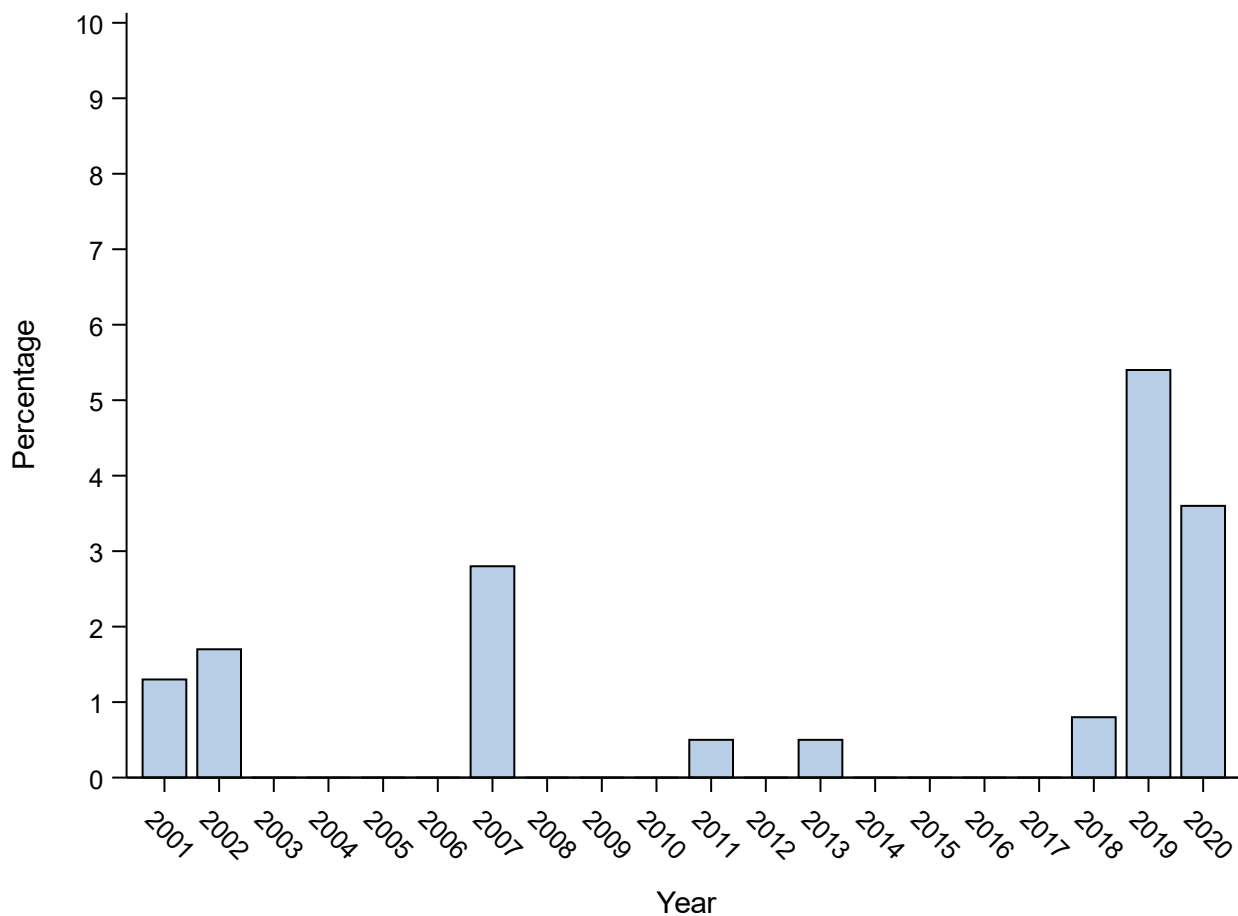


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2001-2020

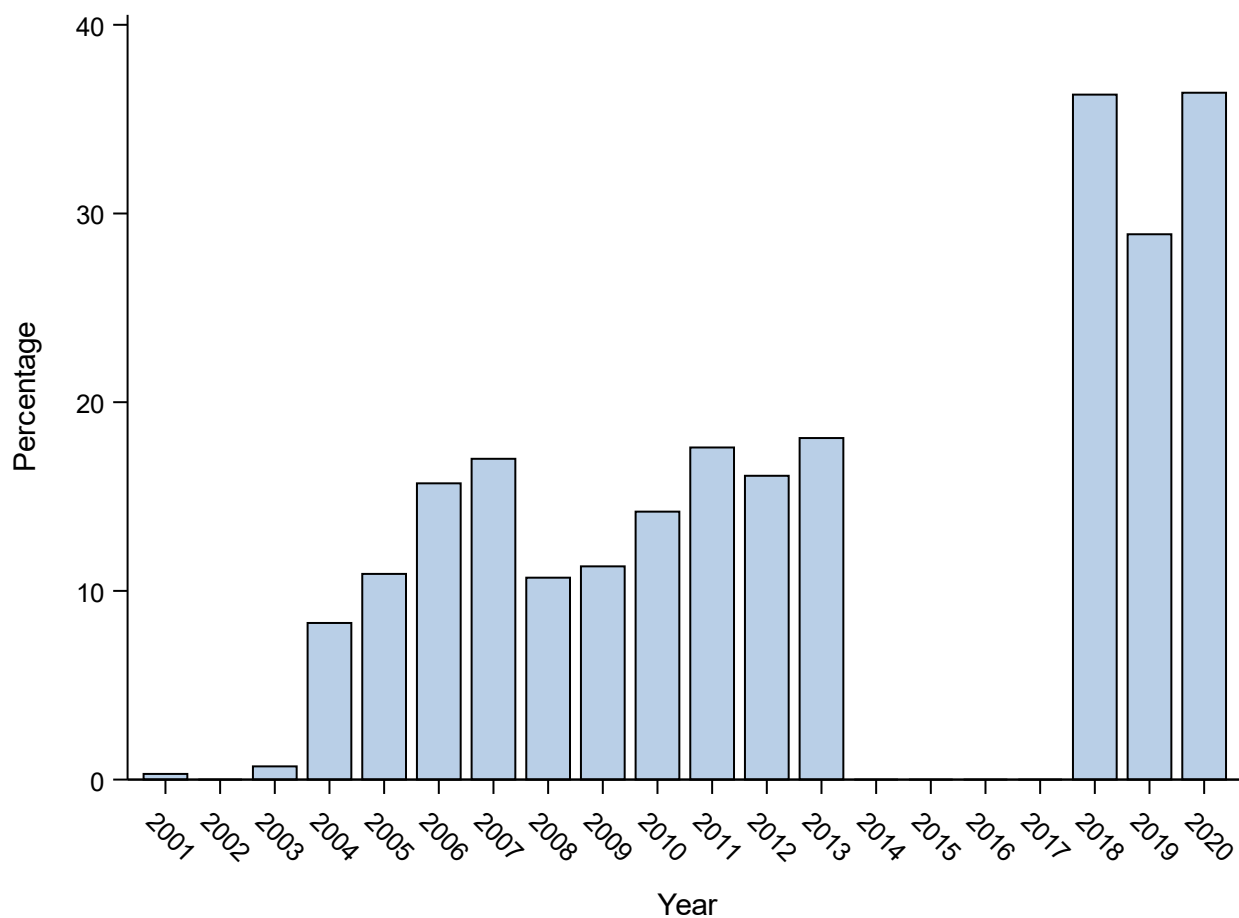


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
4 (1.3)	5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (2.8)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.8)	16 (5.4)	9 (3.6)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Denver, Colorado, 2001-2020

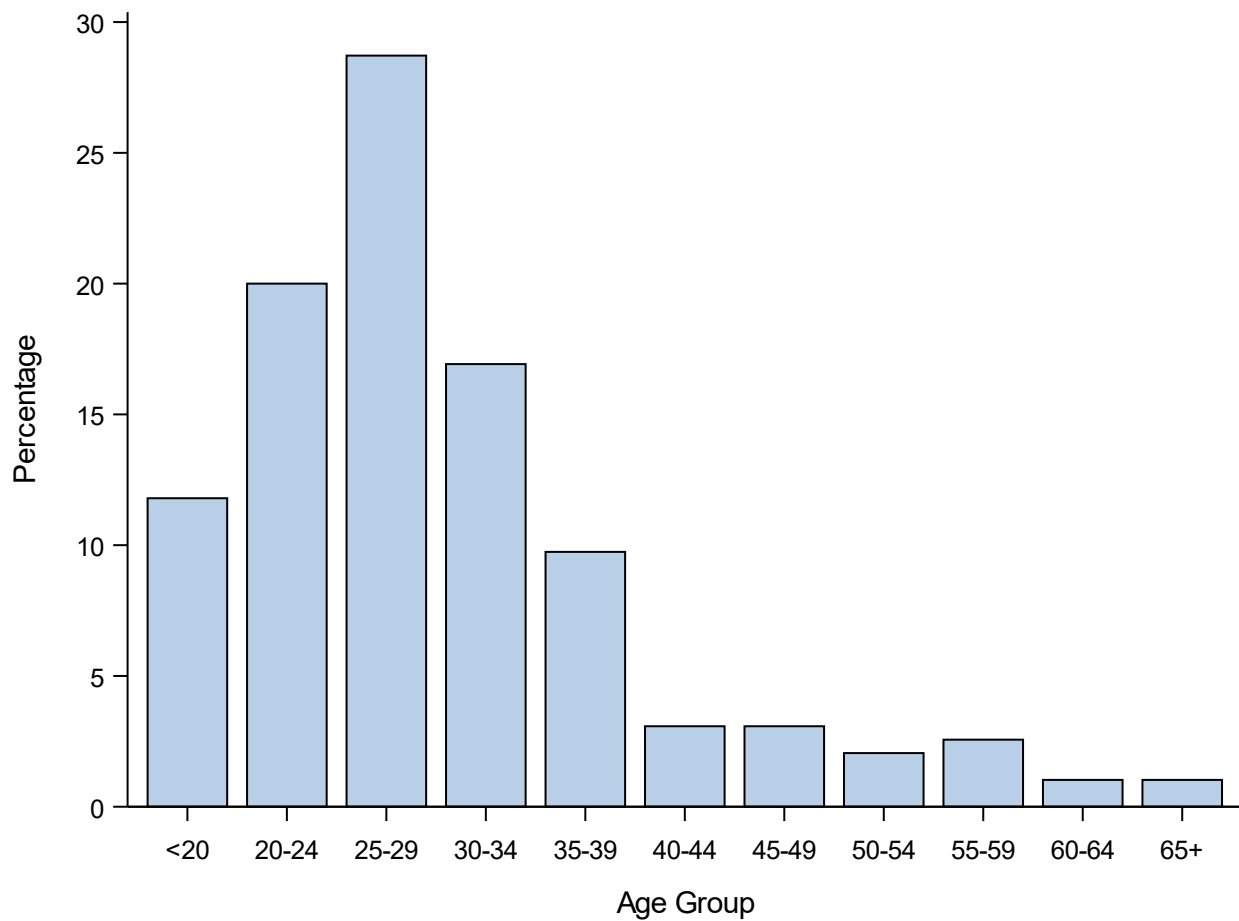


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.3)	0 (0.0)	2 (0.7)	25 (8.3)	31 (10.9)	46 (15.7)	37 (17.0)	27 (10.7)	26 (11.3)	34 (14.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
33 (17.6)	31 (16.1)	36 (18.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	45 (36.3)	85 (28.9)	92 (36.4)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

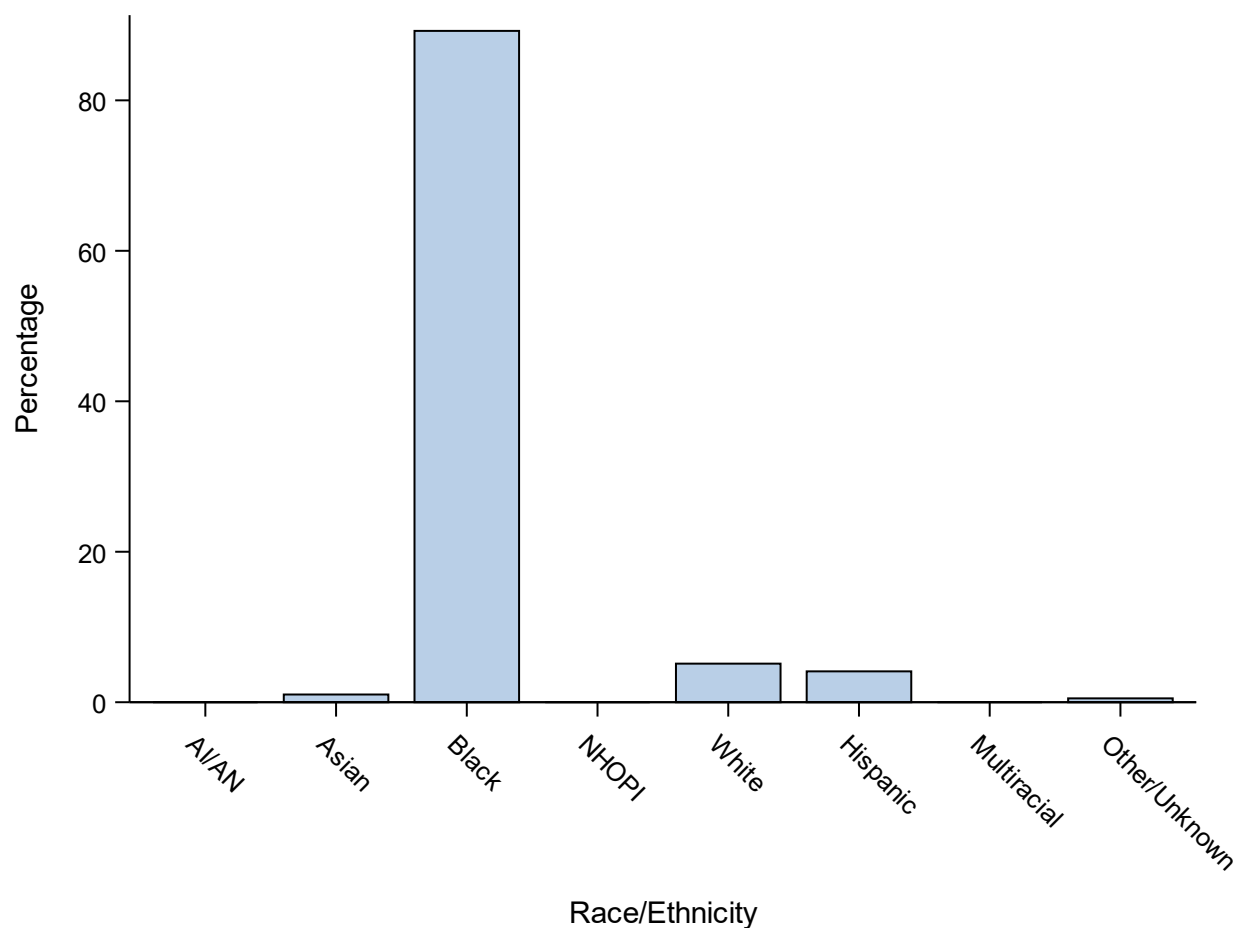
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
23 (11.8)	39 (20.0)	56 (28.7)	33 (16.9)	19 (9.7)	6 (3.1)	6 (3.1)	4 (2.1)	5 (2.6)	2 (1.0)	2 (1.0)	195

Note: Cases with unknown age were excluded.

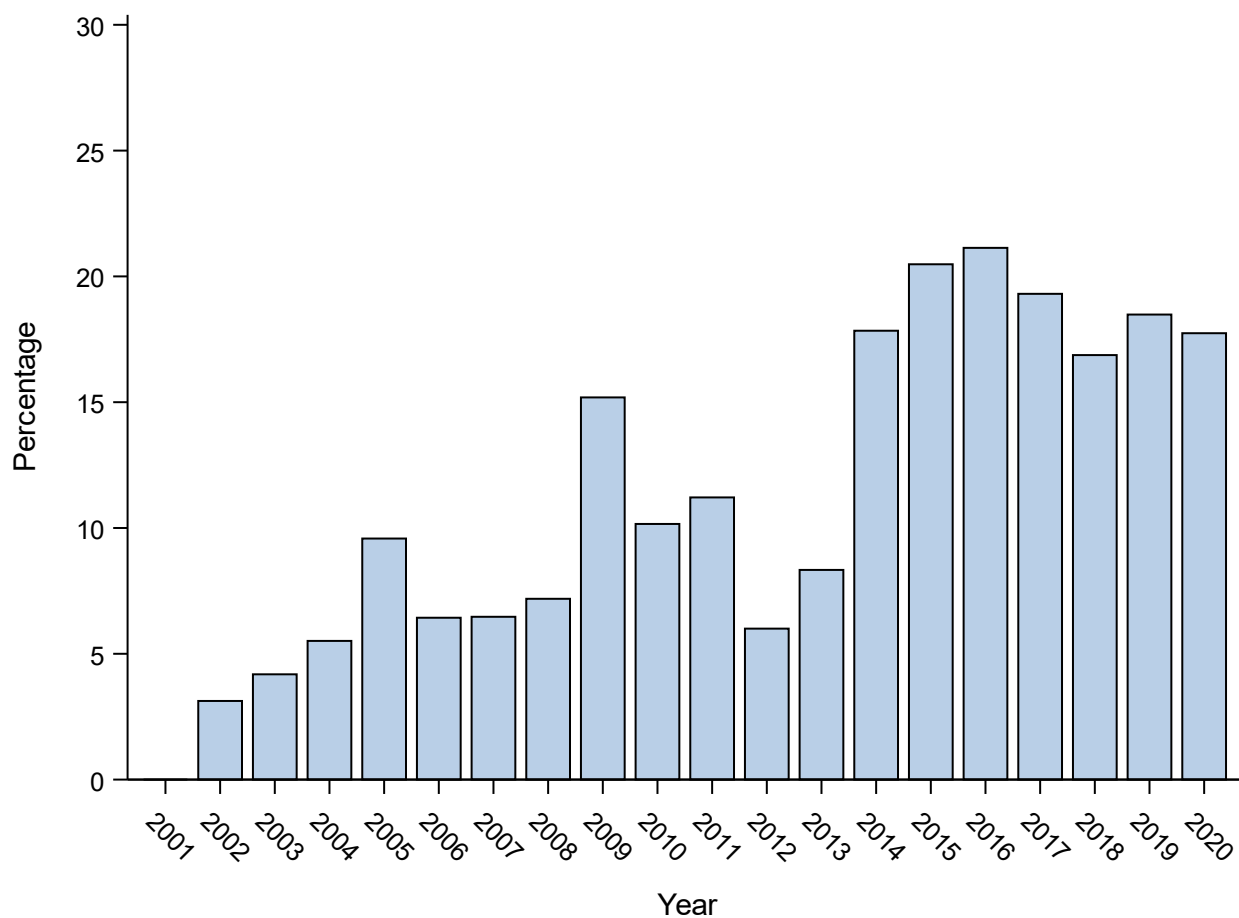
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	2 (1.0)	174 (89.2)	0 (0.0)	10 (5.1)	8 (4.1)	0 (0.0)	1 (0.5)	195

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2001-2020

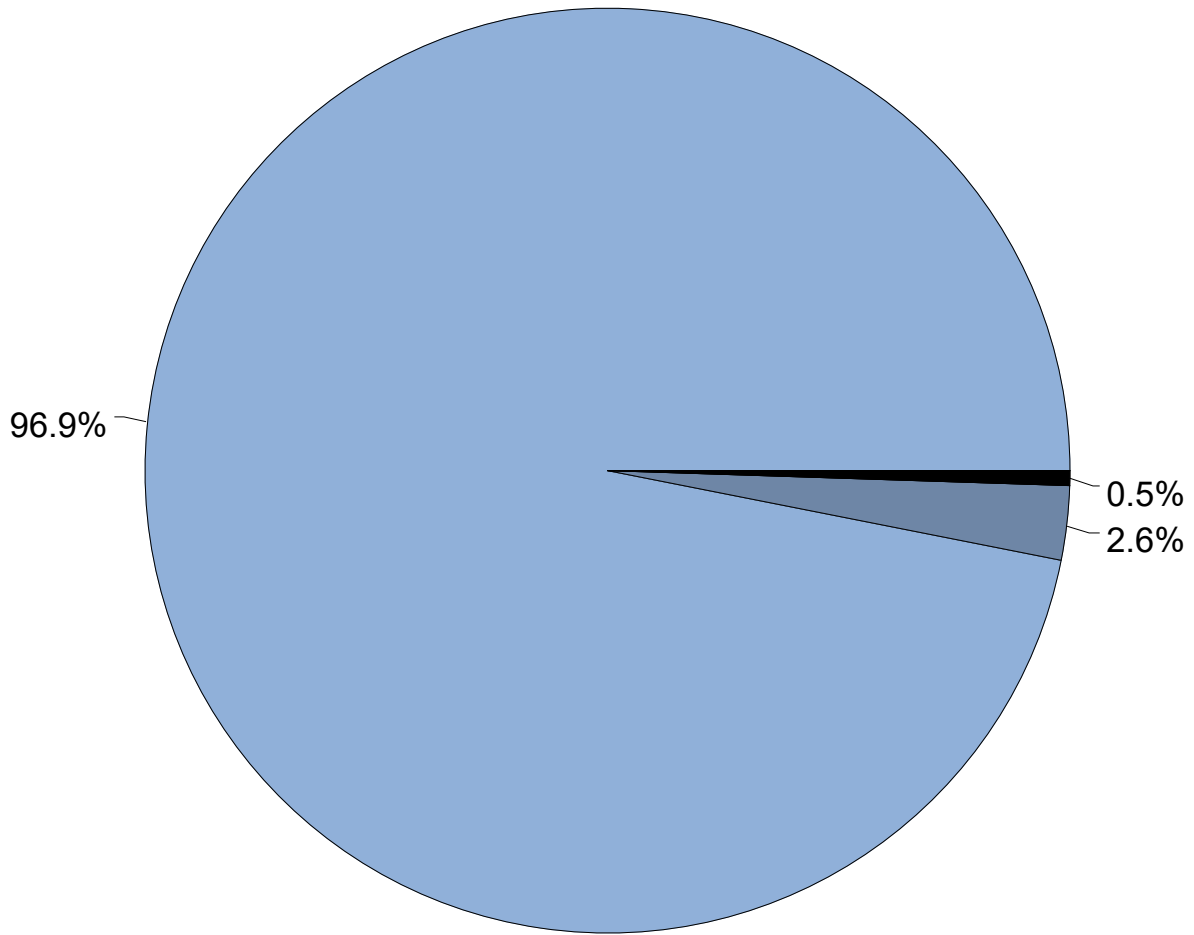


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (3.1)	10 (4.2)	7 (5.5)	16 (9.6)	11 (6.4)	11 (6.5)	12 (7.2)	24 (15.2)	19 (10.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
24 (11.2)	6 (6.0)	14 (8.3)	38 (17.8)	51 (20.5)	41 (21.1)	39 (19.3)	41 (16.9)	39 (18.5)	33 (17.7)

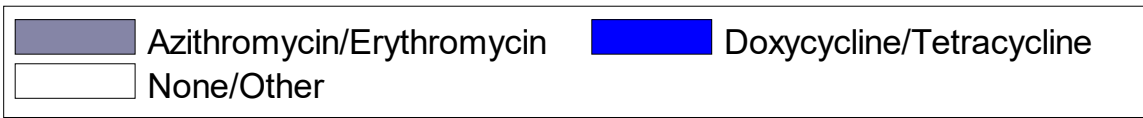
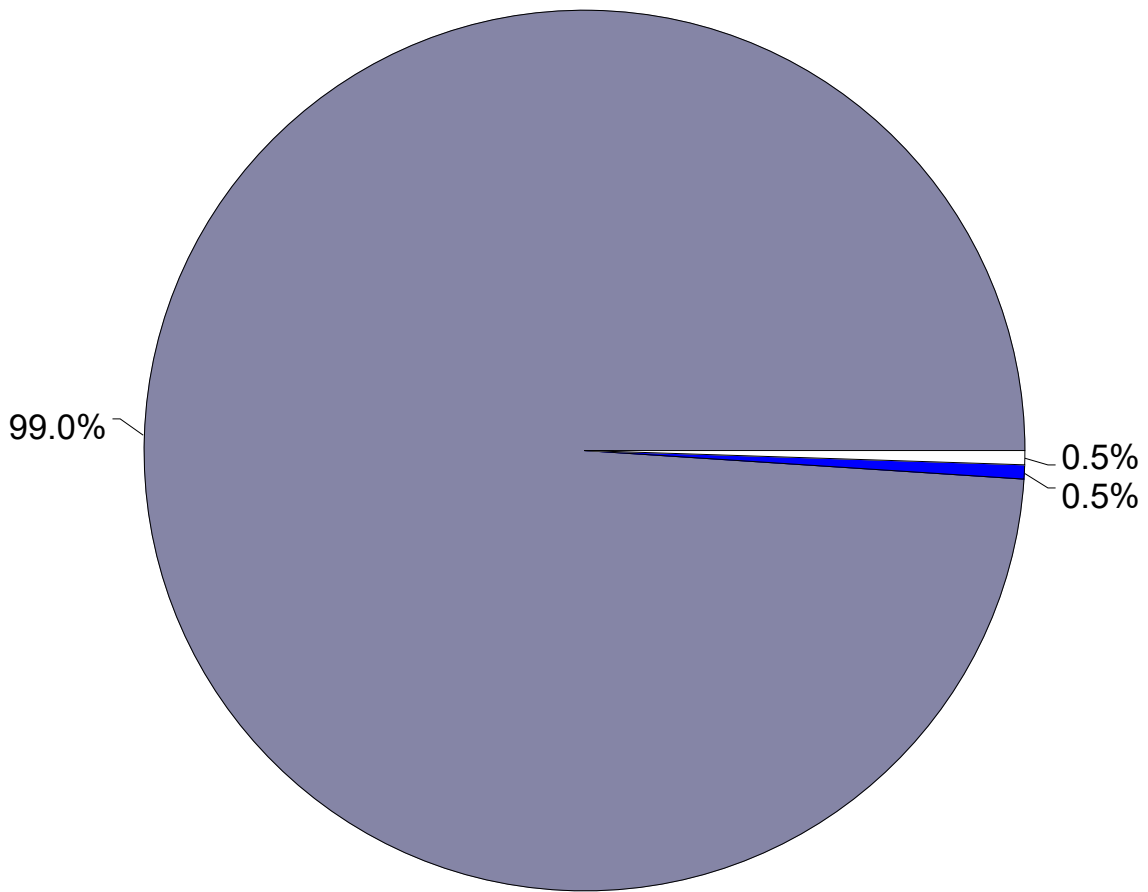
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2020



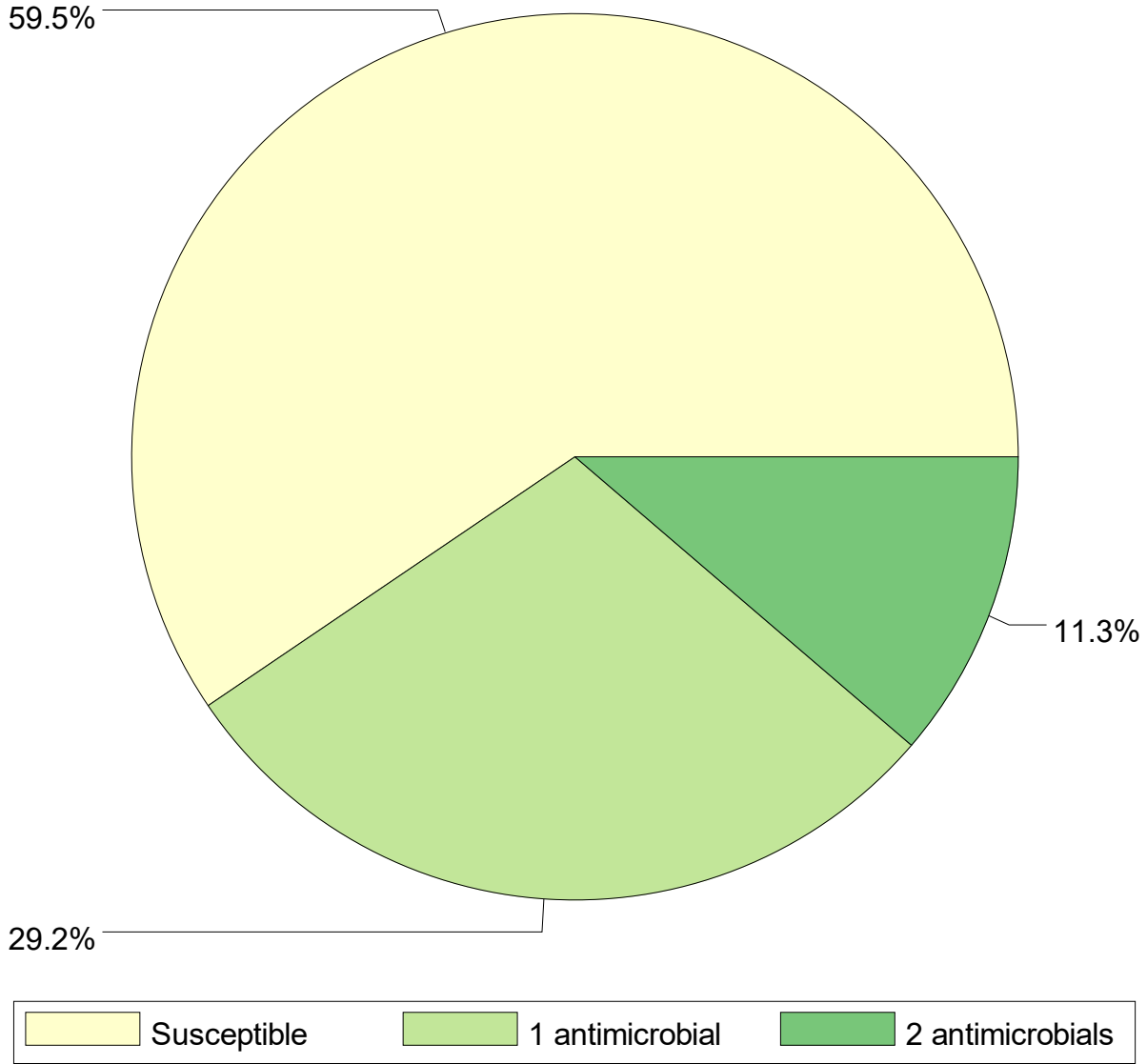
Primary Treatment	Count	Percentage
None	1	0.5
Ceftriaxone 250 mg	187	96.9
Gentamicin	5	2.6

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	192	99.0
Doxycycline/Tetracycline	1	0.5
None/Other	1	0.5

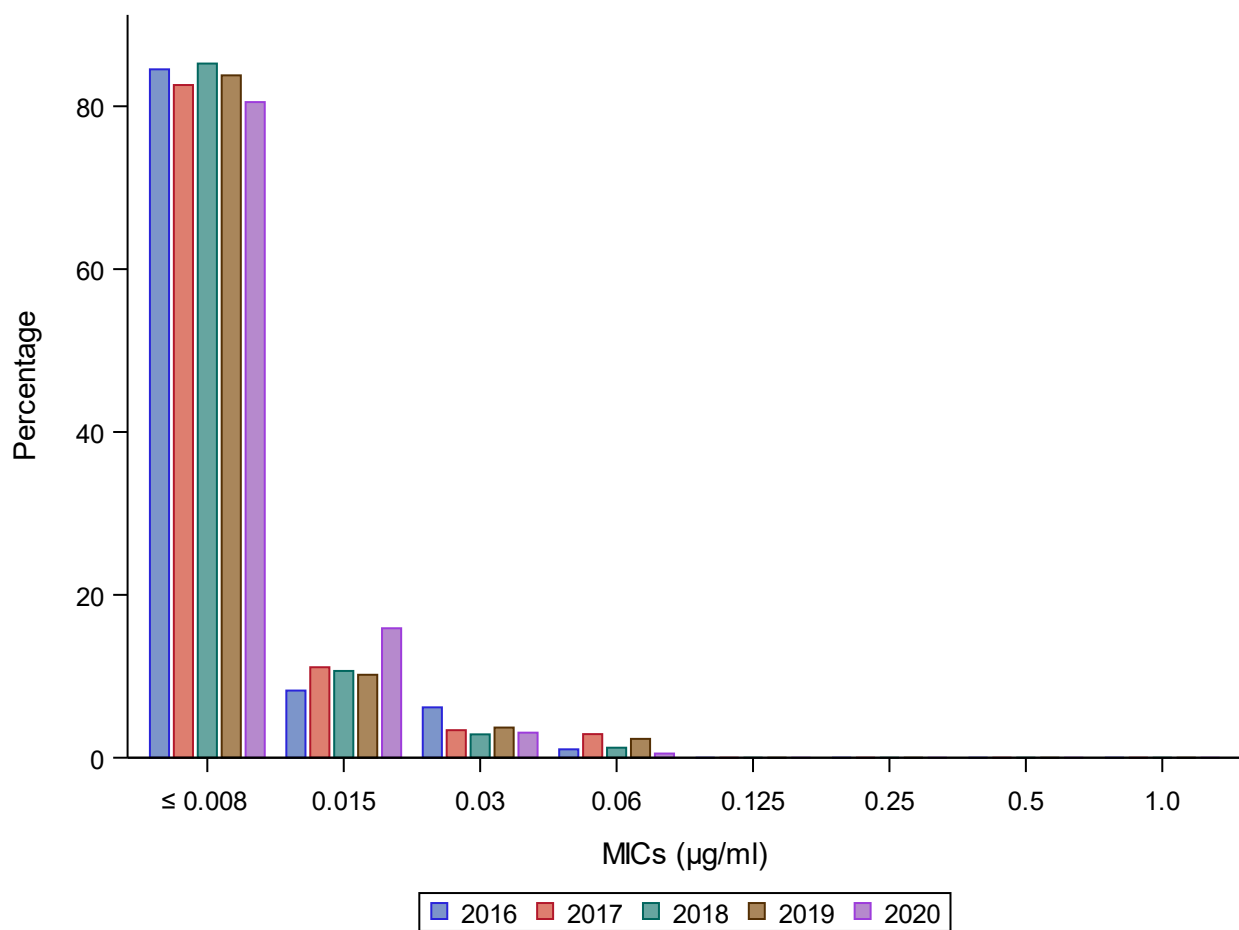
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	116	59.5
1 antimicrobial	57	29.2
2 antimicrobials	22	11.3
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

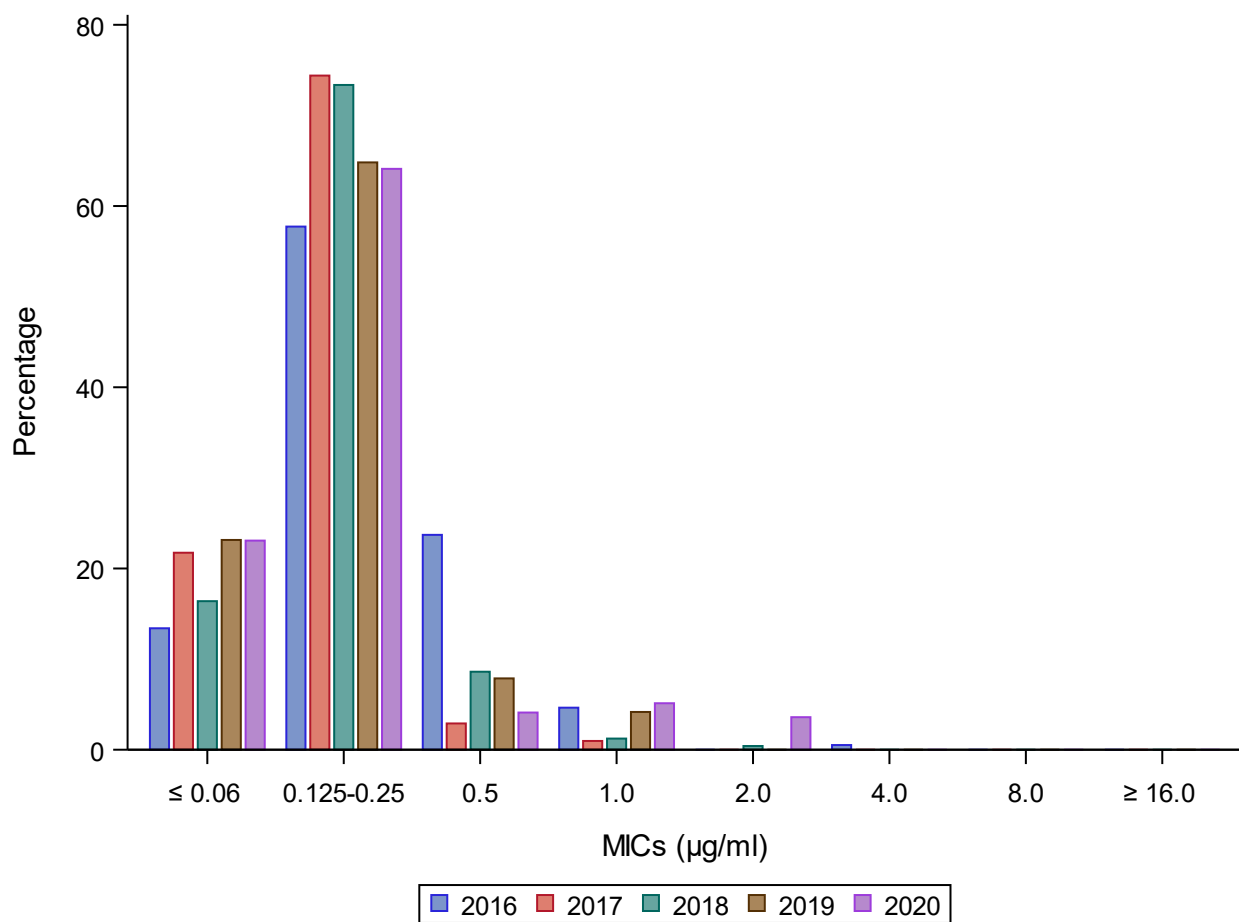
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2016-2020



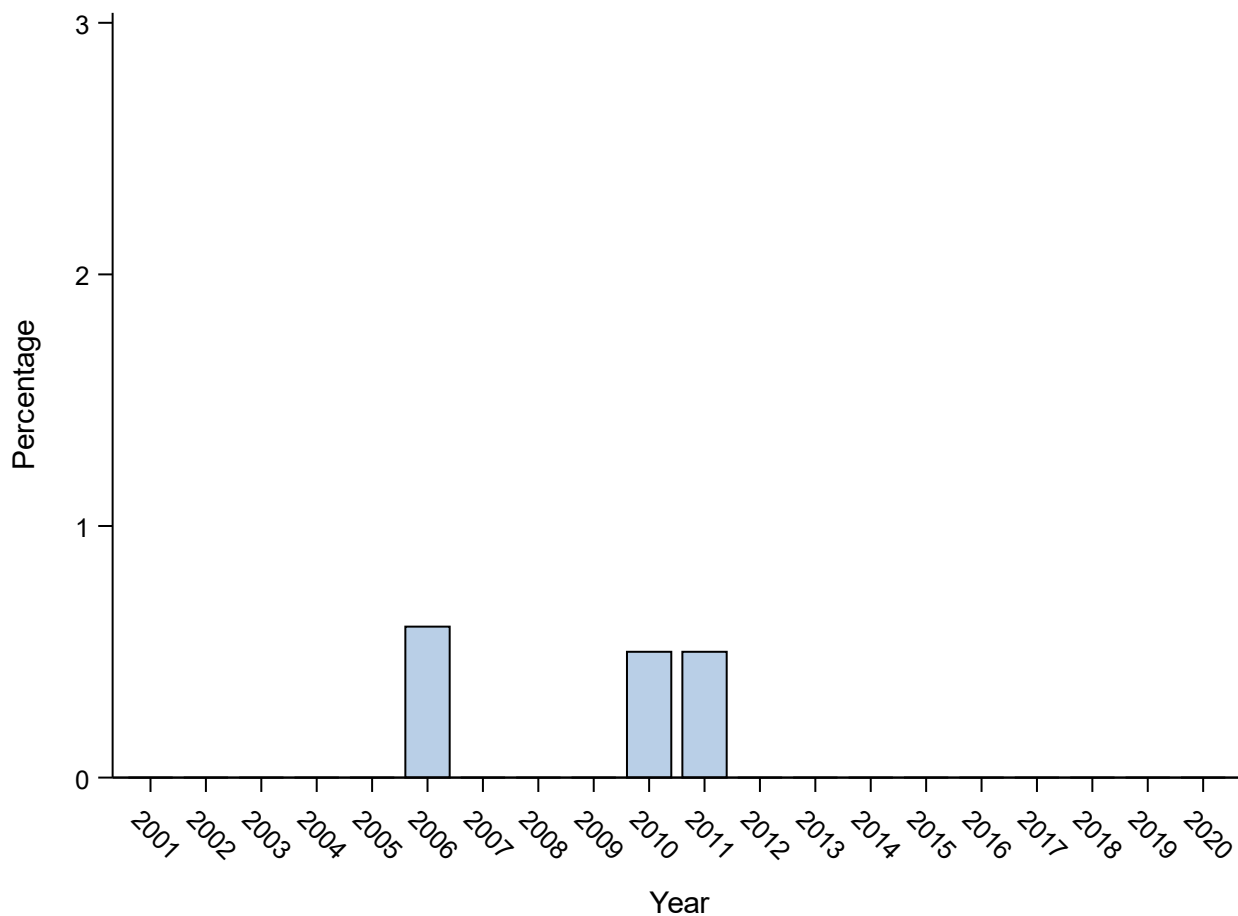
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	164 (84.5)	16 (8.2)	12 (6.2)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	194
2017	171 (82.6)	23 (11.1)	7 (3.4)	6 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	207
2018	208 (85.2)	26 (10.7)	7 (2.9)	3 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	244
2019	181 (83.8)	22 (10.2)	8 (3.7)	5 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	216
2020	157 (80.5)	31 (15.9)	6 (3.1)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	195

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2016-2020



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
2016	26 (13.4)	112 (57.7)	46 (23.7)	9 (4.6)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	194
2017	45 (21.7)	154 (74.4)	6 (2.9)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	207
2018	40 (16.4)	179 (73.4)	21 (8.6)	3 (1.2)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	244
2019	50 (23.1)	140 (64.8)	17 (7.9)	9 (4.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	216
2020	45 (23.1)	125 (64.1)	8 (4.1)	10 (5.1)	7 (3.6)	0 (0.0)	0 (0.0)	0 (0.0)	195

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2001-2020

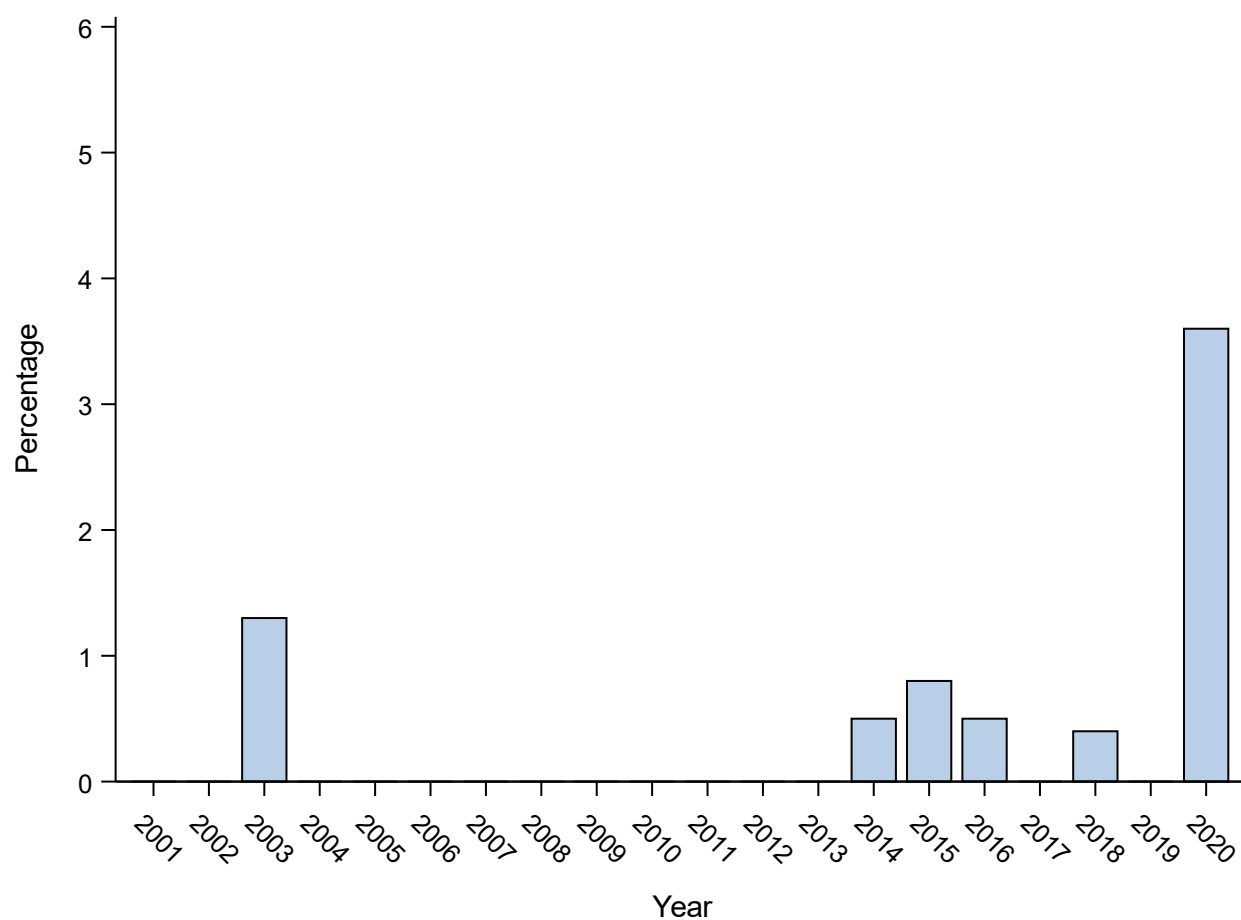


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	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 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2001-2020

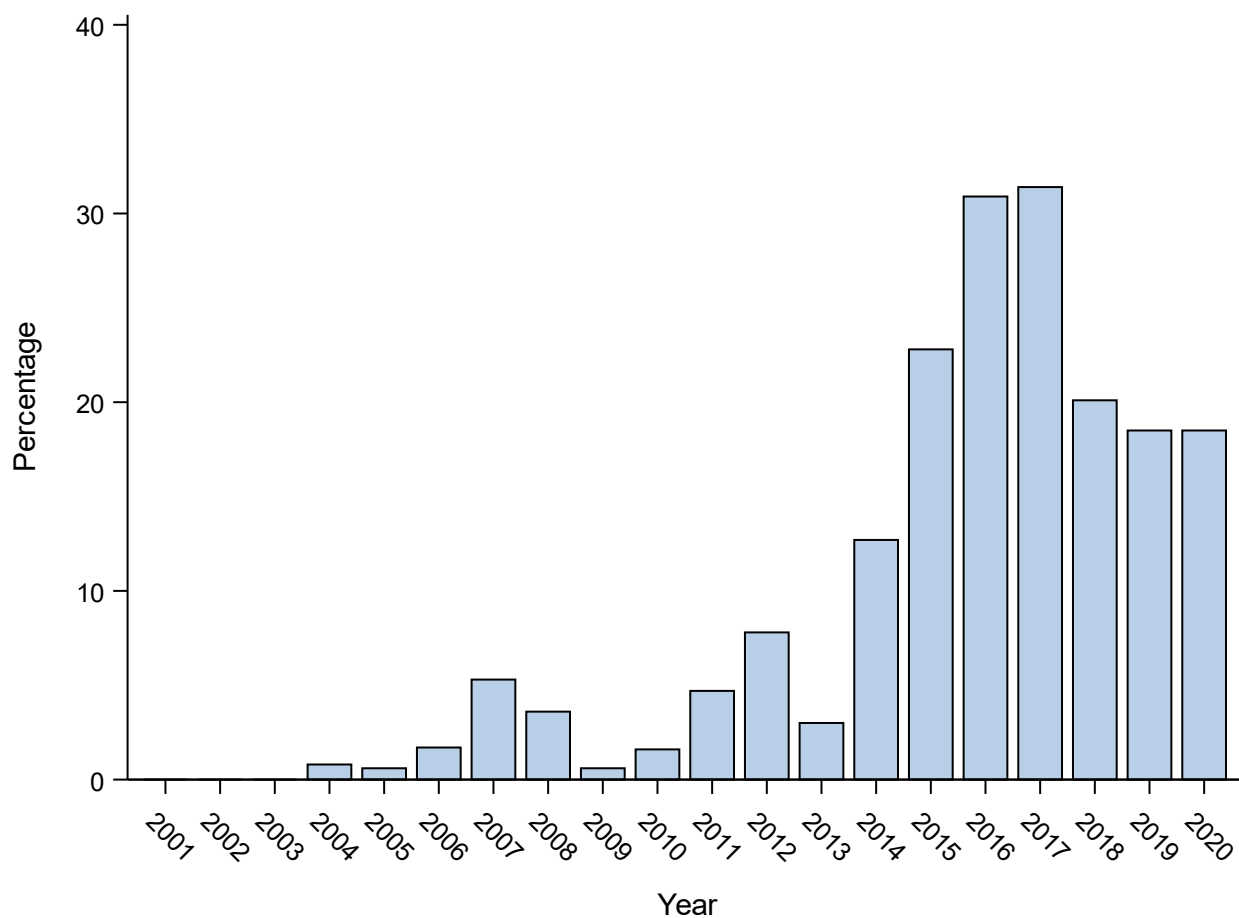


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	3 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	2 (0.8)	1 (0.5)	0 (0.0)	1 (0.4)	0 (0.0)	7 (3.6)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Greensboro, North Carolina, 2001-2020

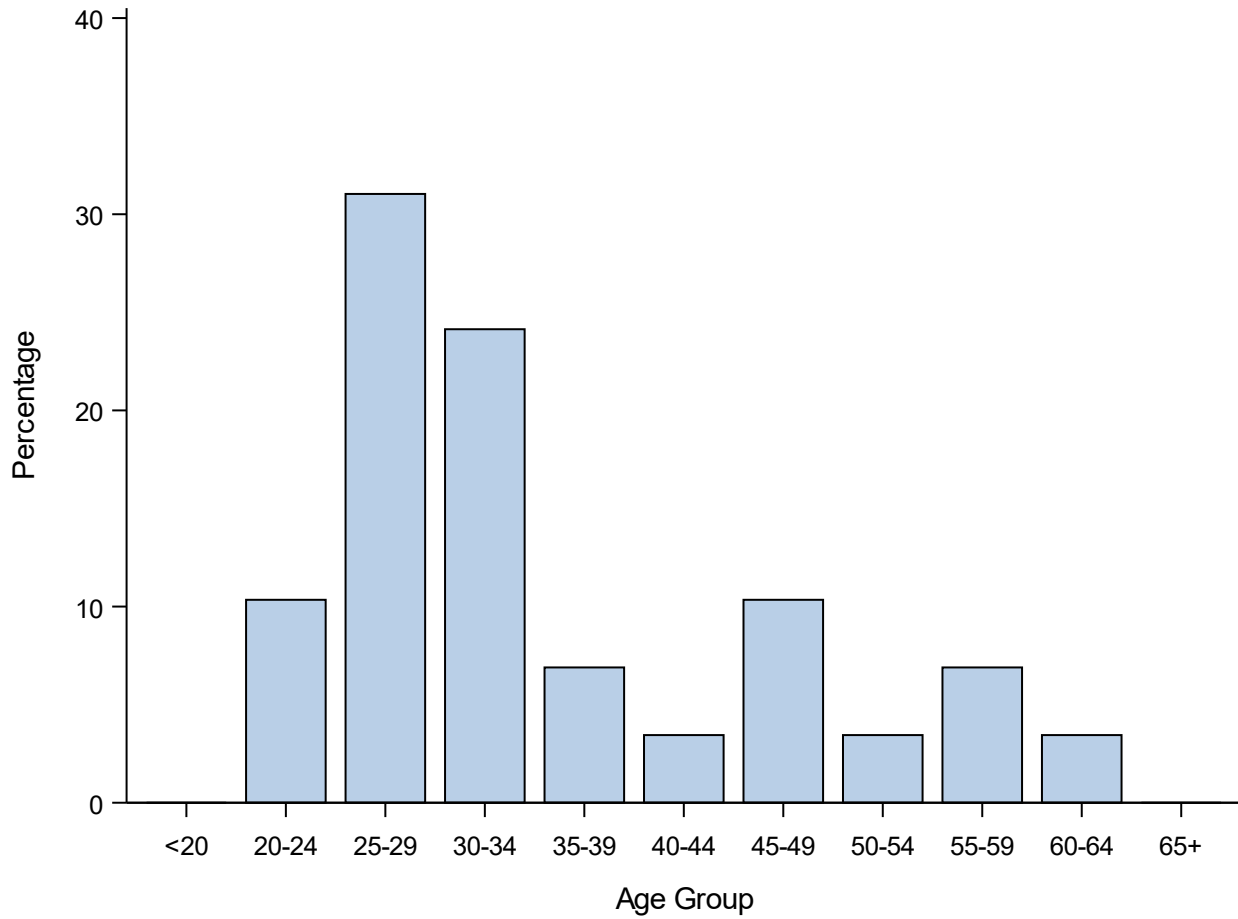


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.8)	1 (0.6)	3 (1.7)	9 (5.3)	6 (3.6)	1 (0.6)	3 (1.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
10 (4.7)	8 (7.8)	5 (3.0)	27 (12.7)	59 (22.8)	60 (30.9)	65 (31.4)	49 (20.1)	40 (18.5)	36 (18.5)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

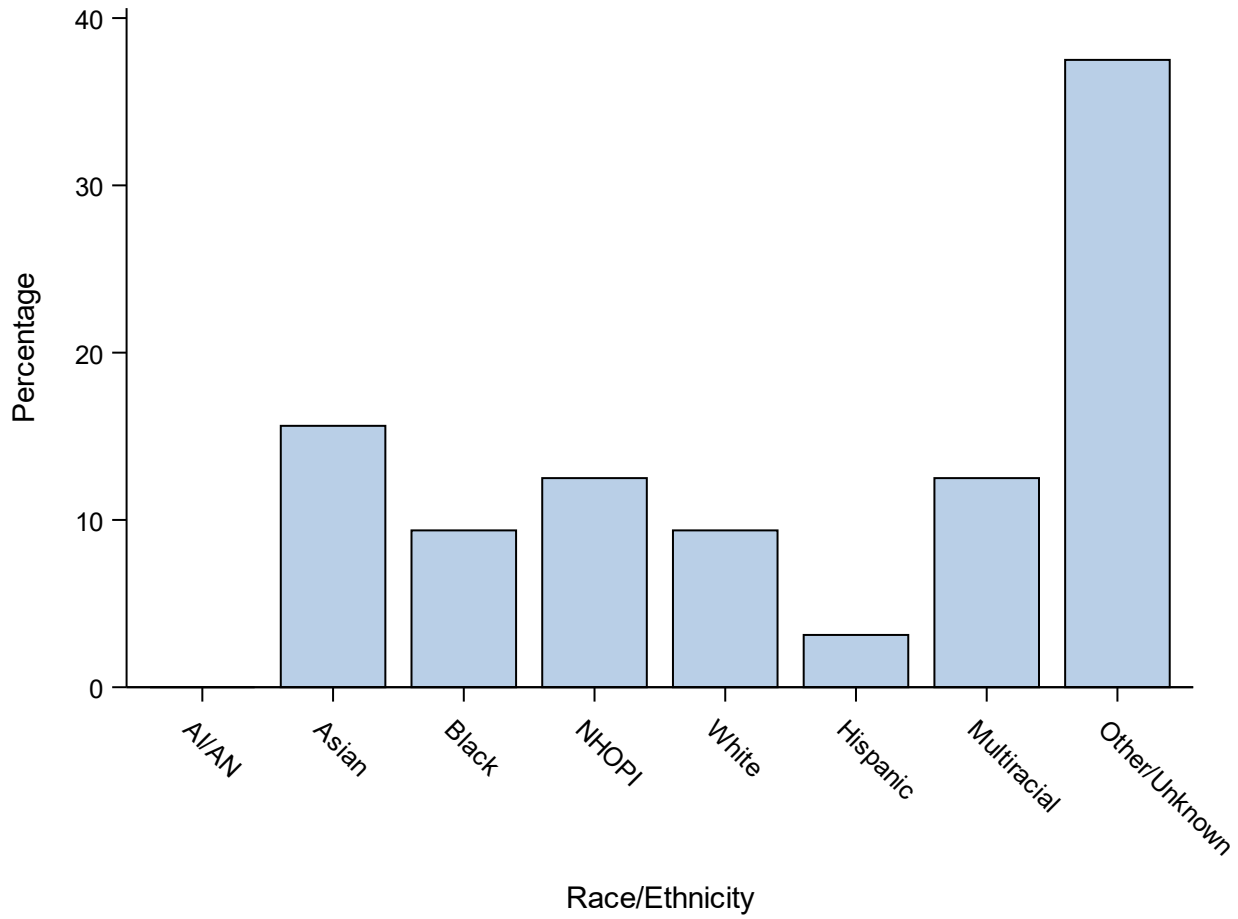
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
0 (0.0)	3 (10.3)	9 (31.0)	7 (24.1)	2 (6.9)	1 (3.4)	3 (10.3)	1 (3.4)	2 (6.9)	1 (3.4)	0 (0.0)	29

Note: Cases with unknown age were excluded.

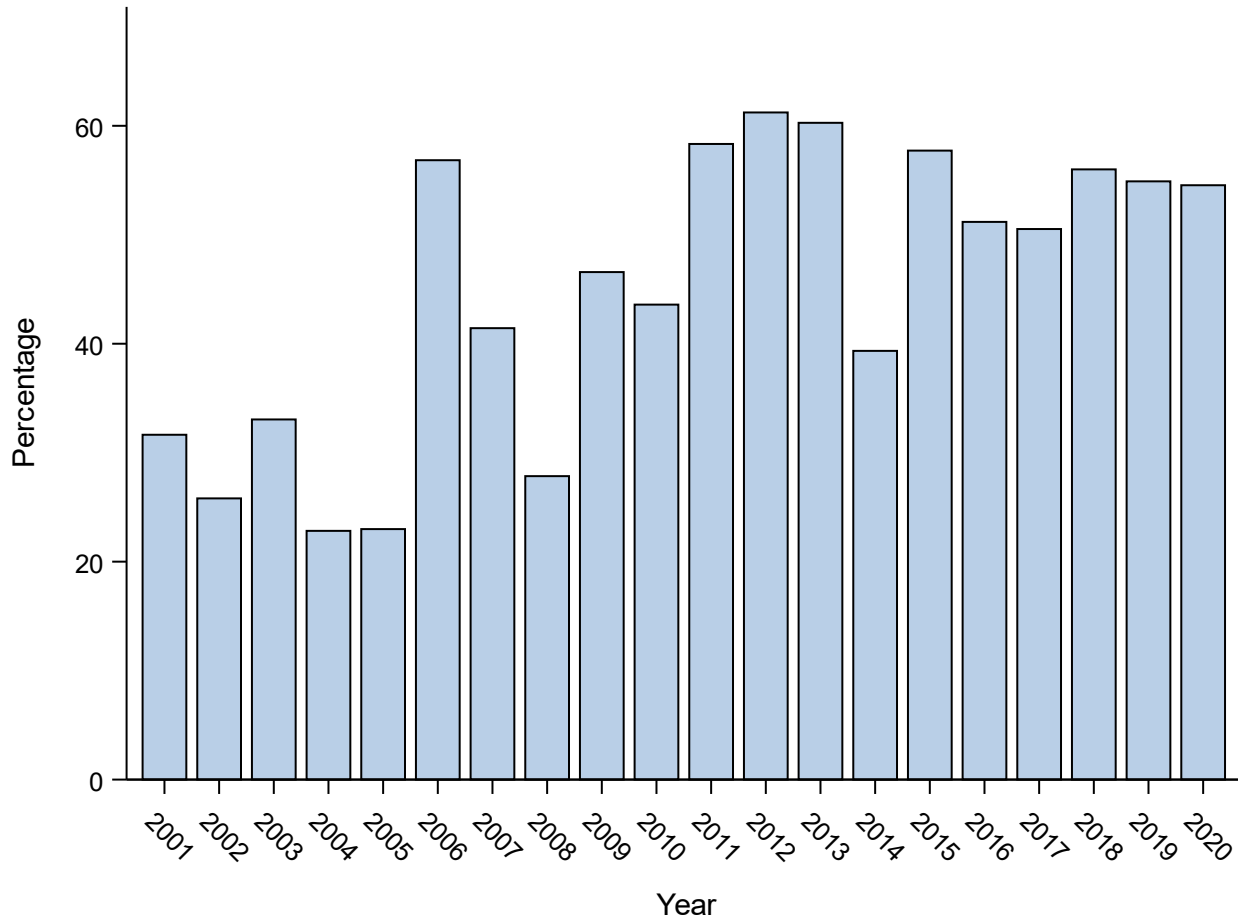
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	5 (15.6)	3 (9.4)	4 (12.5)	3 (9.4)	1 (3.1)	4 (12.5)	12 (37.5)	32

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2001-2020

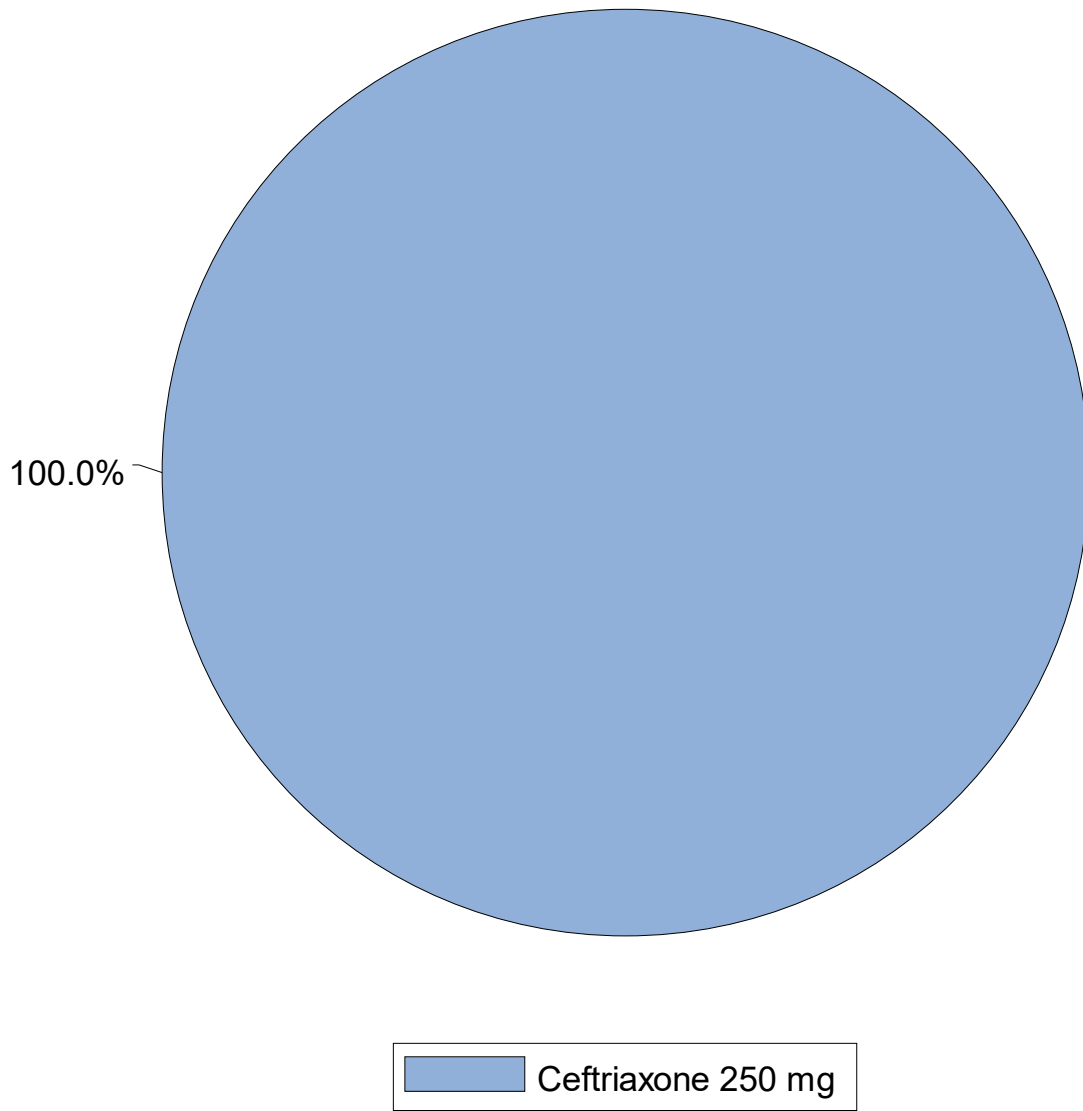


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
25 (31.6)	24 (25.8)	39 (33.1)	21 (22.8)	20 (23.0)	54 (56.8)	29 (41.4)	22 (27.8)	34 (46.6)	34 (43.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
35 (58.3)	60 (61.2)	44 (60.3)	48 (39.3)	71 (57.7)	65 (51.2)	48 (50.5)	42 (56.0)	28 (54.9)	6 (54.5)

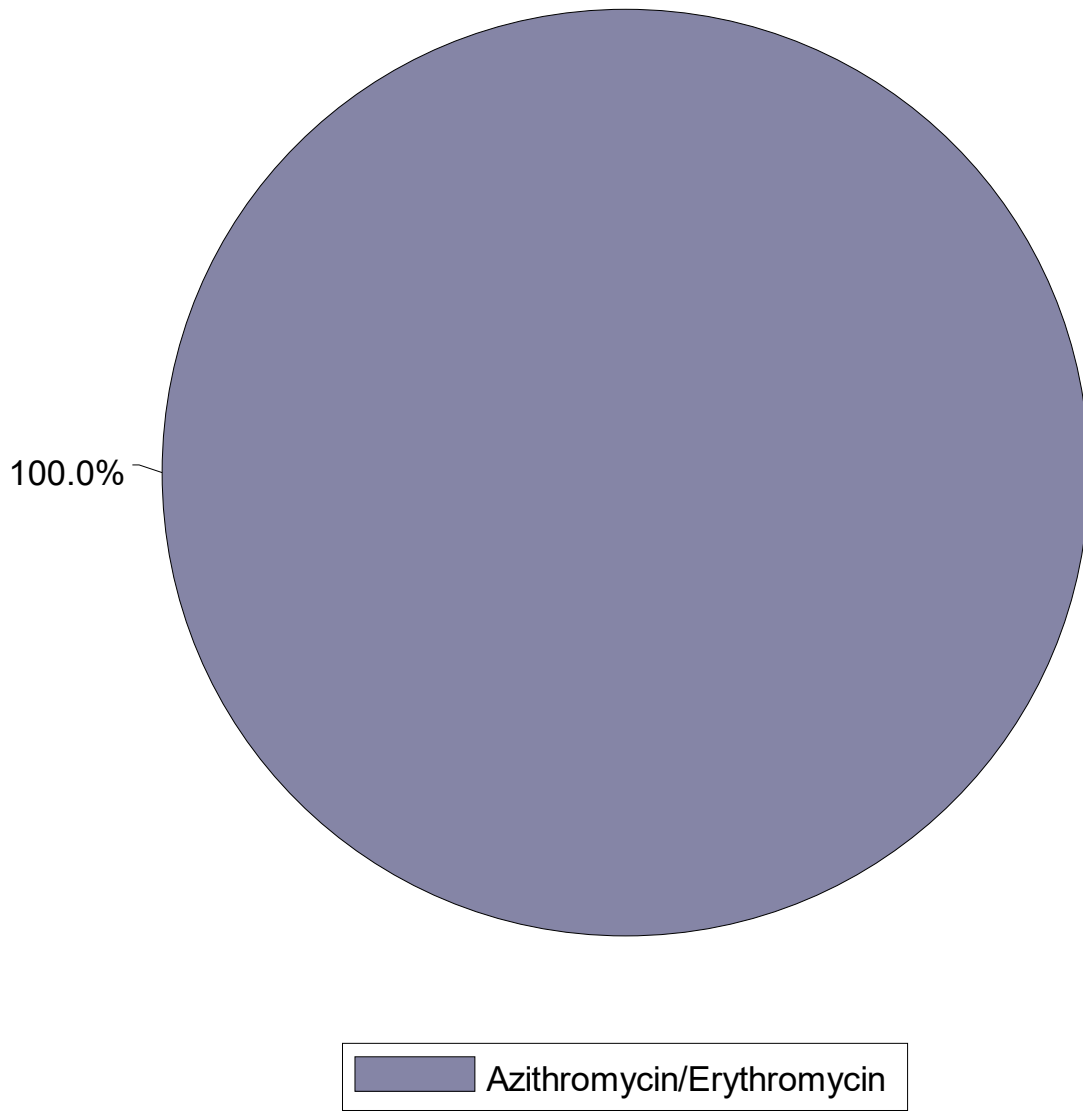
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2020



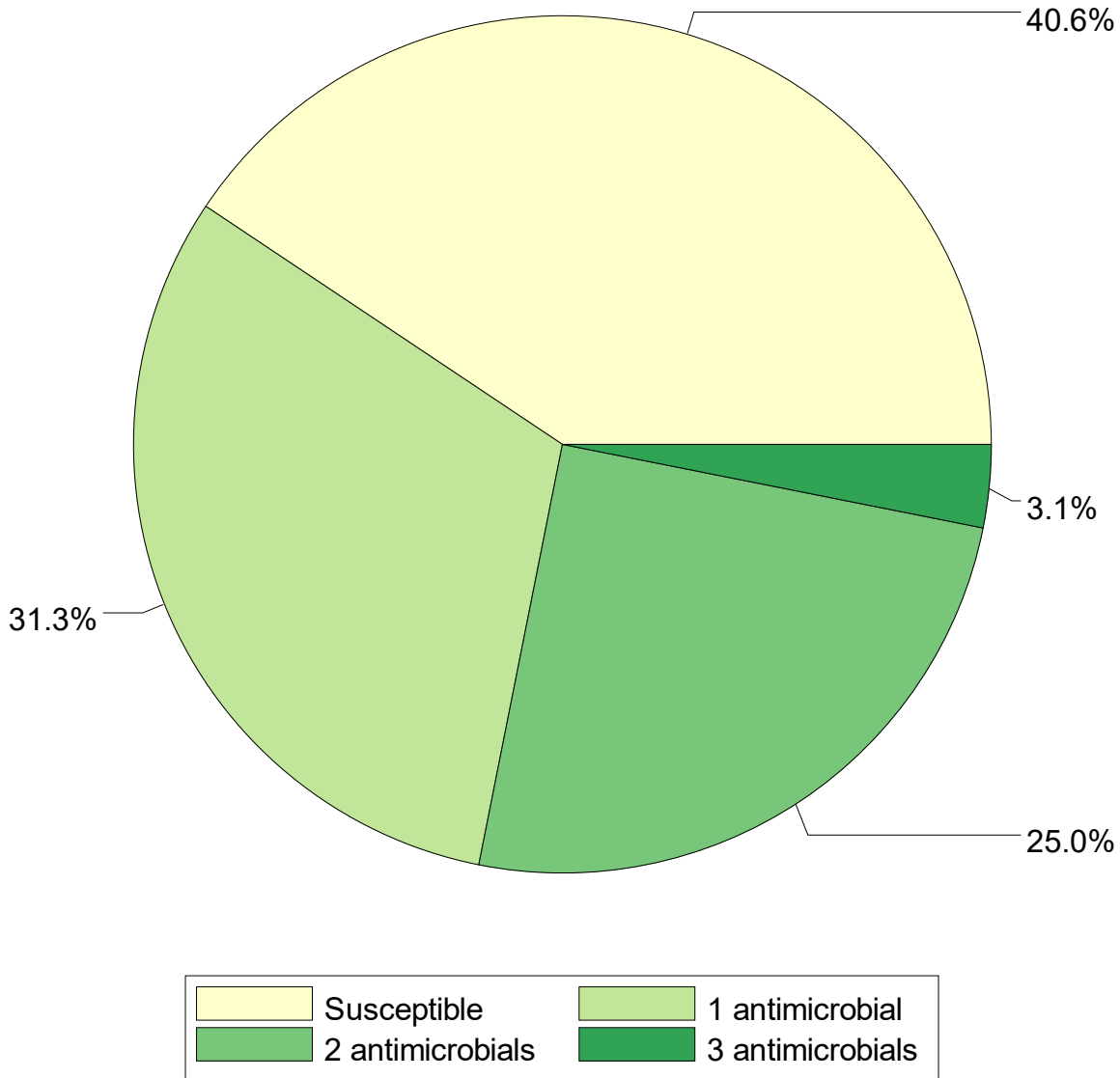
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	15	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	15	100.0

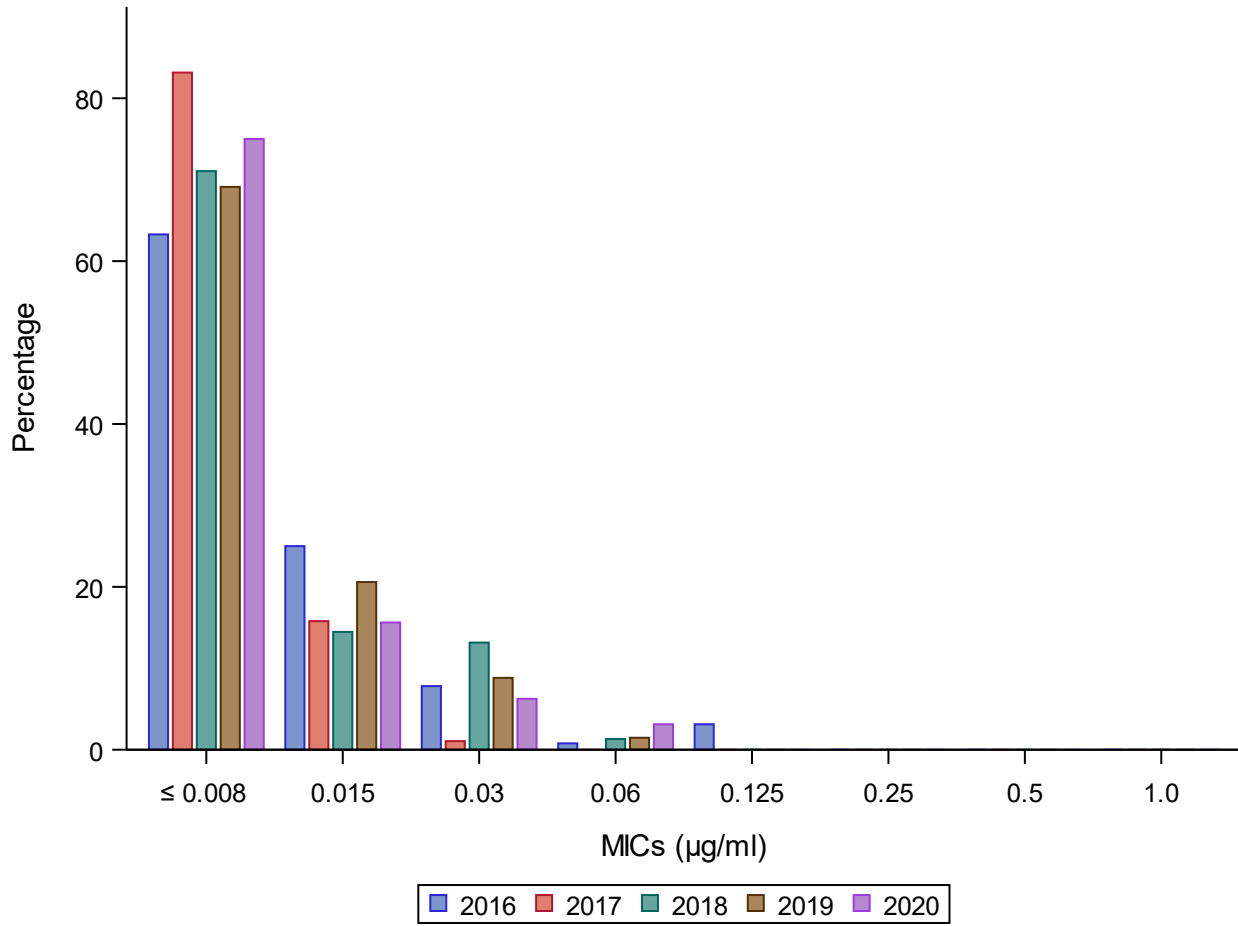
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	13	40.6
1 antimicrobial	10	31.3
2 antimicrobials	8	25.0
3 antimicrobials	1	3.1
4+ antimicrobials	0	0.0

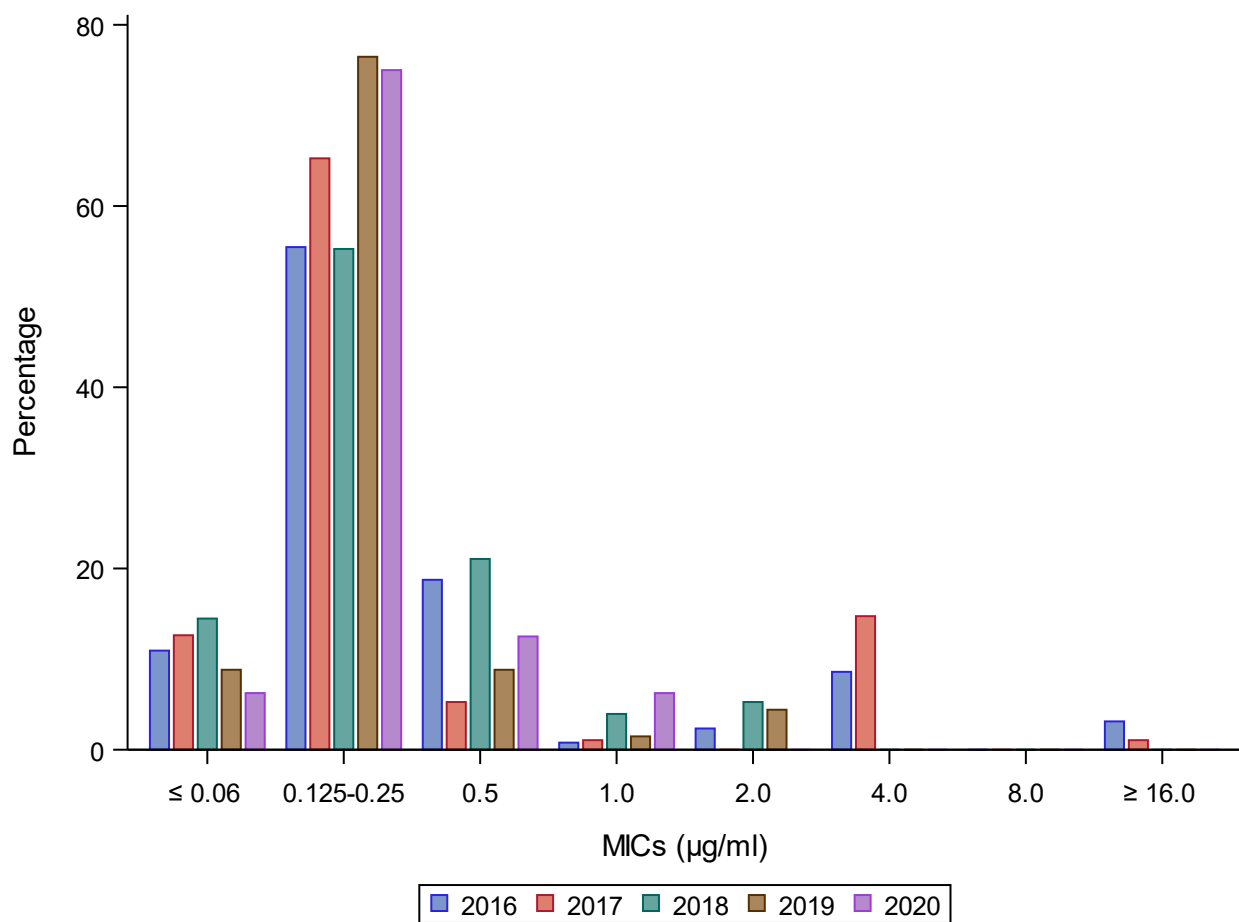
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2016-2020



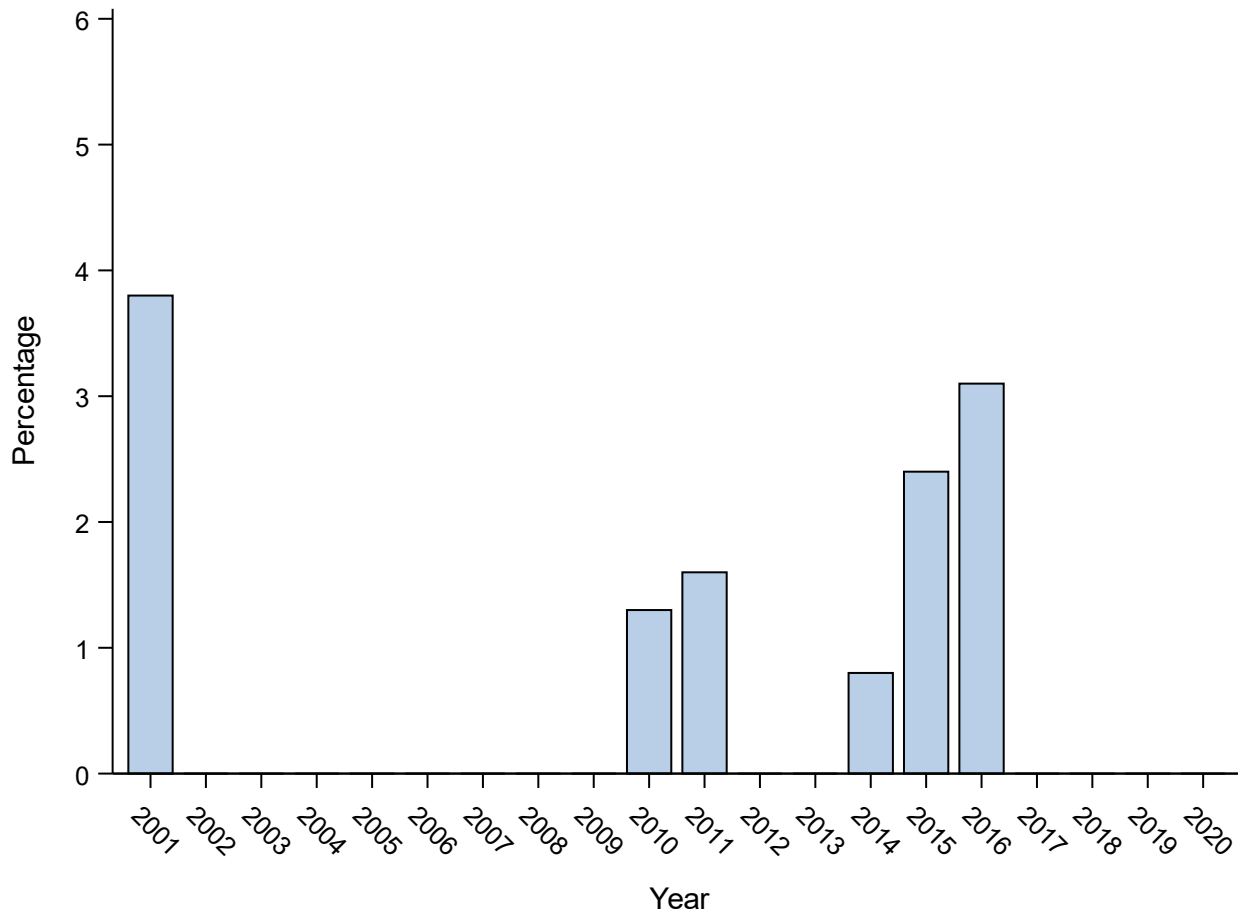
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	81 (63.3)	32 (25.0)	10 (7.8)	1 (0.8)	4 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	128
2017	79 (83.2)	15 (15.8)	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	95
2018	54 (71.1)	11 (14.5)	10 (13.2)	1 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	76
2019	47 (69.1)	14 (20.6)	6 (8.8)	1 (1.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	68
2020	24 (75.0)	5 (15.6)	2 (6.3)	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	32

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2016-2020



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
2016	14 (10.9)	71 (55.5)	24 (18.8)	1 (0.8)	3 (2.3)	11 (8.6)	0 (0.0)	4 (3.1)	128
2017	12 (12.6)	62 (65.3)	5 (5.3)	1 (1.1)	0 (0.0)	14 (14.7)	0 (0.0)	1 (1.1)	95
2018	11 (14.5)	42 (55.3)	16 (21.1)	3 (3.9)	4 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)	76
2019	6 (8.8)	52 (76.5)	6 (8.8)	1 (1.5)	3 (4.4)	0 (0.0)	0 (0.0)	0 (0.0)	68
2020	2 (6.3)	24 (75.0)	4 (12.5)	2 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	32

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2001-2020

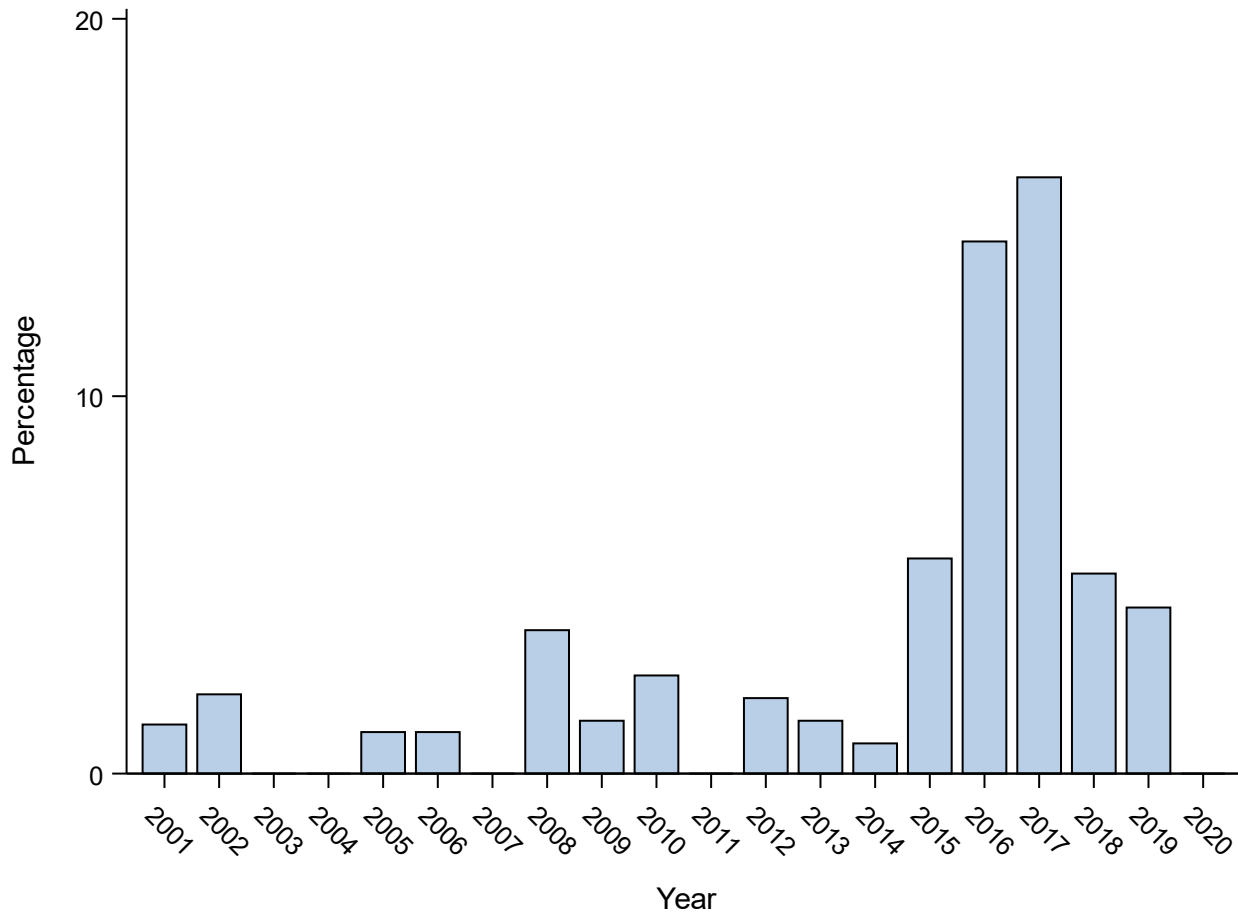


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
3 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (1.6)	0 (0.0)	0 (0.0)	1 (0.8)	3 (2.4)	4 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2001-2020

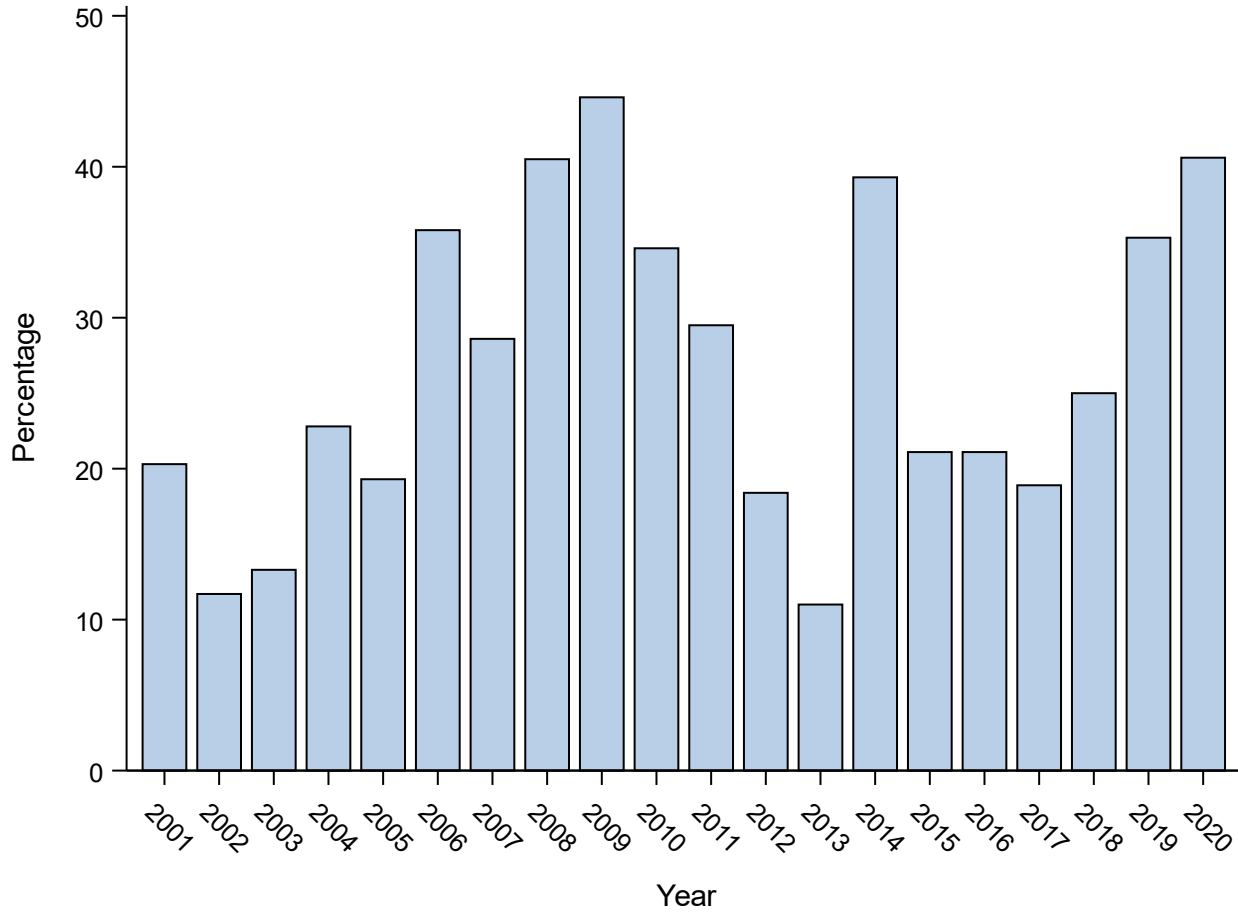


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (1.3)	2 (2.1)	0 (0.0)	0 (0.0)	1 (1.1)	1 (1.1)	0 (0.0)	3 (3.8)	1 (1.4)	2 (2.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	2 (2.0)	1 (1.4)	1 (0.8)	7 (5.7)	18 (14.1)	15 (15.8)	4 (5.3)	3 (4.4)	0 (0.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Honolulu, Hawaii, 2001-2020

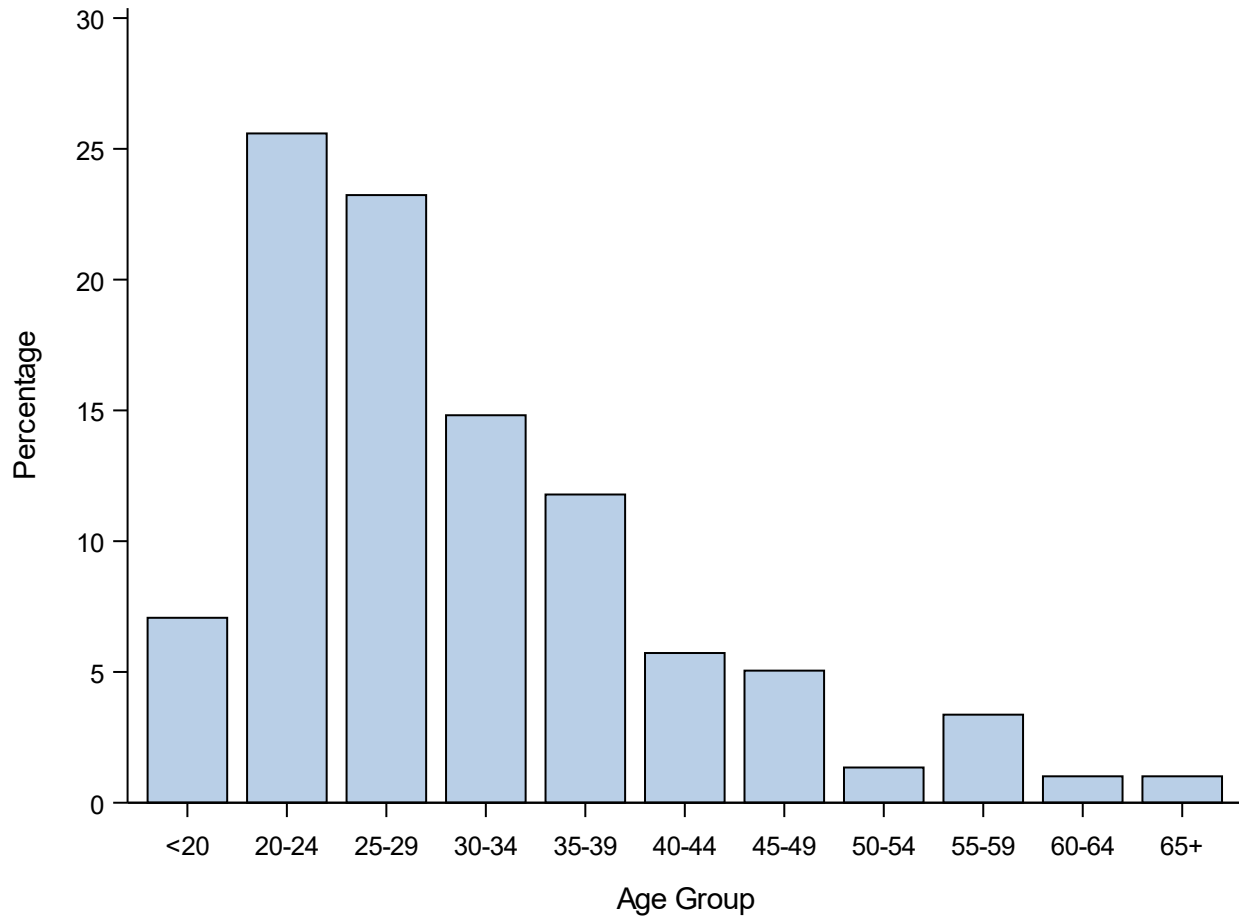


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
16 (20.3)	11 (11.7)	16 (13.3)	21 (22.8)	17 (19.3)	34 (35.8)	20 (28.6)	32 (40.5)	33 (44.6)	27 (34.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
18 (29.5)	18 (18.4)	8 (11.0)	48 (39.3)	26 (21.1)	27 (21.1)	18 (18.9)	19 (25.0)	24 (35.3)	13 (40.6)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

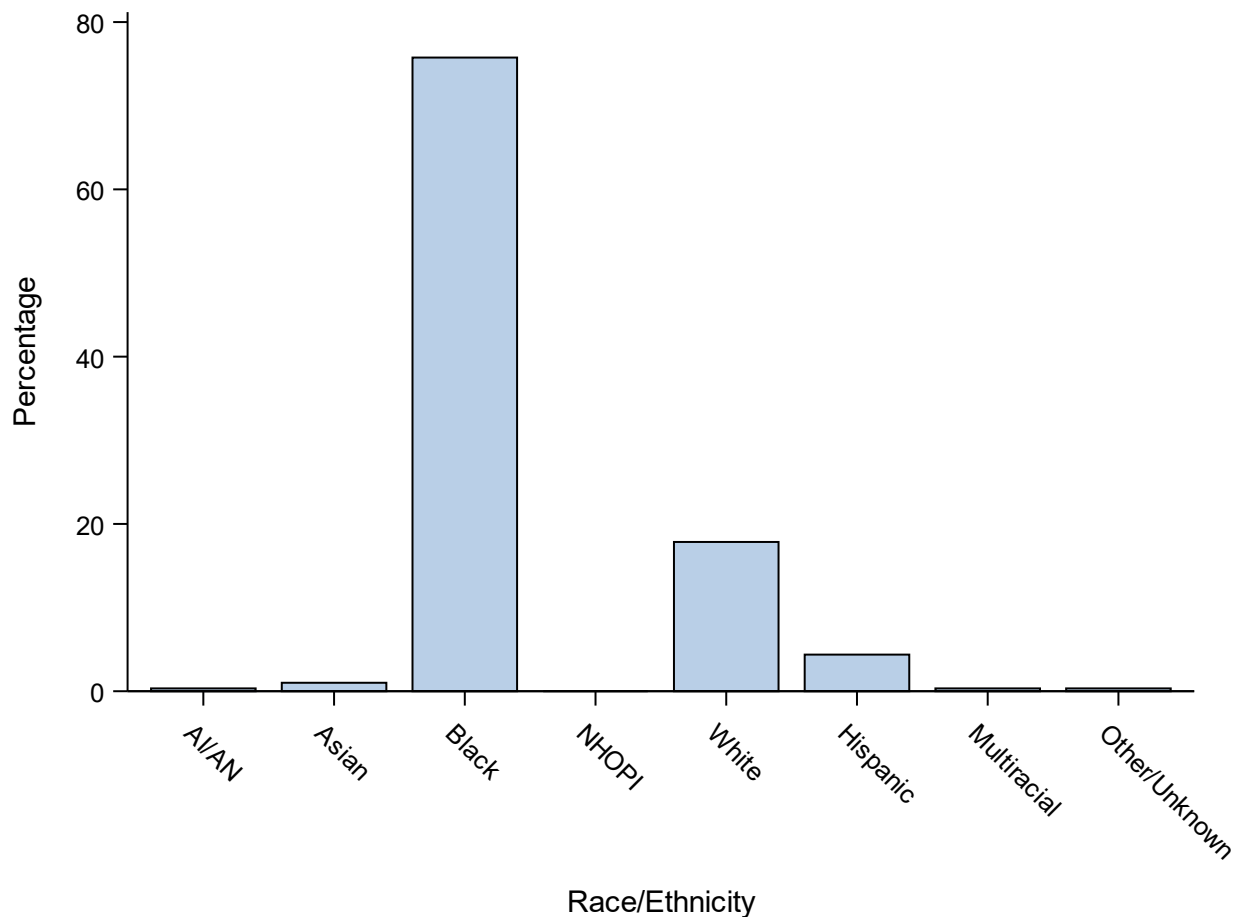
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
21 (7.1)	76 (25.6)	69 (23.2)	44 (14.8)	35 (11.8)	17 (5.7)	15 (5.1)	4 (1.3)	10 (3.4)	3 (1.0)	3 (1.0)	297

Note: Cases with unknown age were excluded.

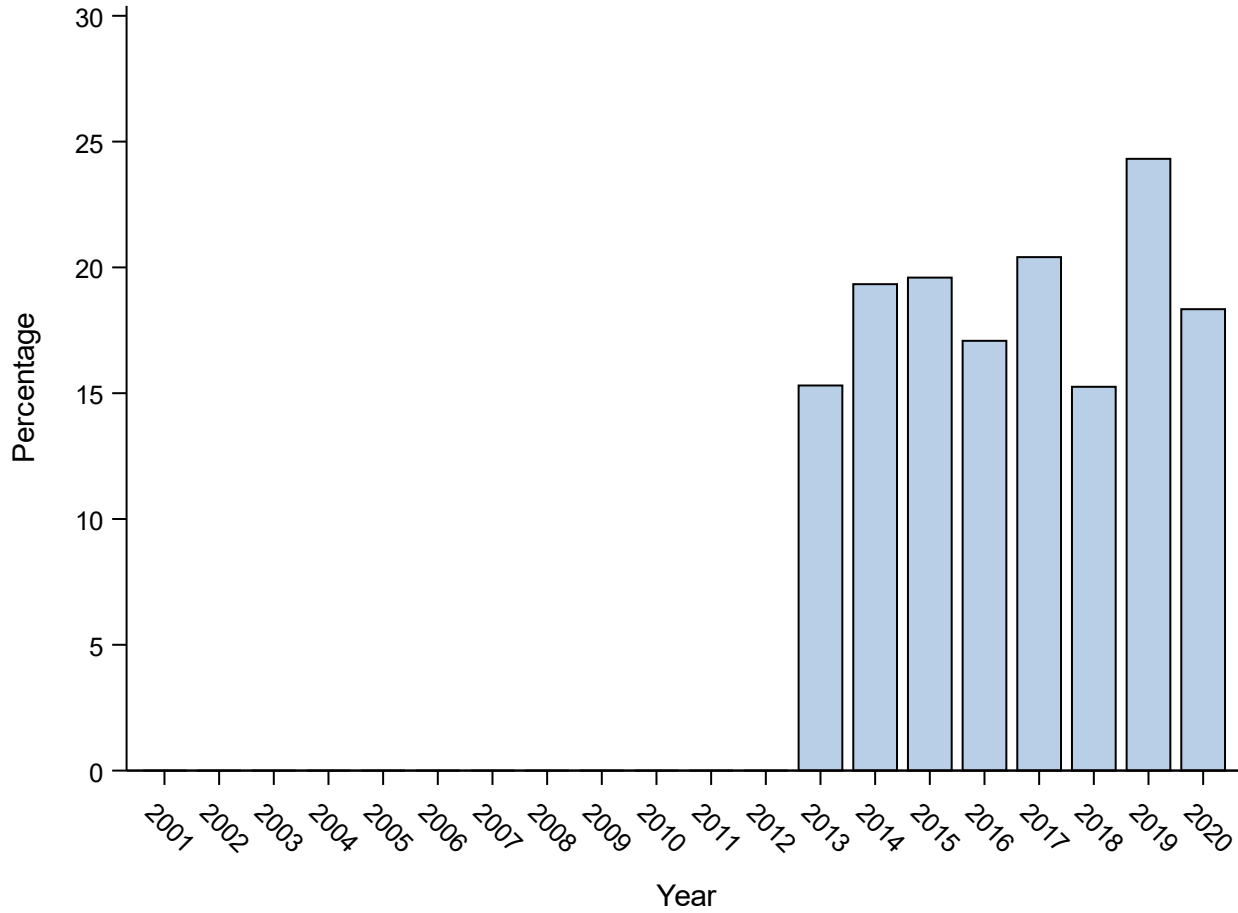
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (0.3)	3 (1.0)	225 (75.8)	0 (0.0)	53 (17.8)	13 (4.4)	1 (0.3)	1 (0.3)	297

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2001-2020

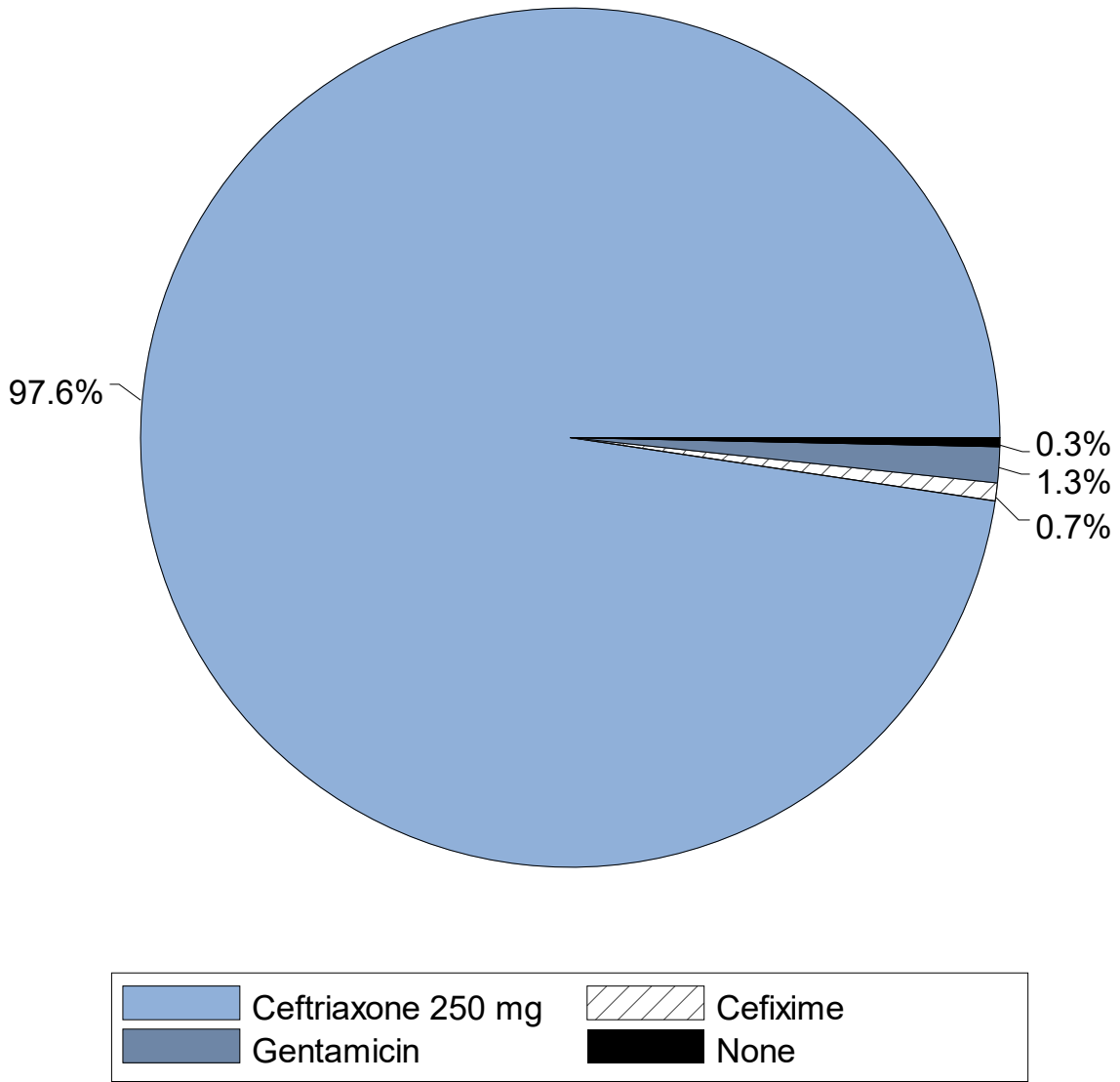


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	45 (15.3)	58 (19.3)	58 (19.6)	48 (17.1)	60 (20.4)	45 (15.3)	71 (24.3)	53 (18.3)

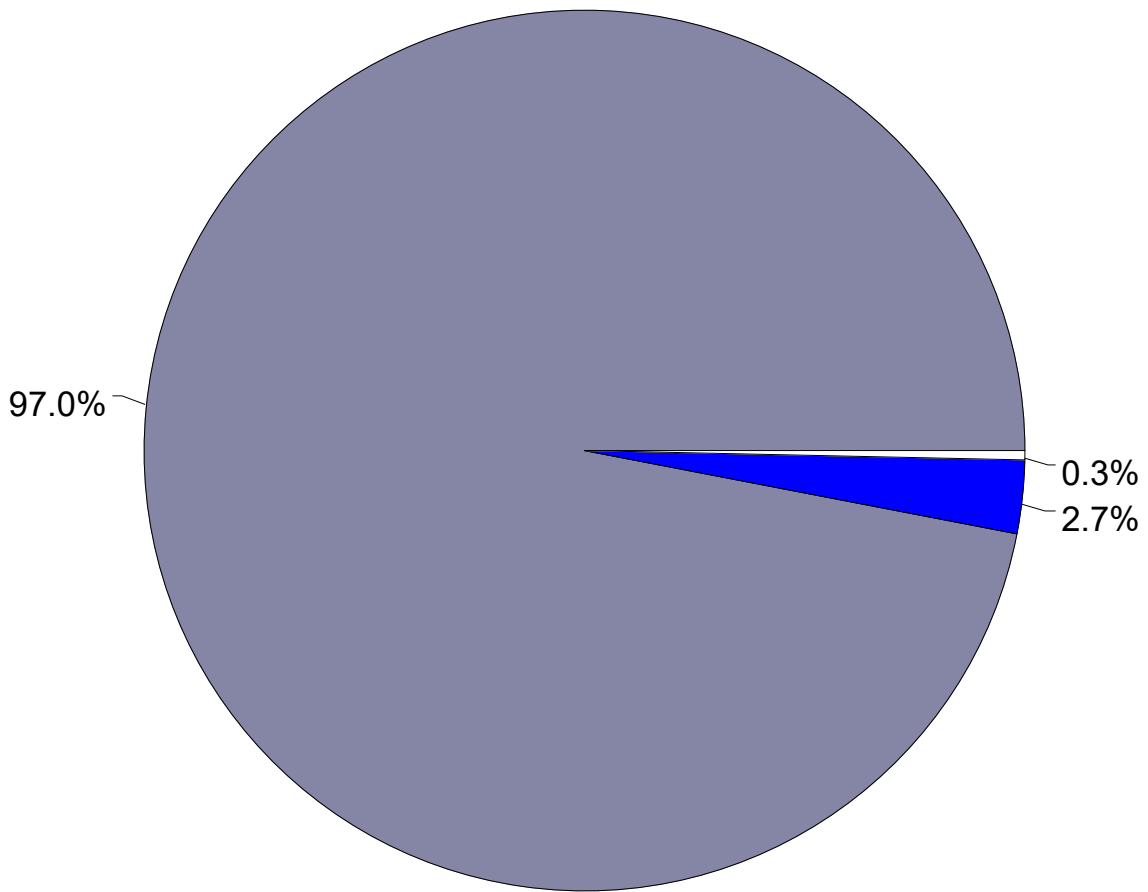
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2013-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2020



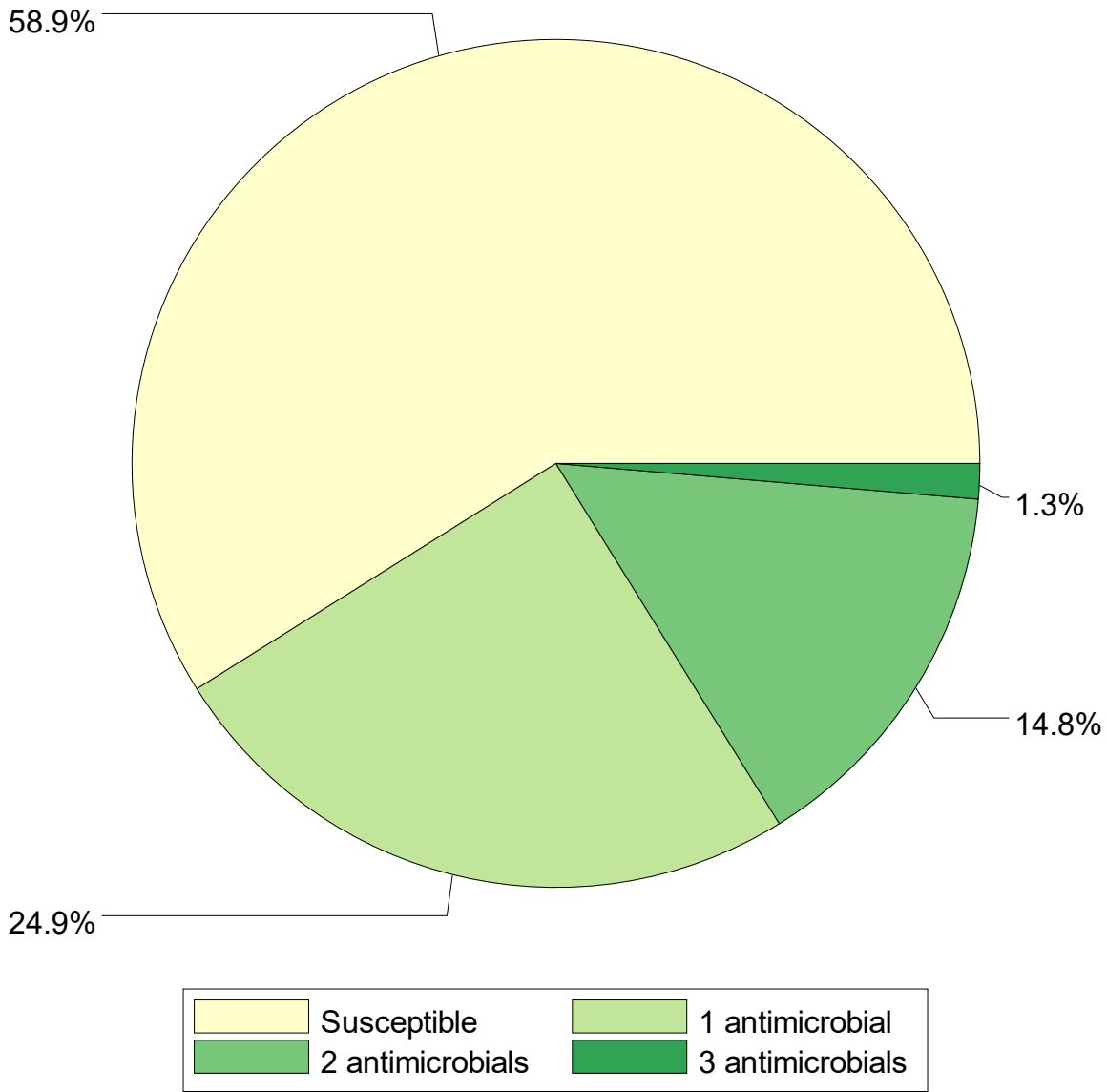
Primary Treatment	Count	Percentage
None	1	0.3
Ceftriaxone 250 mg	290	97.6
Cefixime	2	0.7
Gentamicin	4	1.3

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	288	97.0
Doxycycline/Tetracycline	8	2.7
None/Other	1	0.3

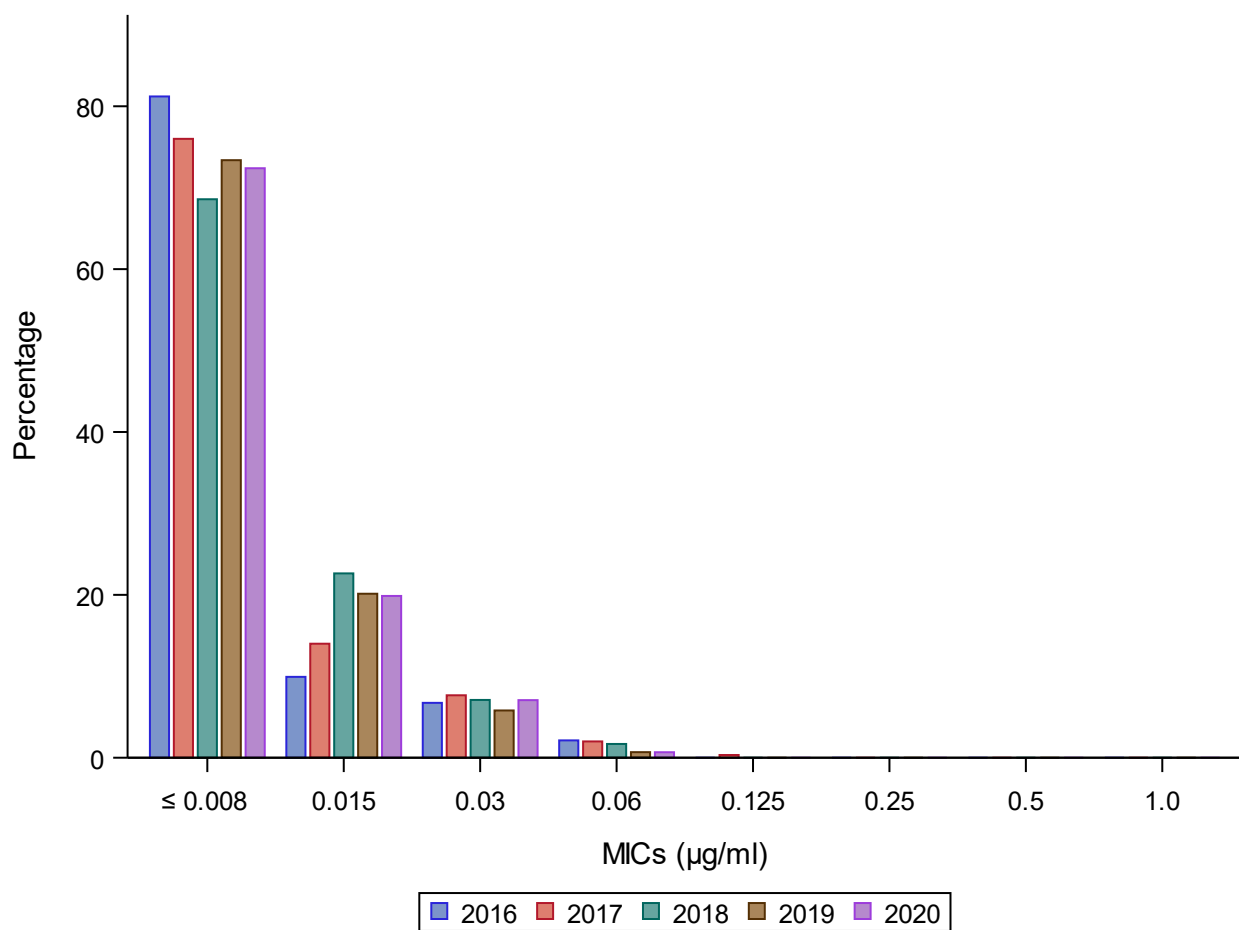
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	175	58.9
1 antimicrobial	74	24.9
2 antimicrobials	44	14.8
3 antimicrobials	4	1.3
4+ antimicrobials	0	0.0

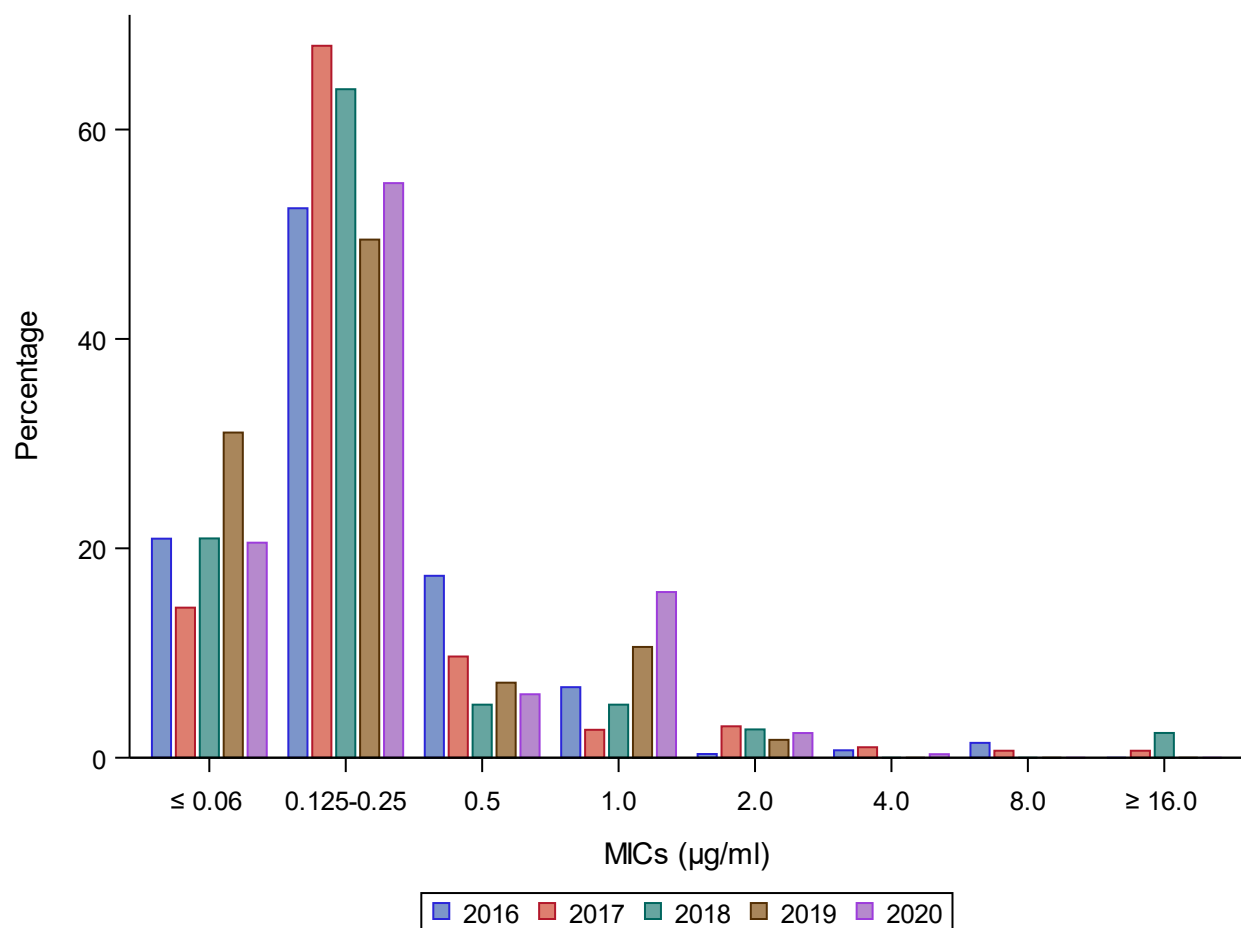
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g/mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g/mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g/mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g/mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g/mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2016-2020



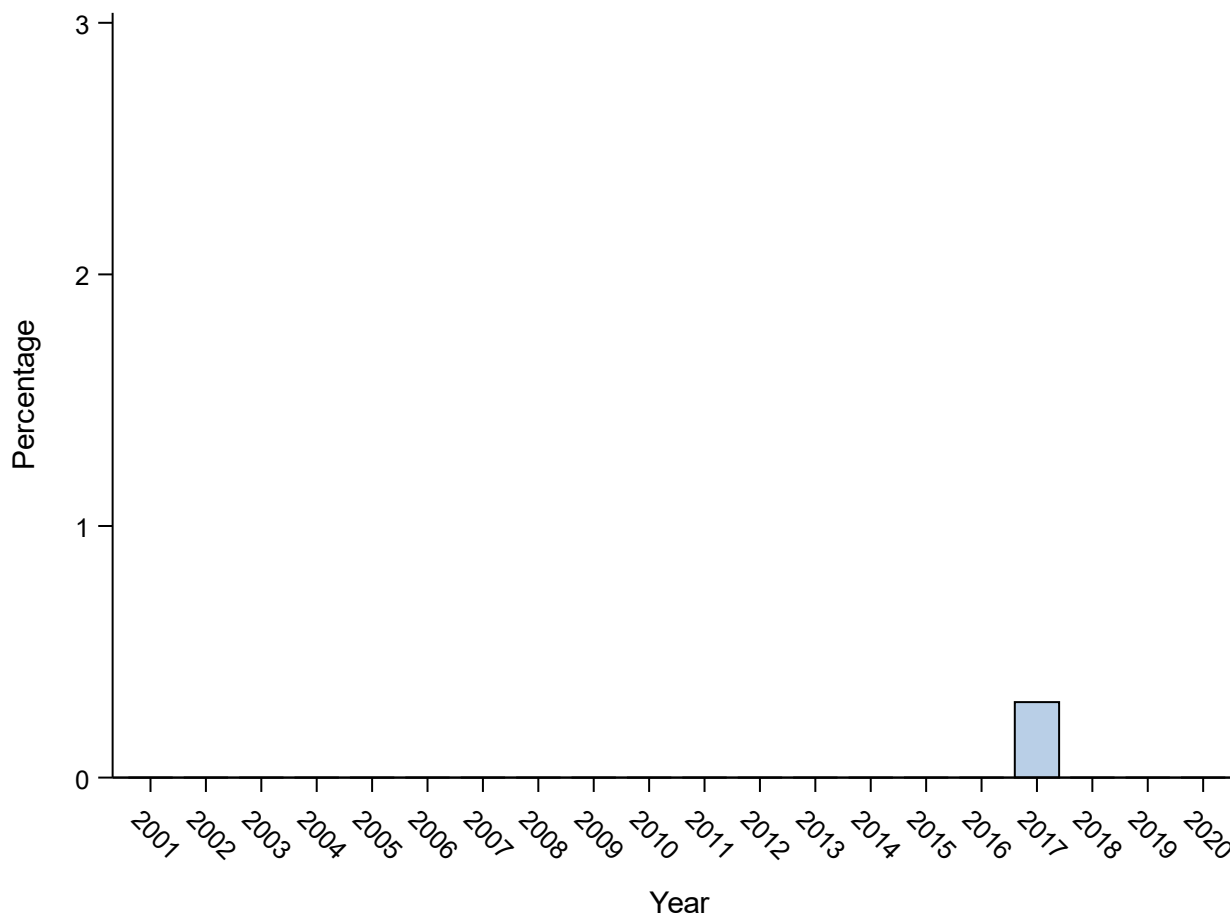
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	229 (81.2)	28 (9.9)	19 (6.7)	6 (2.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	282
2017	228 (76.0)	42 (14.0)	23 (7.7)	6 (2.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	203 (68.6)	67 (22.6)	21 (7.1)	5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	296
2019	215 (73.4)	59 (20.1)	17 (5.8)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	293
2020	215 (72.4)	59 (19.9)	21 (7.1)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	297

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2016-2020



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
2016	59 (20.9)	148 (52.5)	49 (17.4)	19 (6.7)	1 (0.4)	2 (0.7)	4 (1.4)	0 (0.0)	282
2017	43 (14.3)	204 (68.0)	29 (9.7)	8 (2.7)	9 (3.0)	3 (1.0)	2 (0.7)	2 (0.7)	300
2018	62 (20.9)	189 (63.9)	15 (5.1)	15 (5.1)	8 (2.7)	0 (0.0)	0 (0.0)	7 (2.4)	296
2019	91 (31.1)	145 (49.5)	21 (7.2)	31 (10.6)	5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	293
2020	61 (20.5)	163 (54.9)	18 (6.1)	47 (15.8)	7 (2.4)	1 (0.3)	0 (0.0)	0 (0.0)	297

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2001-2020

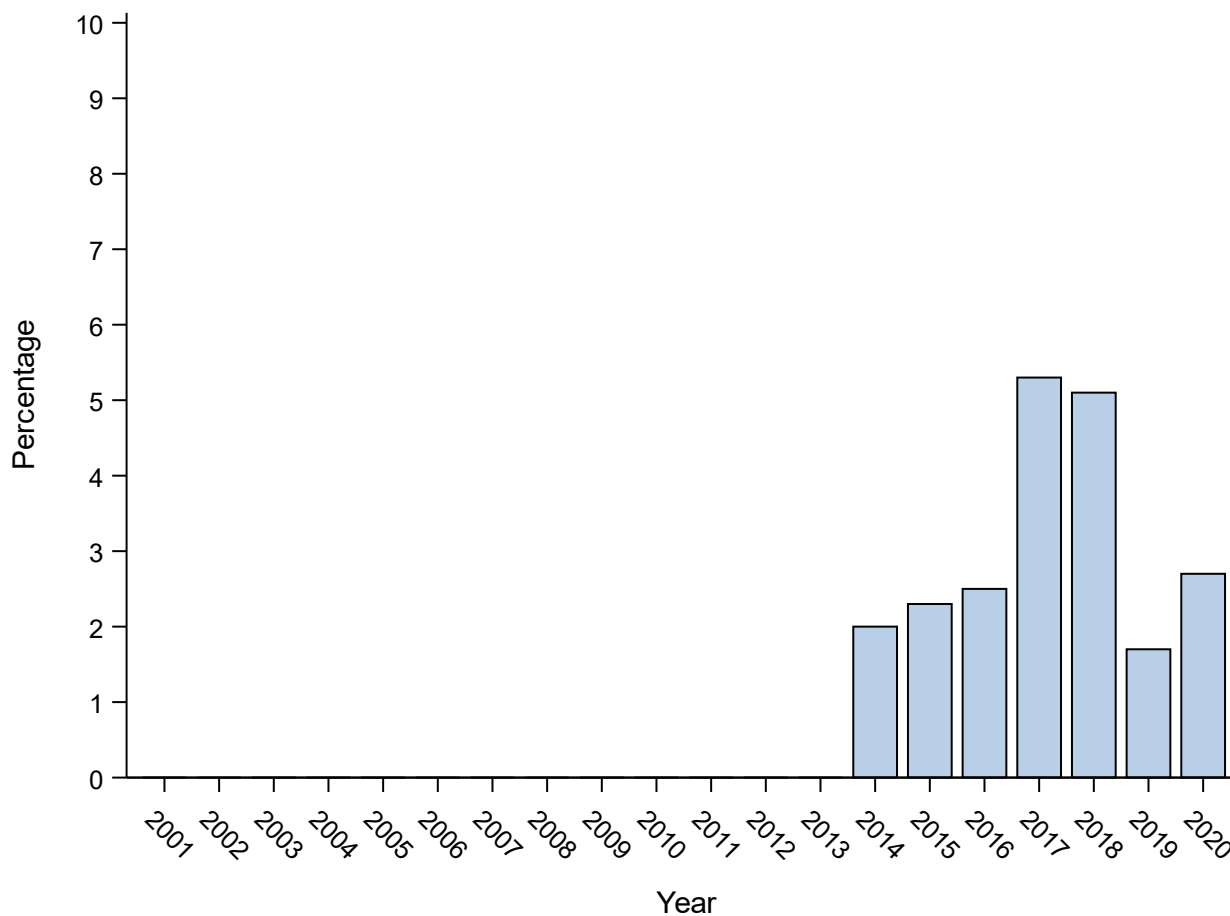


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2013-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Indianapolis, Indiana, 2001-2020

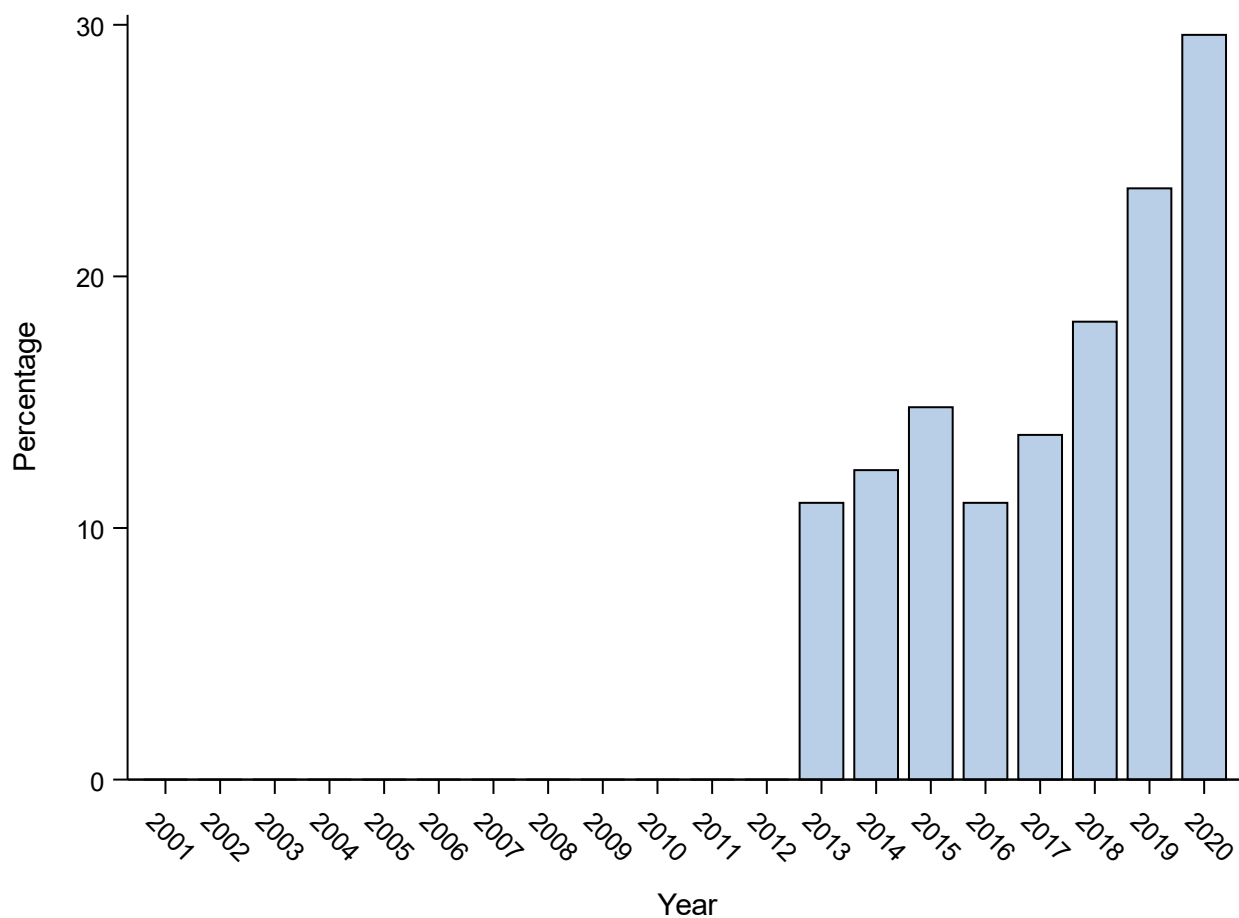


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	6 (2.0)	7 (2.3)	7 (2.5)	16 (5.3)	15 (5.1)	5 (1.7)	8 (2.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2013-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Indianapolis, Indiana, 2001-2020

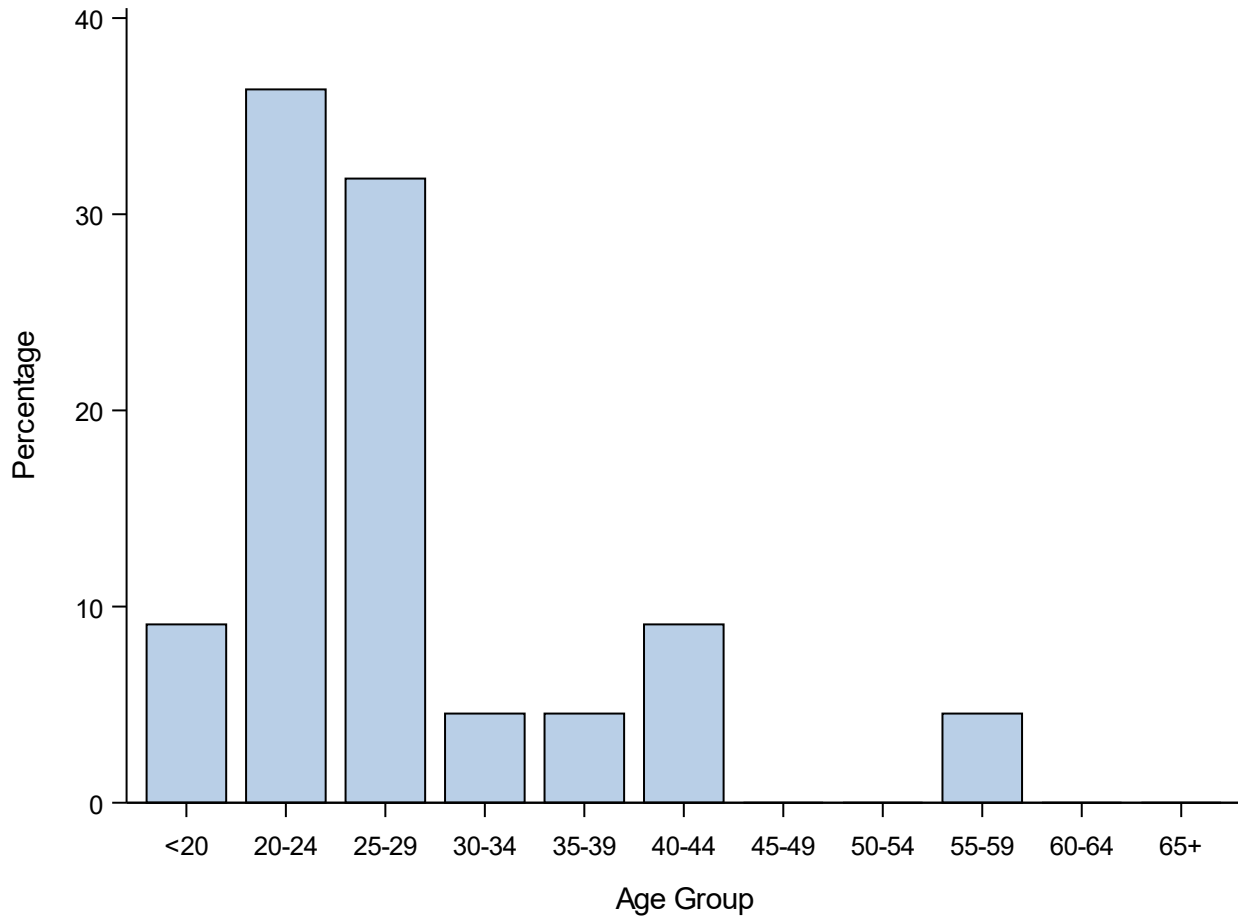


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	33 (11.0)	37 (12.3)	44 (14.8)	31 (11.0)	41 (13.7)	54 (18.2)	69 (23.5)	88 (29.6)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2013-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

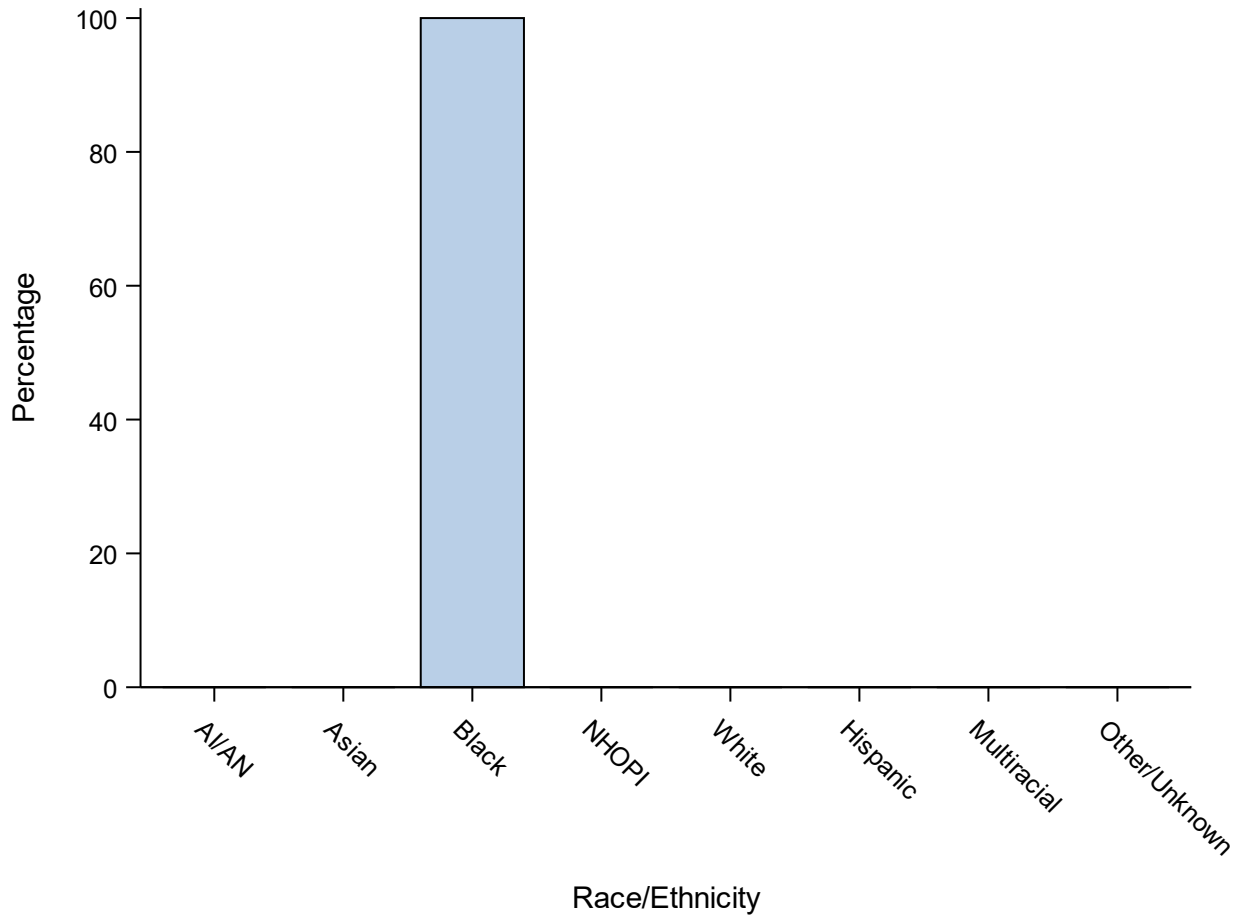
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (9.1)	8 (36.4)	7 (31.8)	1 (4.5)	1 (4.5)	2 (9.1)	0 (0.0)	0 (0.0)	1 (4.5)	0 (0.0)	0 (0.0)	22

Note: Cases with unknown age were excluded.

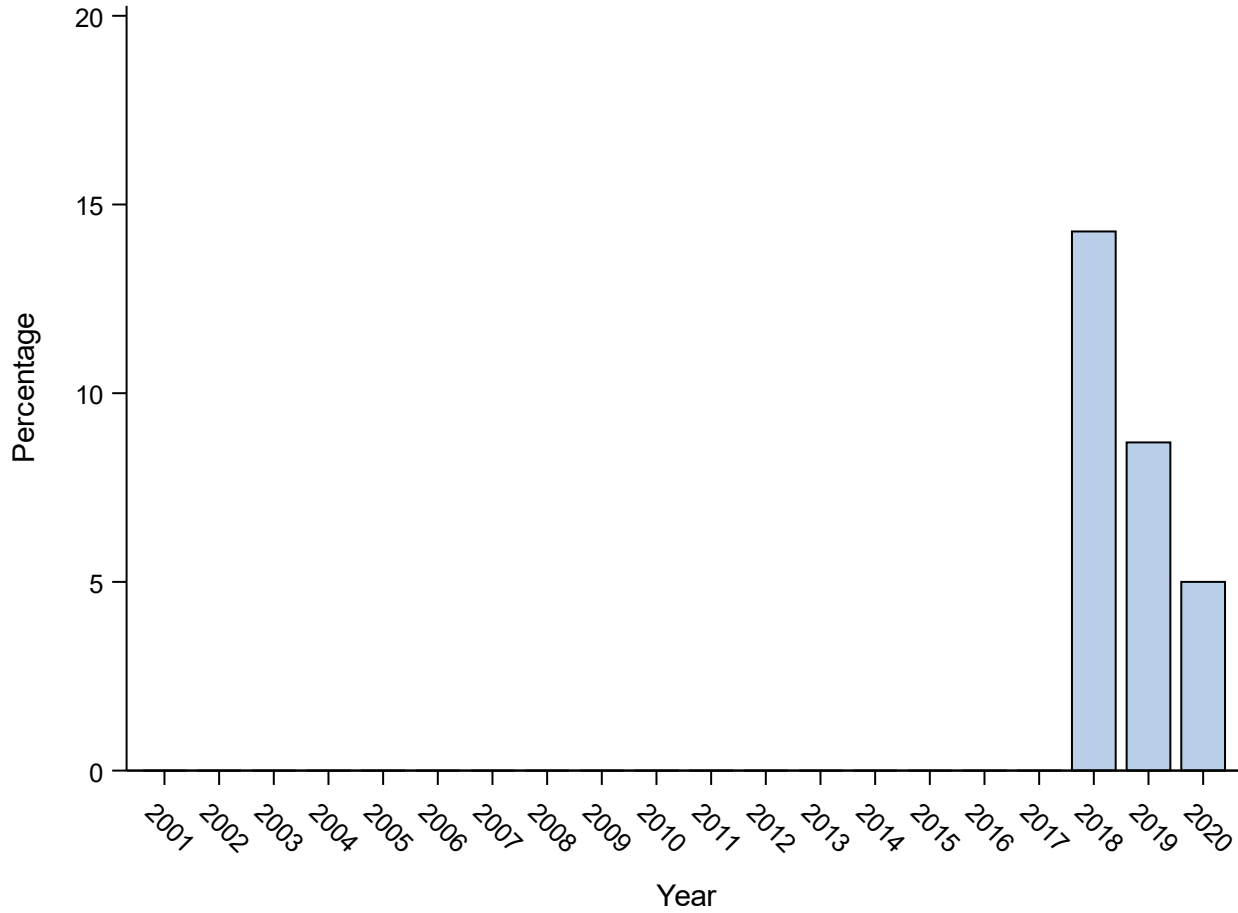
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	22 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	22

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2001-2020

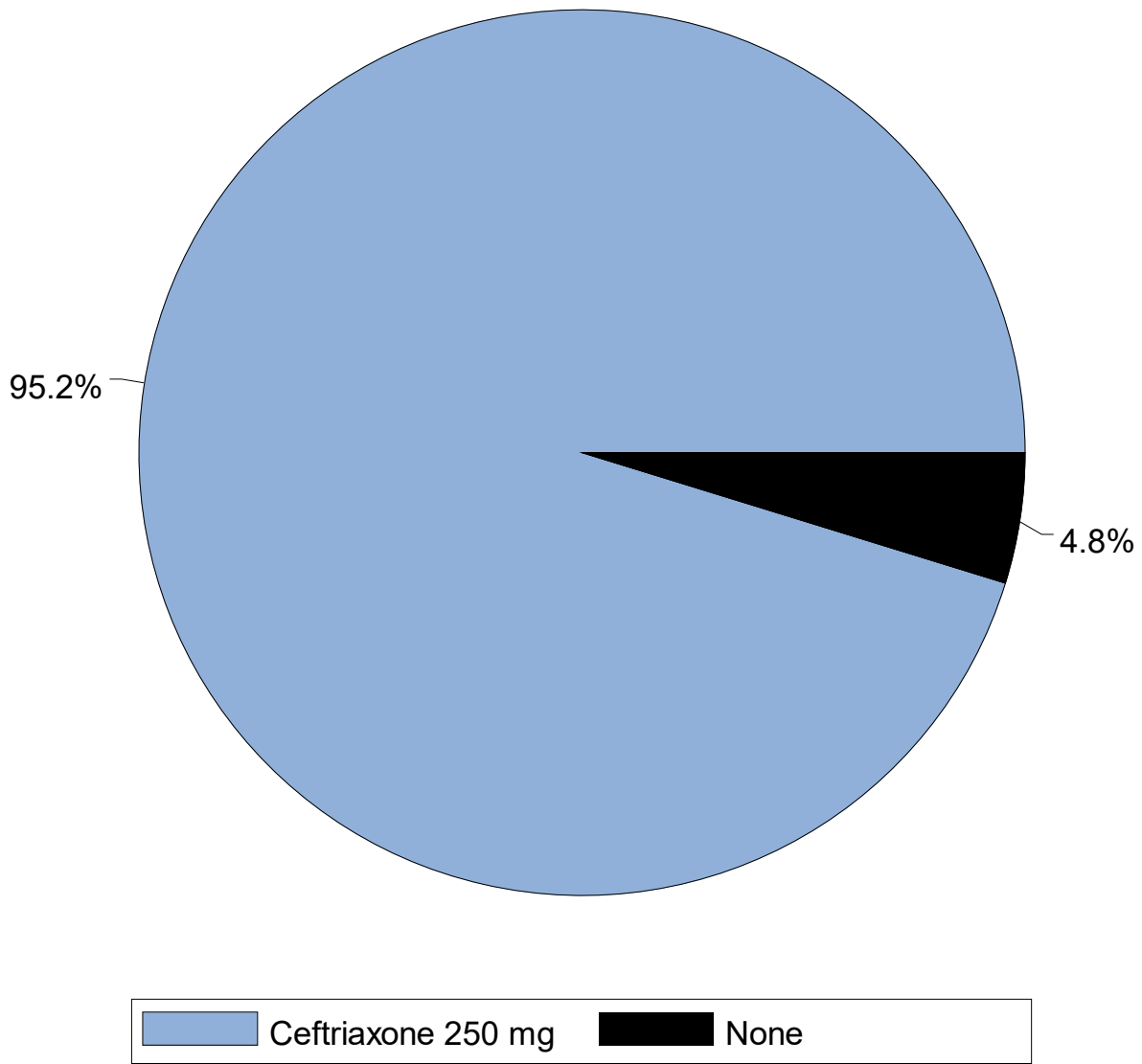


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (14.3)	8 (8.7)	1 (5.0)

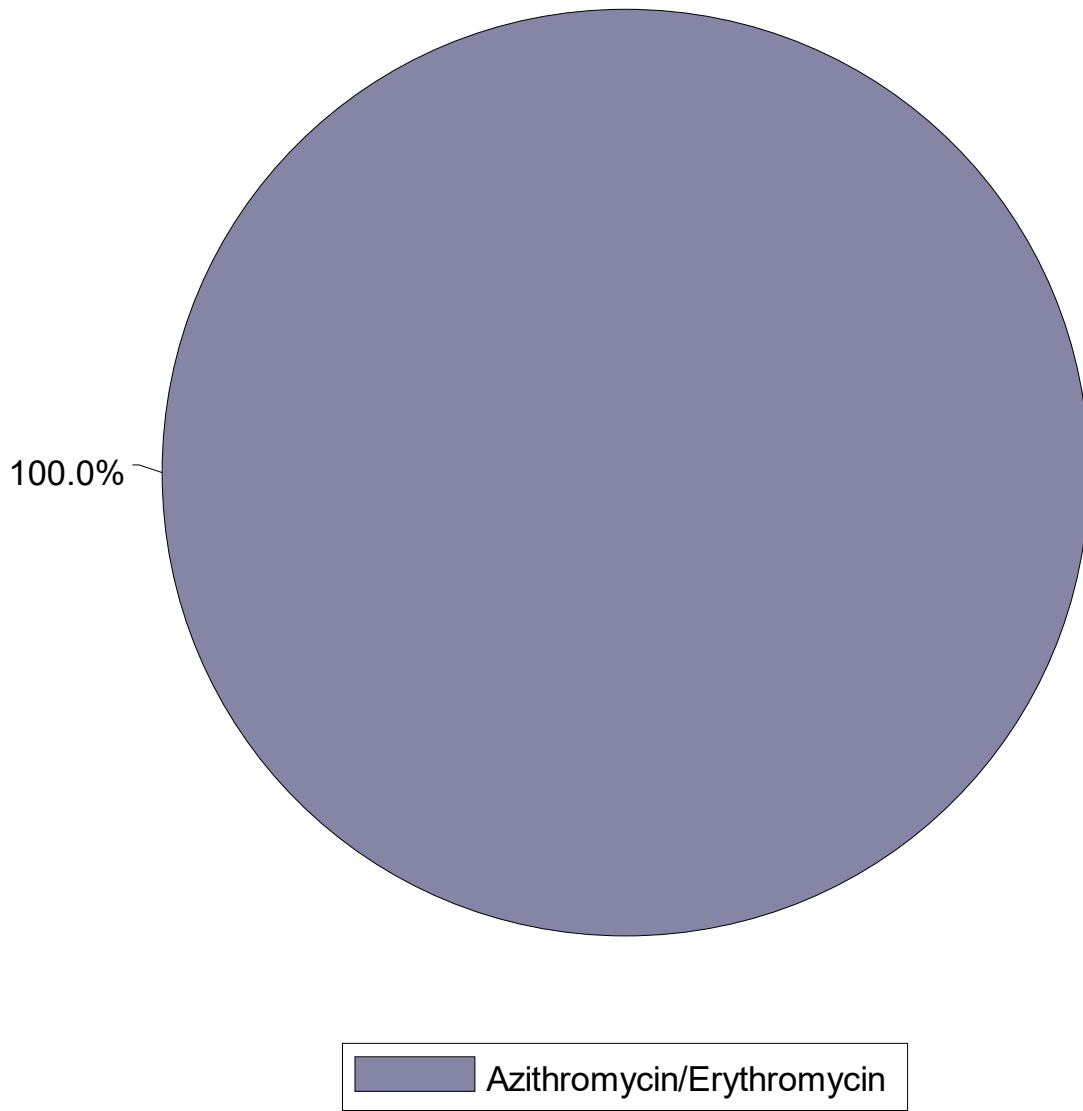
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2020



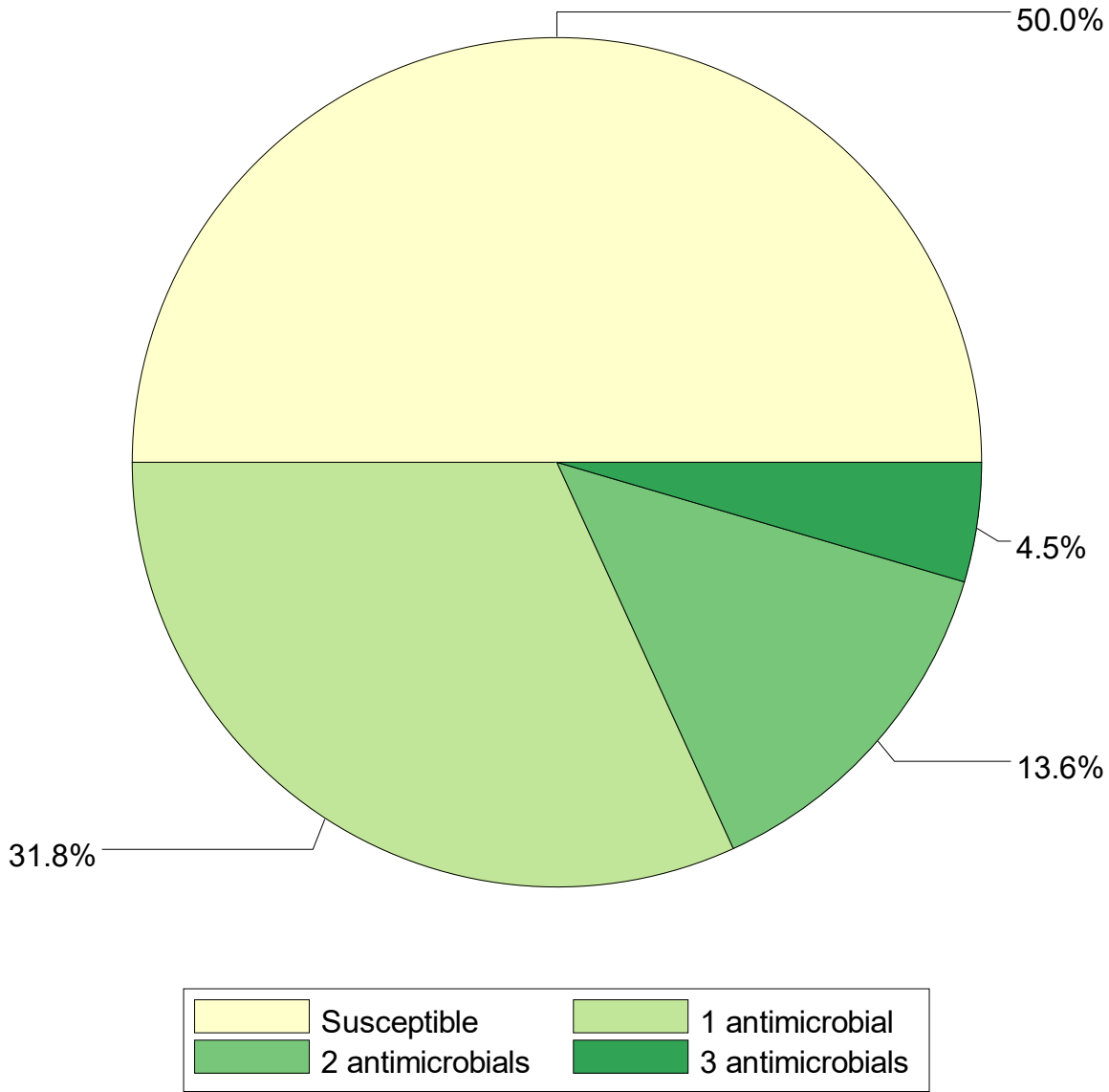
Primary Treatment	Count	Percentage
None	1	4.8
Ceftriaxone 250 mg	20	95.2

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	21	100.0

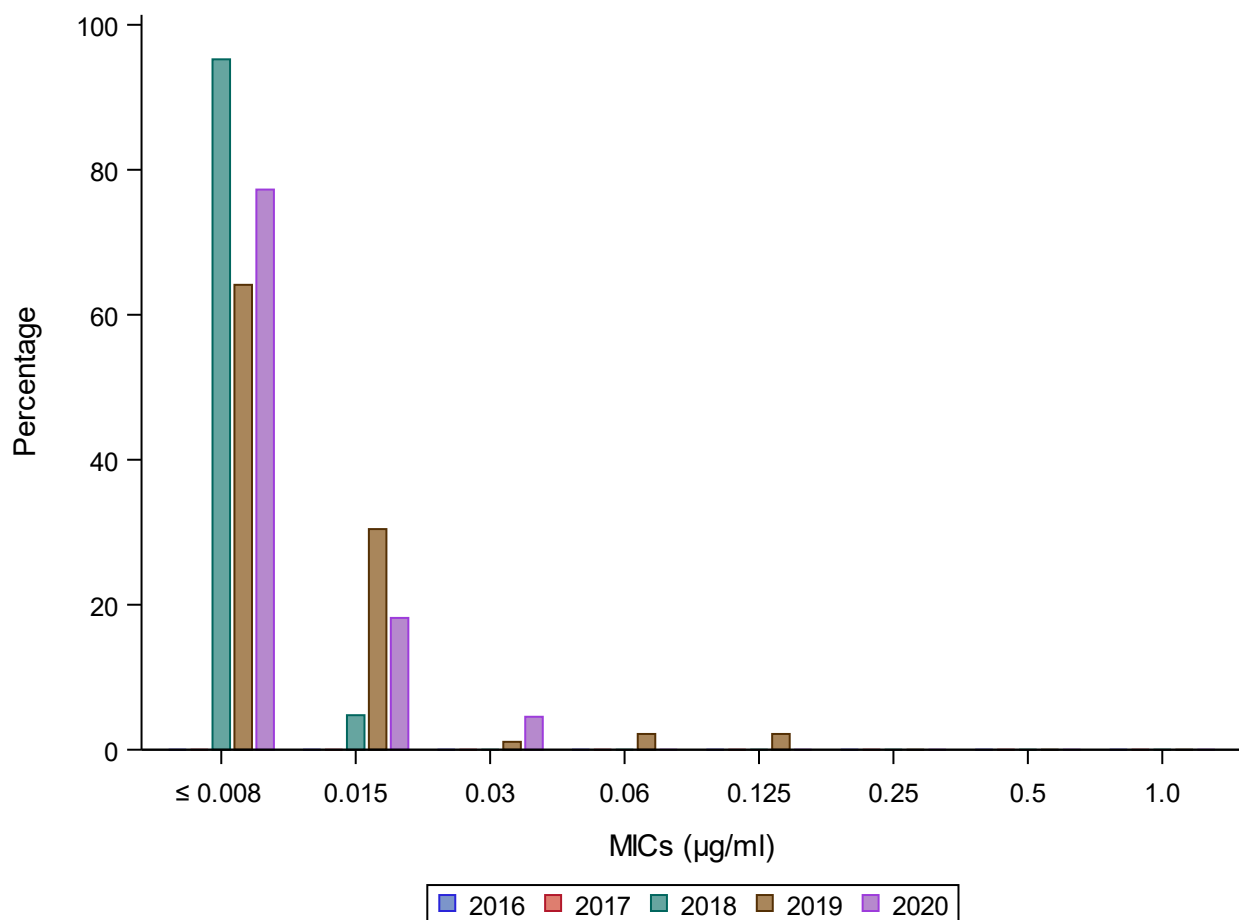
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	11	50.0
1 antimicrobial	7	31.8
2 antimicrobials	3	13.6
3 antimicrobials	1	4.5
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

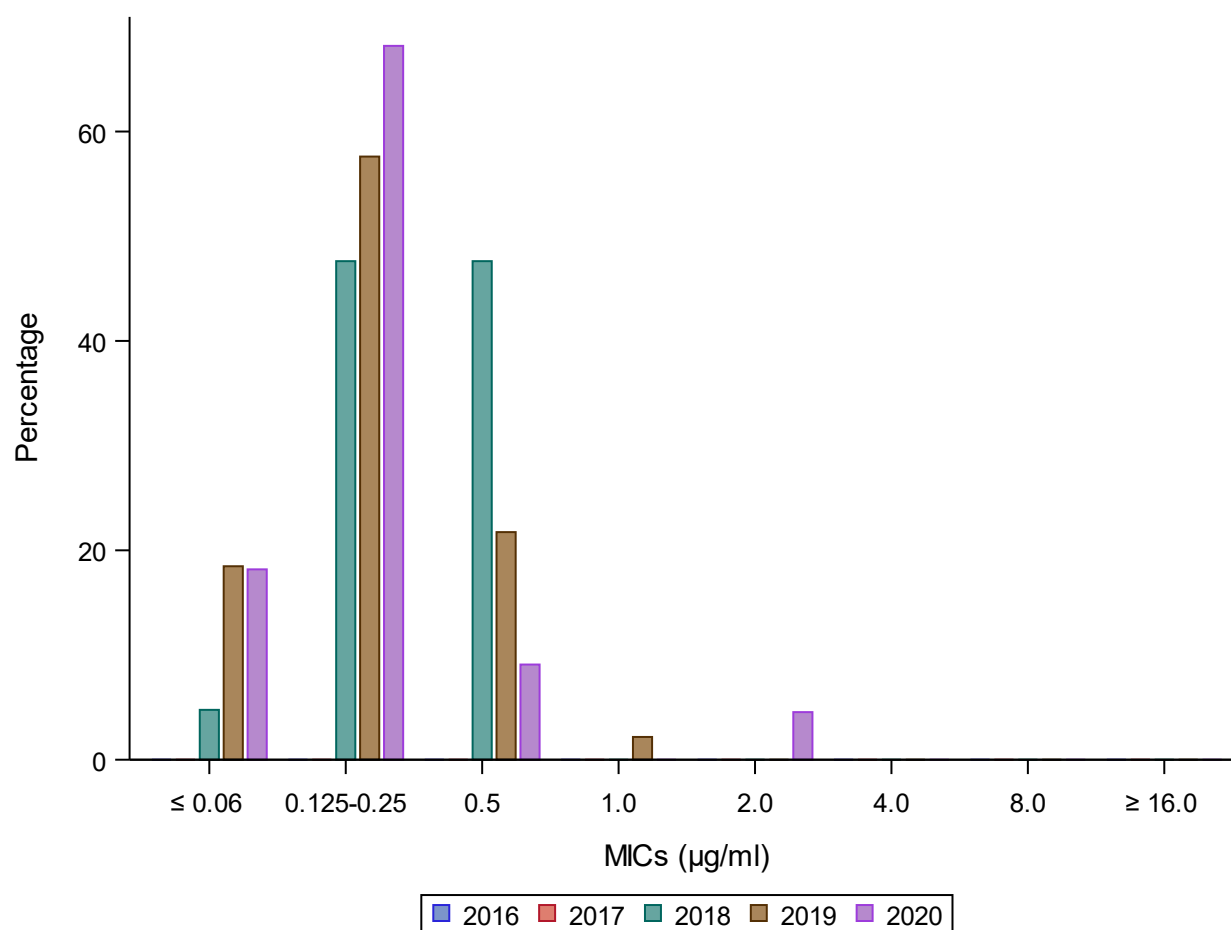
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2016-2020



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
2016	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
2017	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
2018	20 (95.2)	1 (4.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	21
2019	59 (64.1)	28 (30.4)	1 (1.1)	2 (2.2)	2 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	92
2020	17 (77.3)	4 (18.2)	1 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	22

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

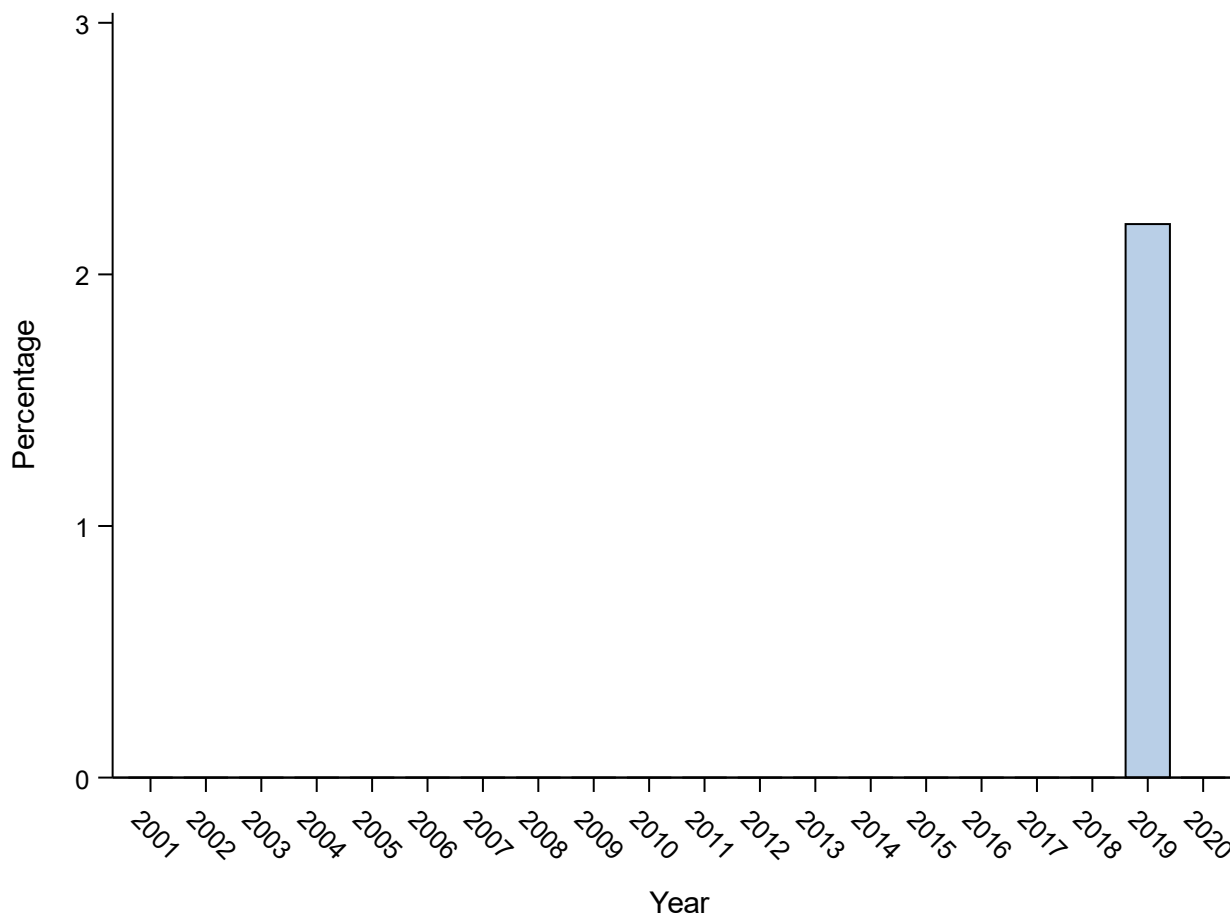
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2016-2020



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
2016	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
2017	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
2018	1 (4.8)	10 (47.6)	10 (47.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	21
2019	17 (18.5)	53 (57.6)	20 (21.7)	2 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	92
2020	4 (18.2)	15 (68.2)	2 (9.1)	0 (0.0)	1 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	22

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2001-2020

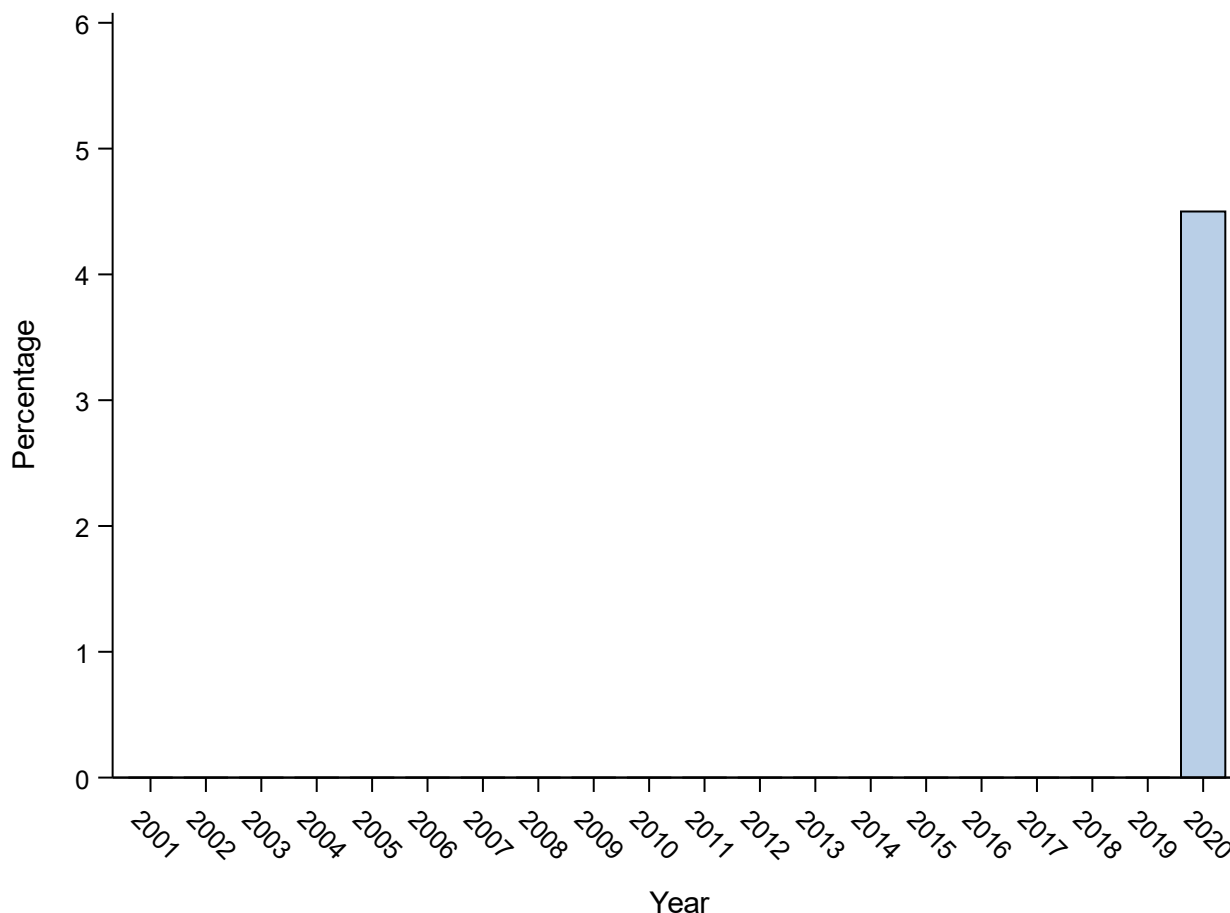


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.2)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2001-2020

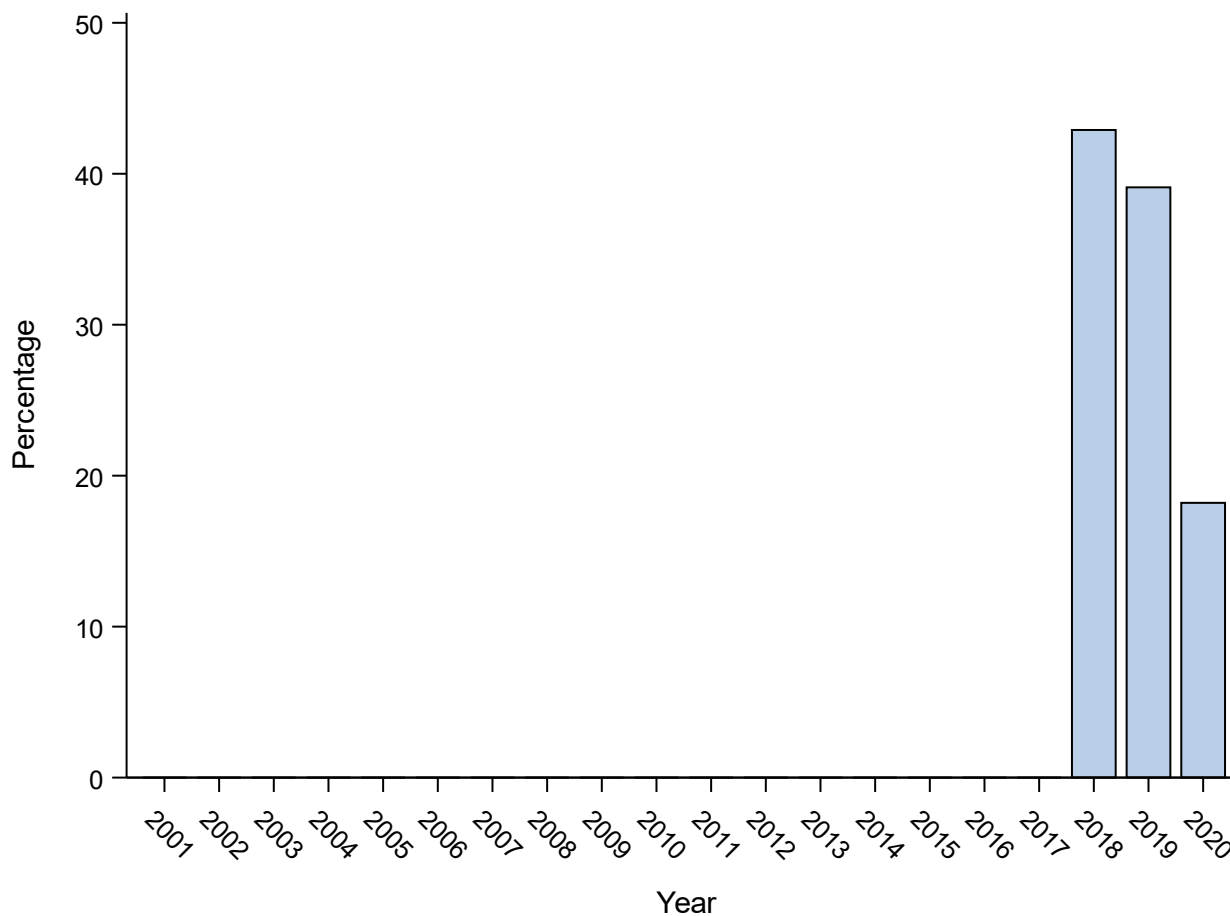


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	1 (4.5)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Jackson, Mississippi, 2001-2020

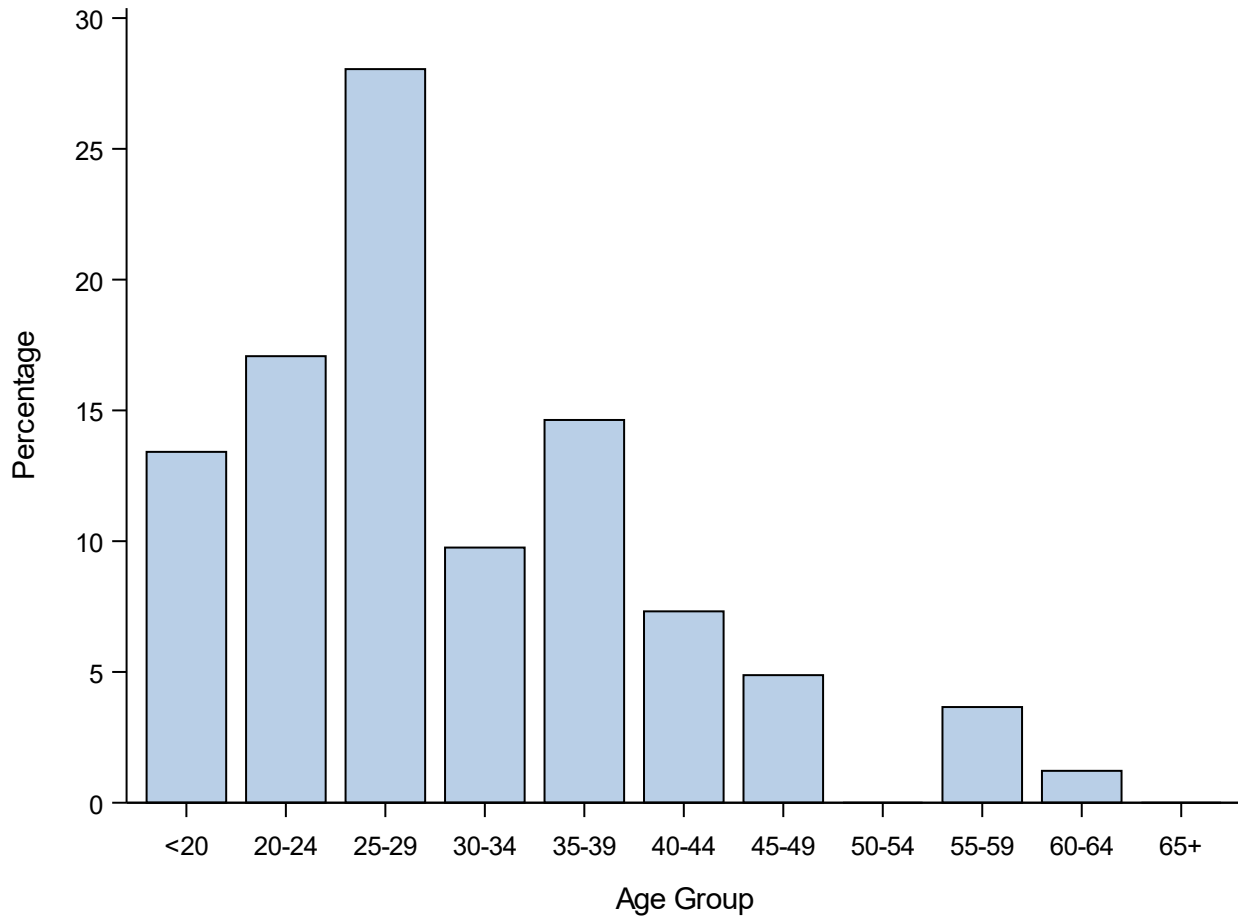


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (42.9)	36 (39.1)	4 (18.2)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

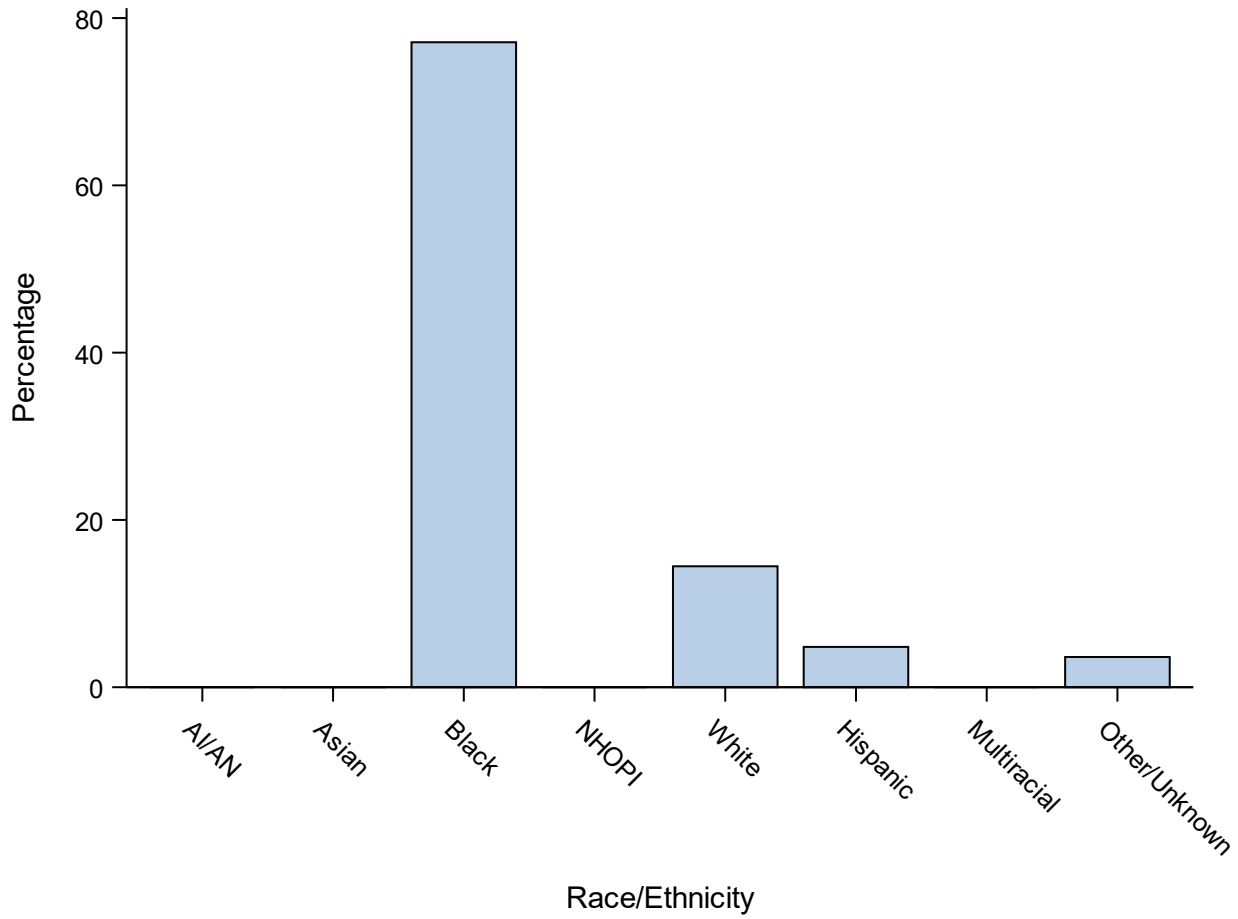
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
11 (13.4)	14 (17.1)	23 (28.0)	8 (9.8)	12 (14.6)	6 (7.3)	4 (4.9)	0 (0.0)	3 (3.7)	1 (1.2)	0 (0.0)	82

Note: Cases with unknown age were excluded.

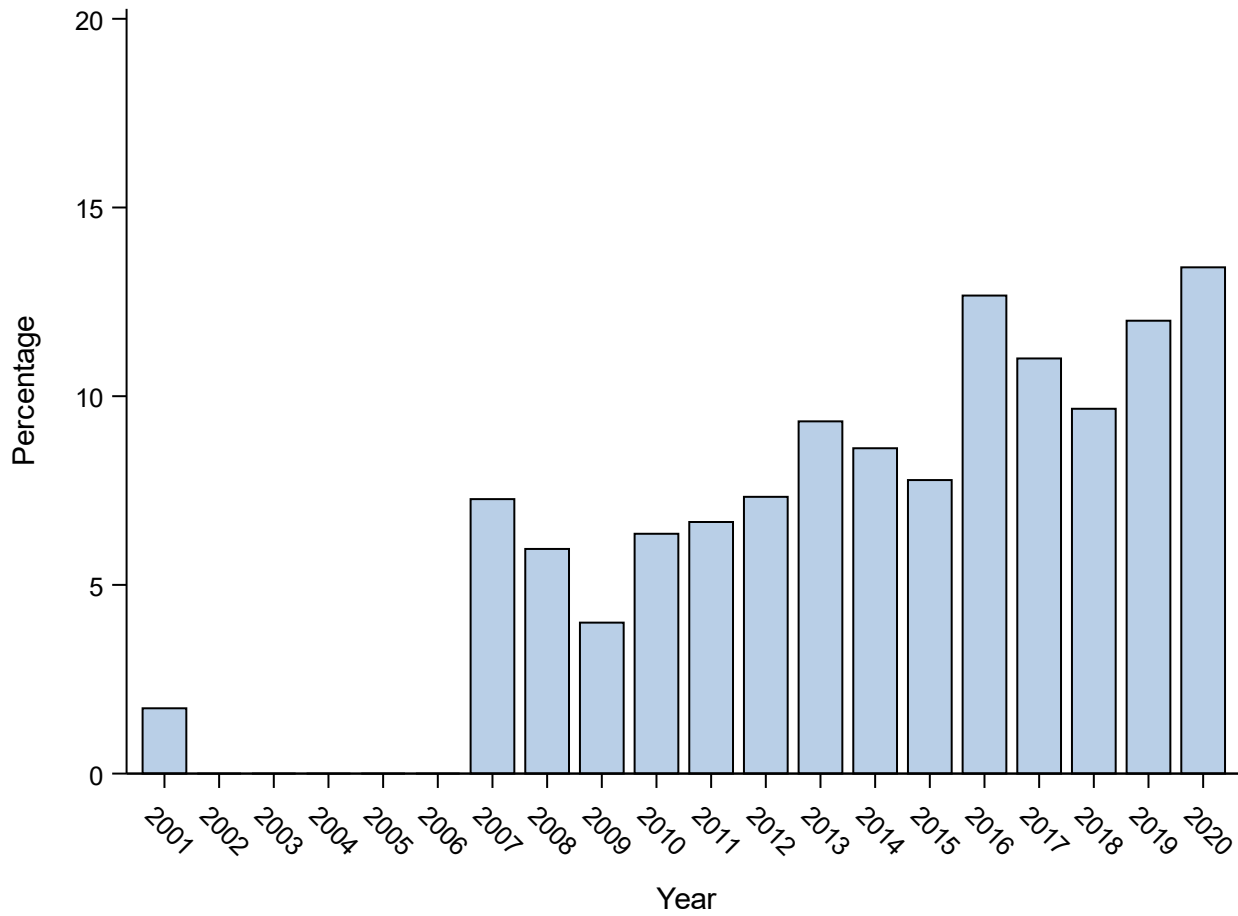
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	64 (77.1)	0 (0.0)	12 (14.5)	4 (4.8)	0 (0.0)	3 (3.6)	83

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2001-2020

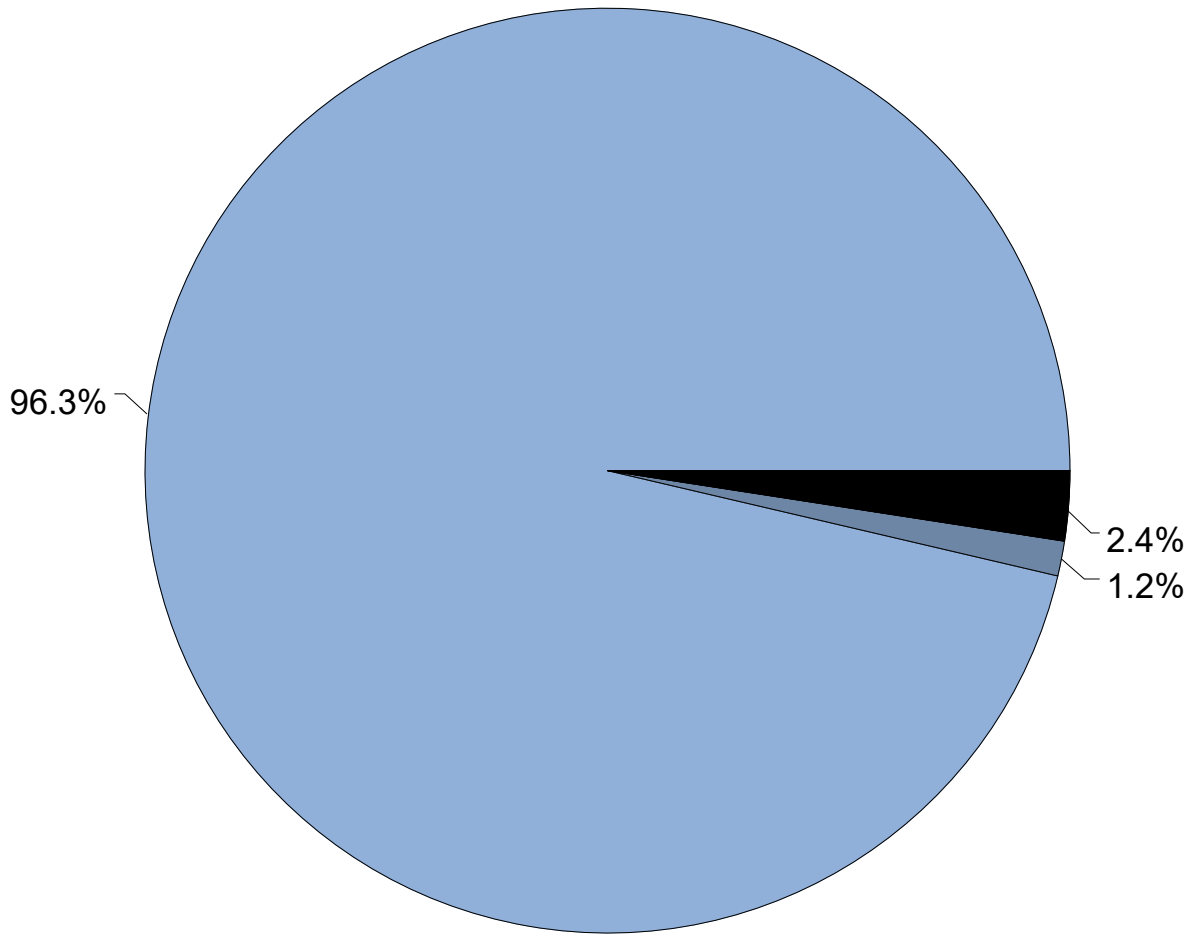


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (7.3)	15 (6.0)	12 (4.0)	19 (6.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
20 (6.7)	22 (7.3)	28 (9.3)	20 (8.6)	21 (7.8)	38 (12.7)	33 (11.0)	29 (9.7)	36 (12.0)	11 (3.4)

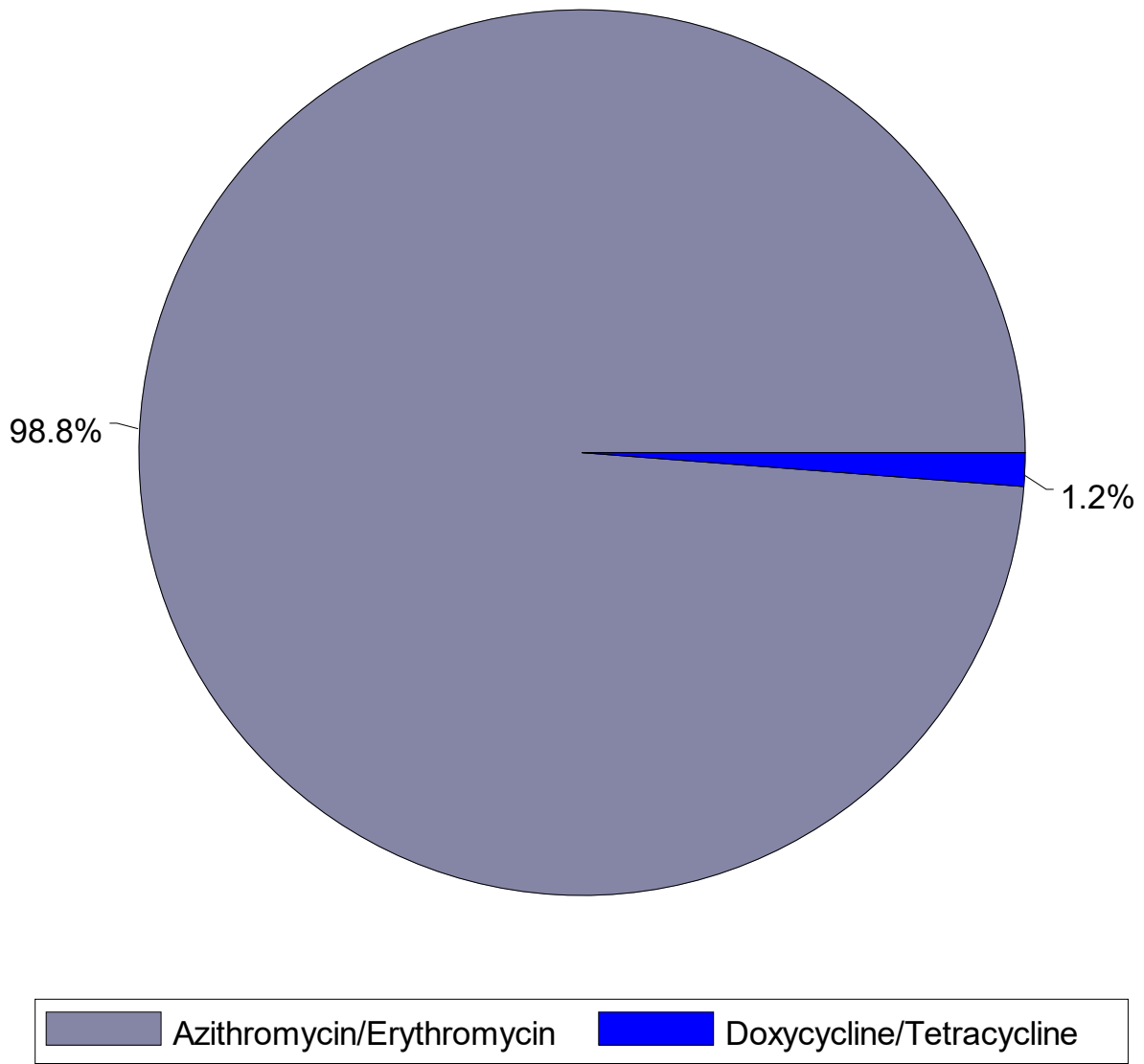
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP in 2001 and 2007-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2020



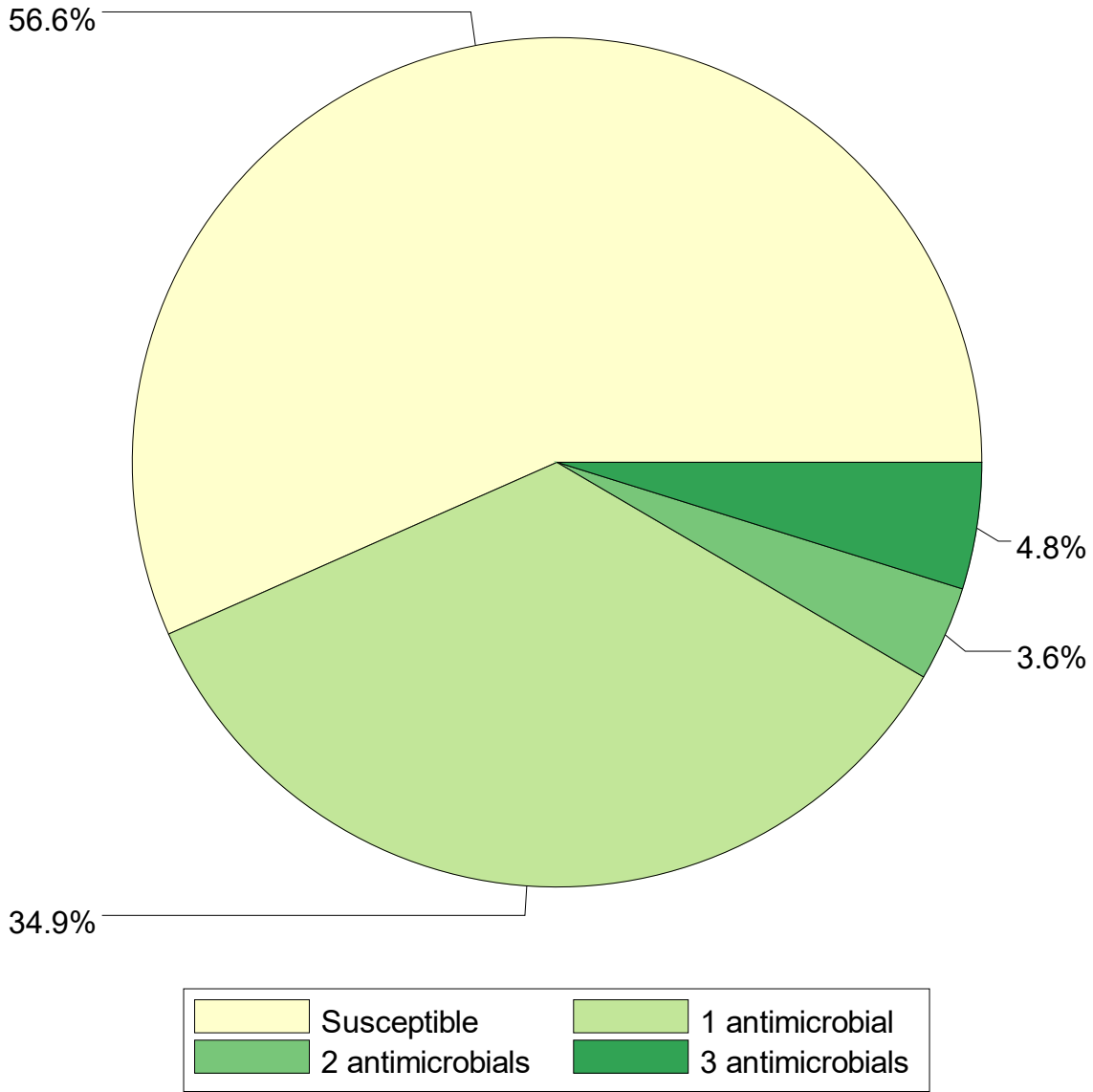
Primary Treatment	Count	Percentage
None	2	2.4
Ceftriaxone 250 mg	79	96.3
Gentamicin	1	1.2

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	81	98.8
Doxycycline/Tetracycline	1	1.2

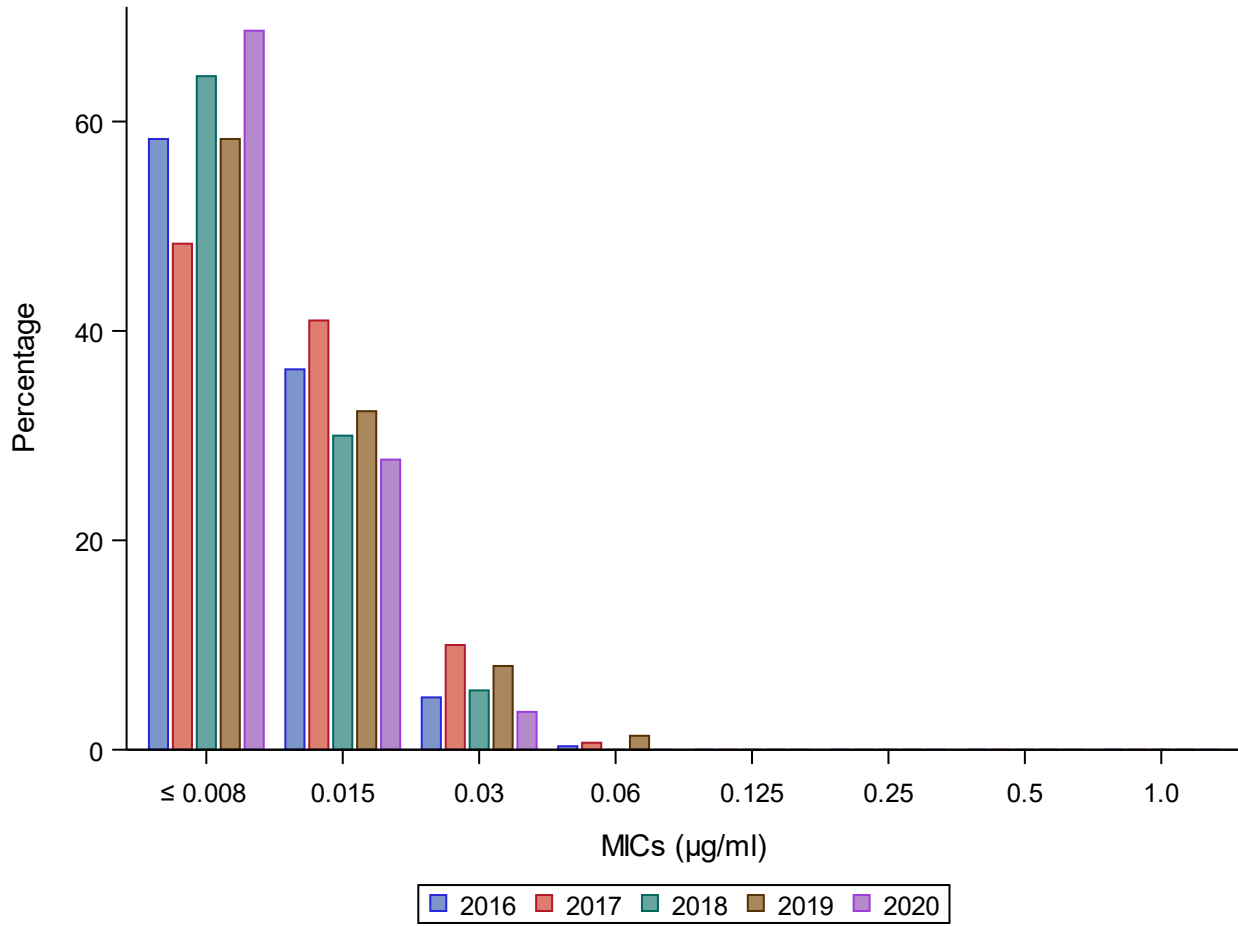
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	47	56.6
1 antimicrobial	29	34.9
2 antimicrobials	3	3.6
3 antimicrobials	4	4.8
4+ antimicrobials	0	0.0

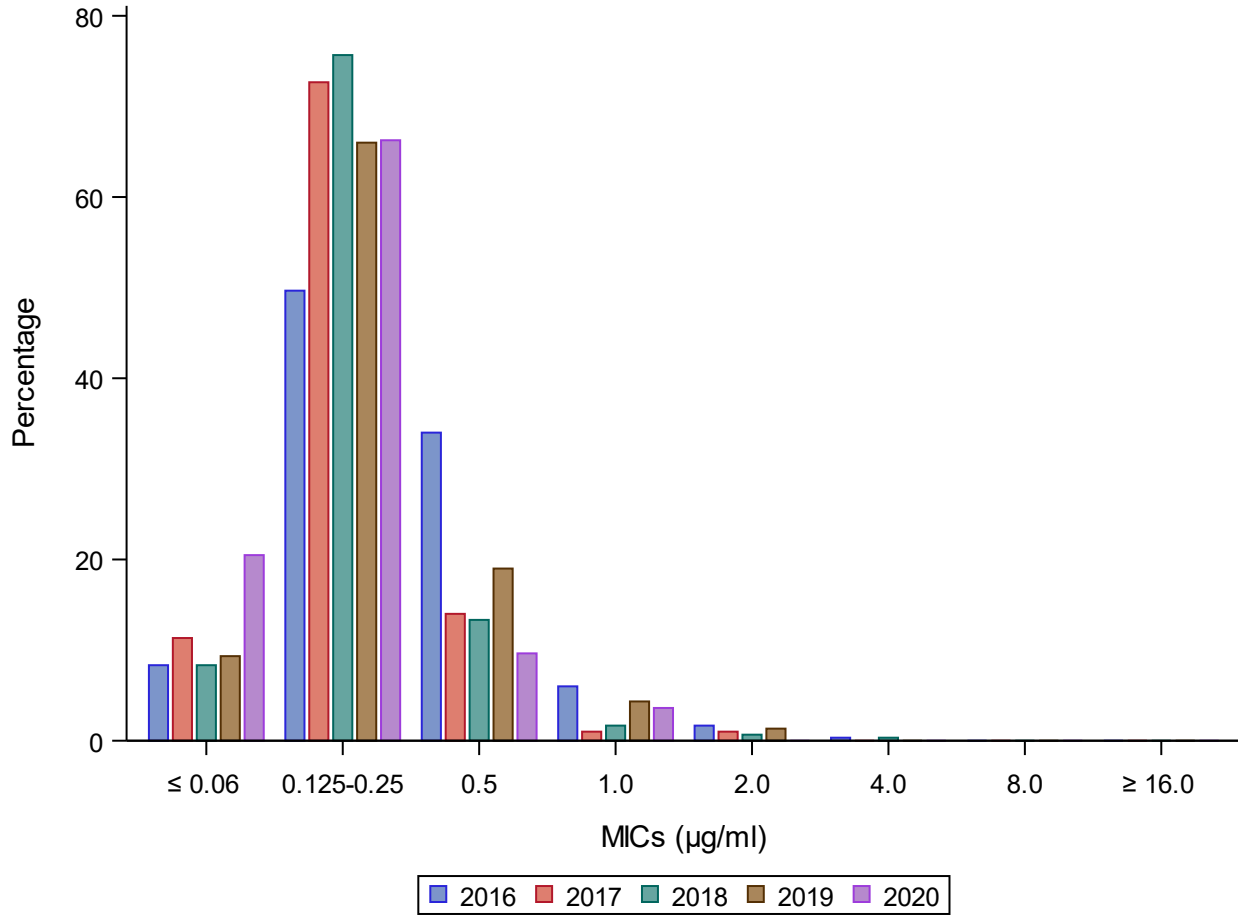
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2016-2020



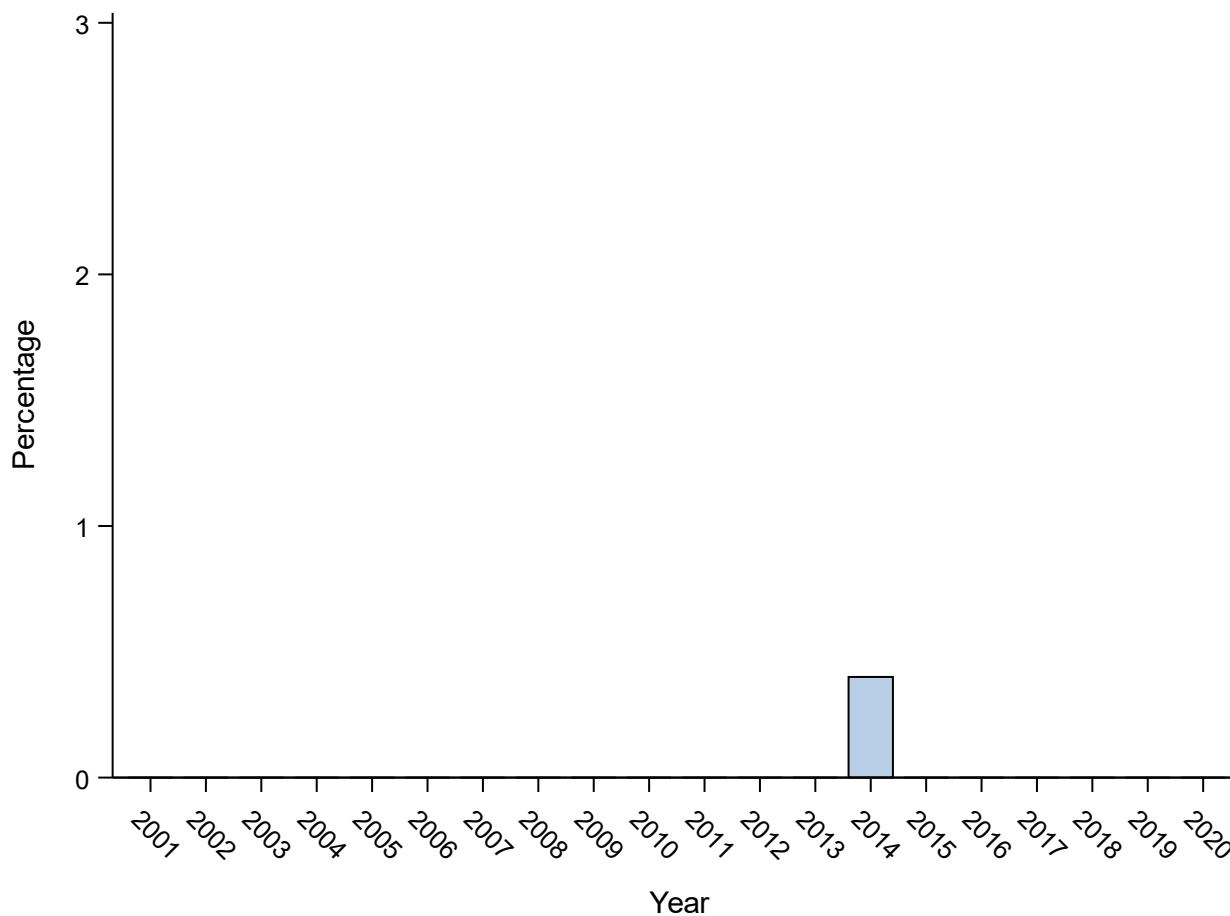
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	175 (58.3)	109 (36.3)	15 (5.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	145 (48.3)	123 (41.0)	30 (10.0)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	193 (64.3)	90 (30.0)	17 (5.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2019	175 (58.3)	97 (32.3)	24 (8.0)	4 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2020	57 (68.7)	23 (27.7)	3 (3.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	83

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2016-2020



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
2016	25 (8.3)	149 (49.7)	102 (34.0)	18 (6.0)	5 (1.7)	1 (0.3)	0 (0.0)	0 (0.0)	300
2017	34 (11.3)	218 (72.7)	42 (14.0)	3 (1.0)	3 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	25 (8.3)	227 (75.7)	40 (13.3)	5 (1.7)	2 (0.7)	1 (0.3)	0 (0.0)	0 (0.0)	300
2019	28 (9.3)	198 (66.0)	57 (19.0)	13 (4.3)	4 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2020	17 (20.5)	55 (66.3)	8 (9.6)	3 (3.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	83

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2001-2020

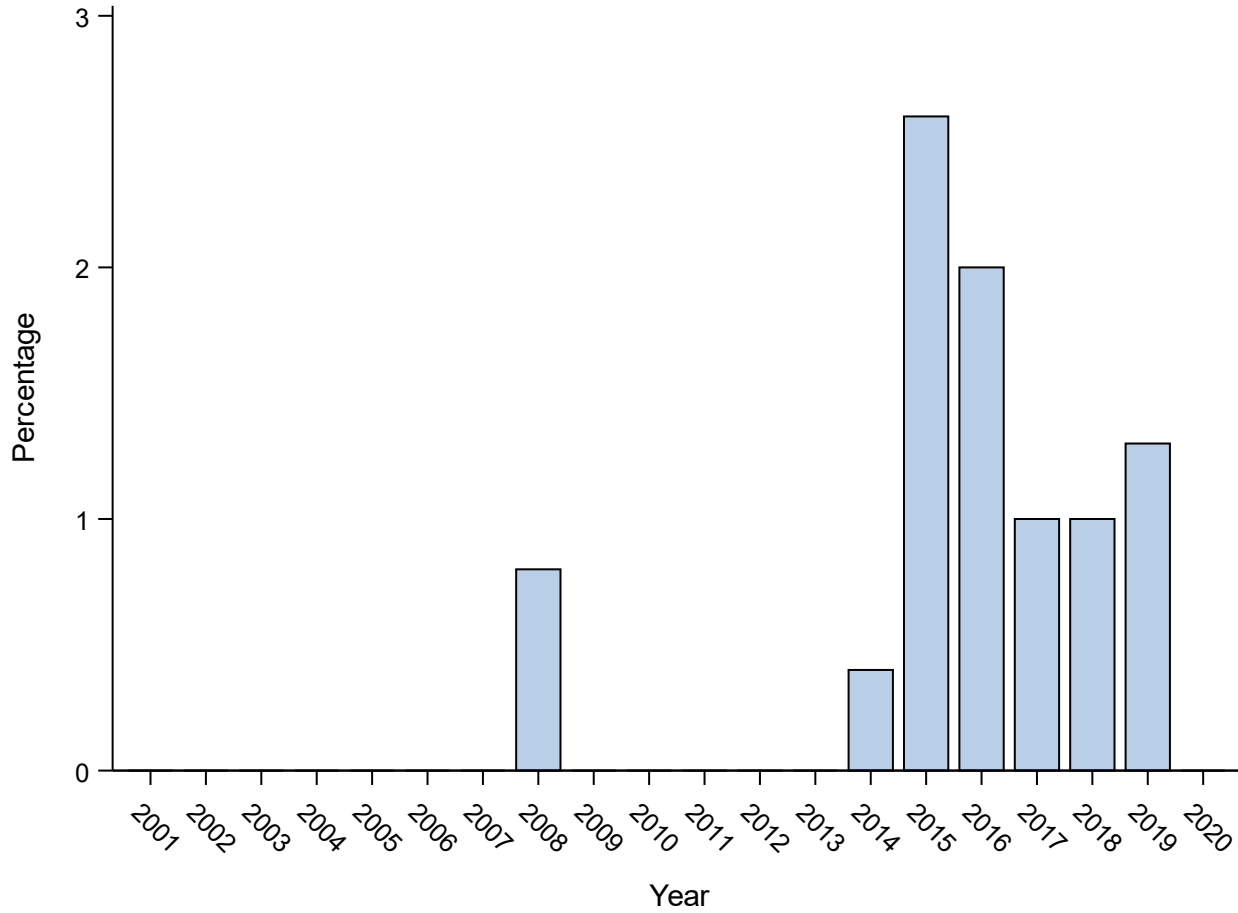


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP in 2001 and 2007-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2001-2020

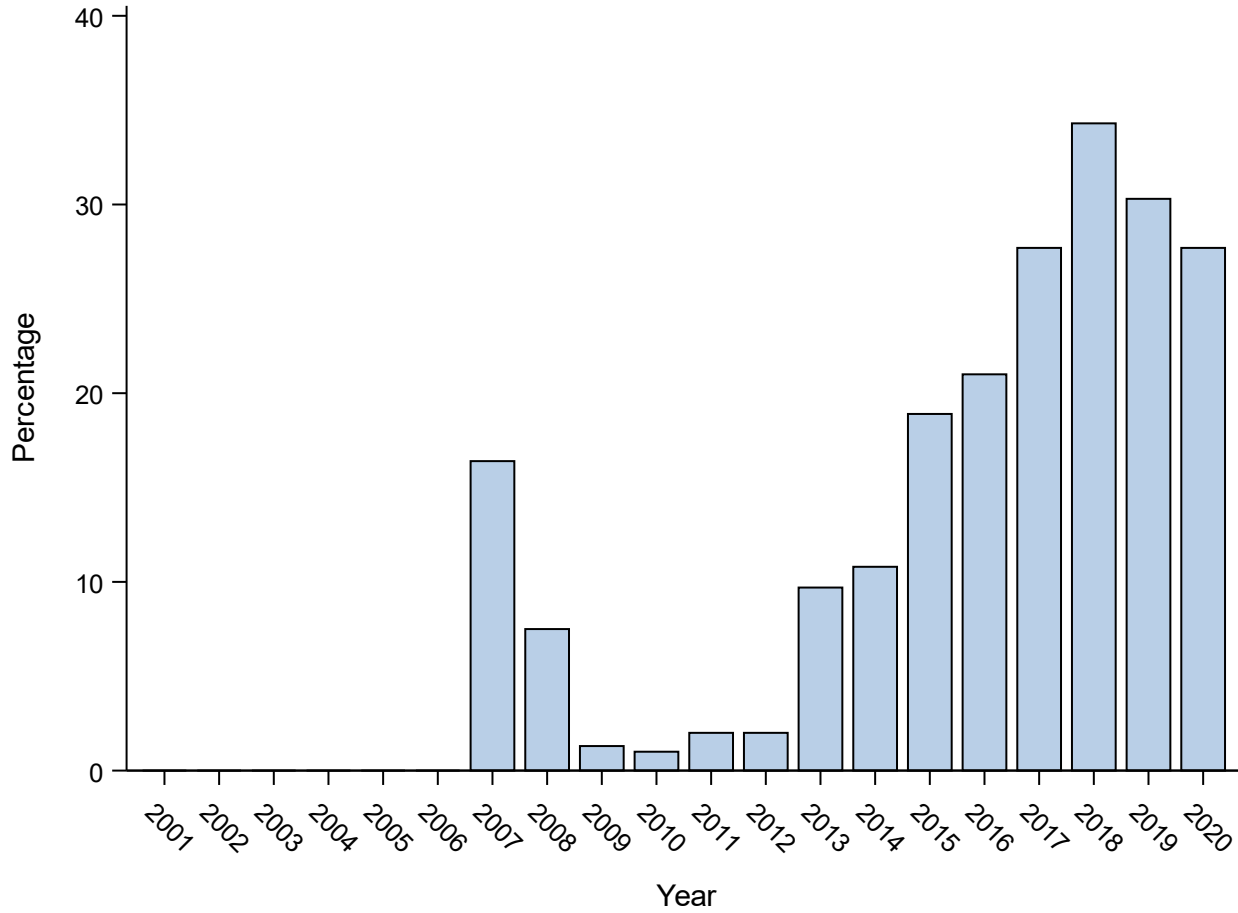


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.8)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	7 (2.6)	6 (2.0)	3 (1.0)	3 (1.0)	4 (1.3)	0 (0.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP in 2001 and 2007-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Kansas City, Missouri, 2001-2020

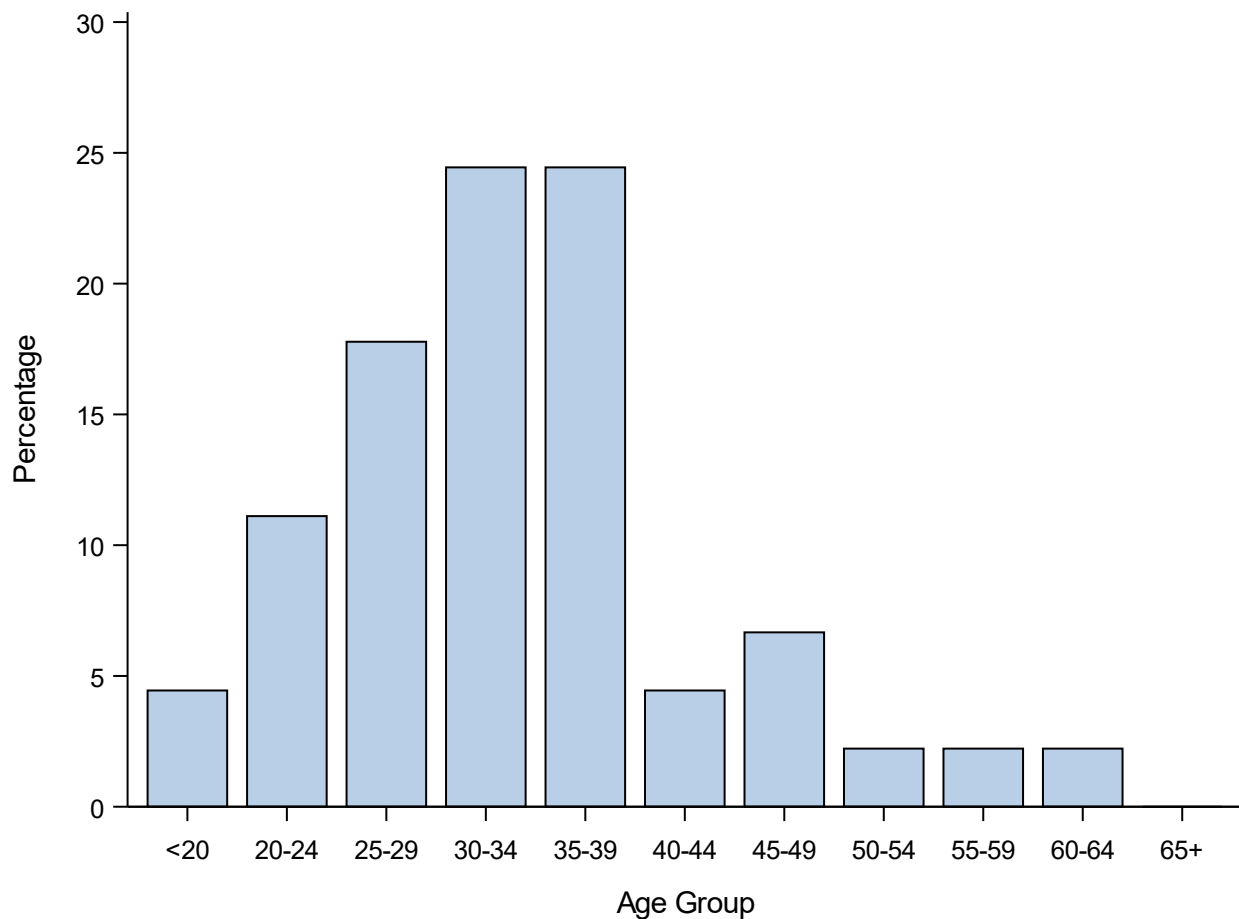


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (16.4)	19 (7.5)	4 (1.3)	3 (1.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
6 (2.0)	6 (2.0)	29 (9.7)	25 (10.8)	51 (18.9)	63 (21.0)	83 (27.7)	103 (34.3)	91 (30.3)	23 (27.7)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP in 2001 and 2007-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

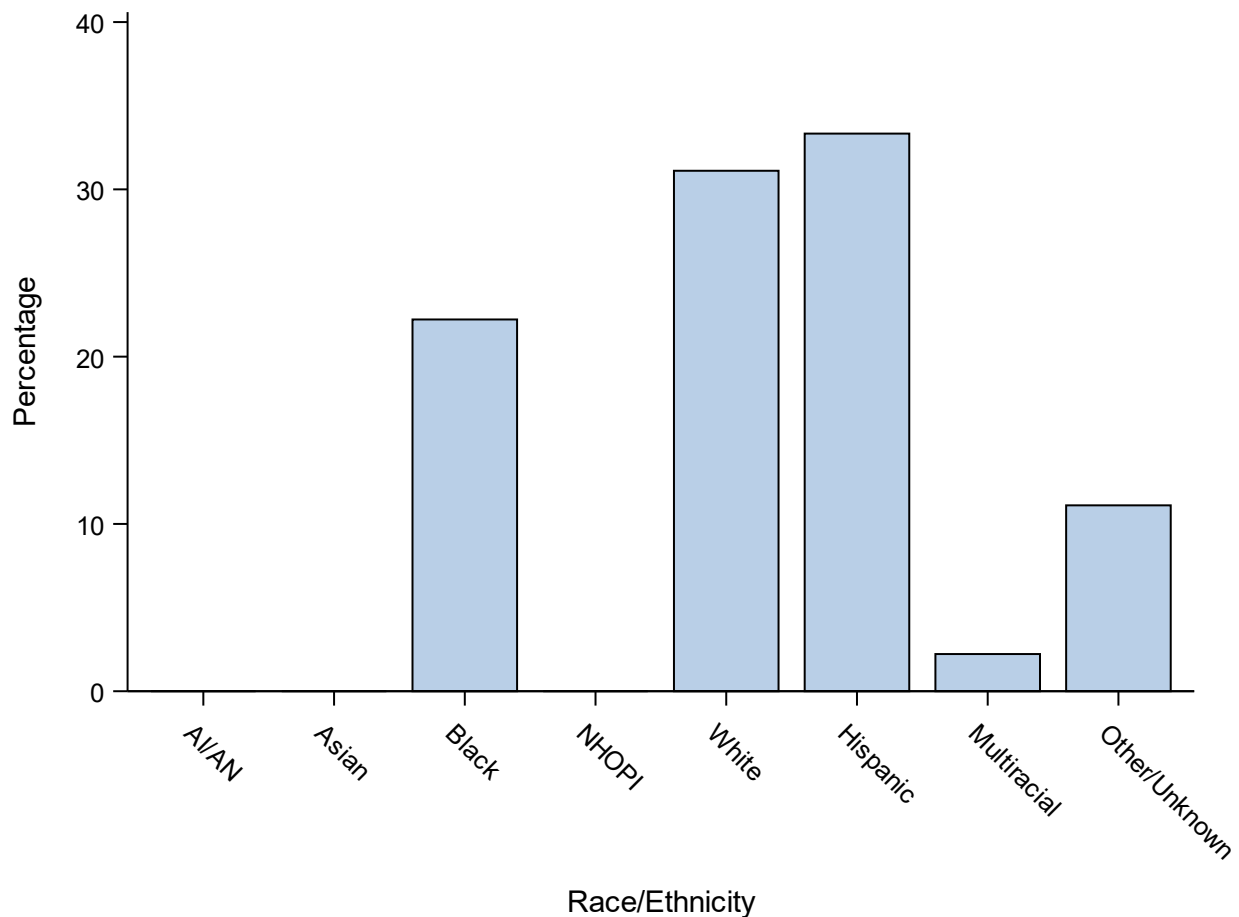
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (4.4)	5 (11.1)	8 (17.8)	11 (24.4)	11 (24.4)	2 (4.4)	3 (6.7)	1 (2.2)	1 (2.2)	1 (2.2)	0 (0.0)	45

Note: Cases with unknown age were excluded.

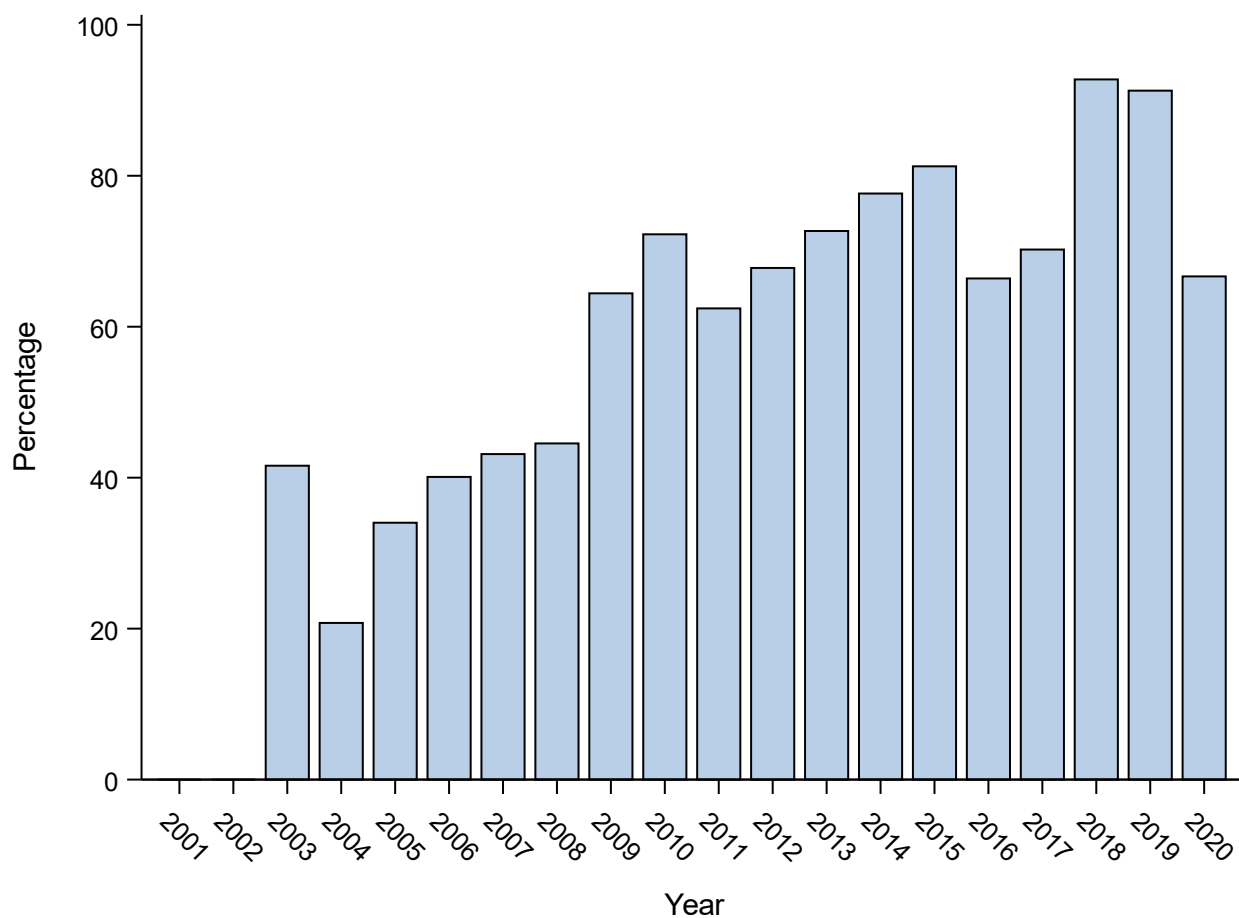
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	10 (22.2)	0 (0.0)	14 (31.1)	15 (33.3)	1 (2.2)	5 (11.1)	45

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2001-2020

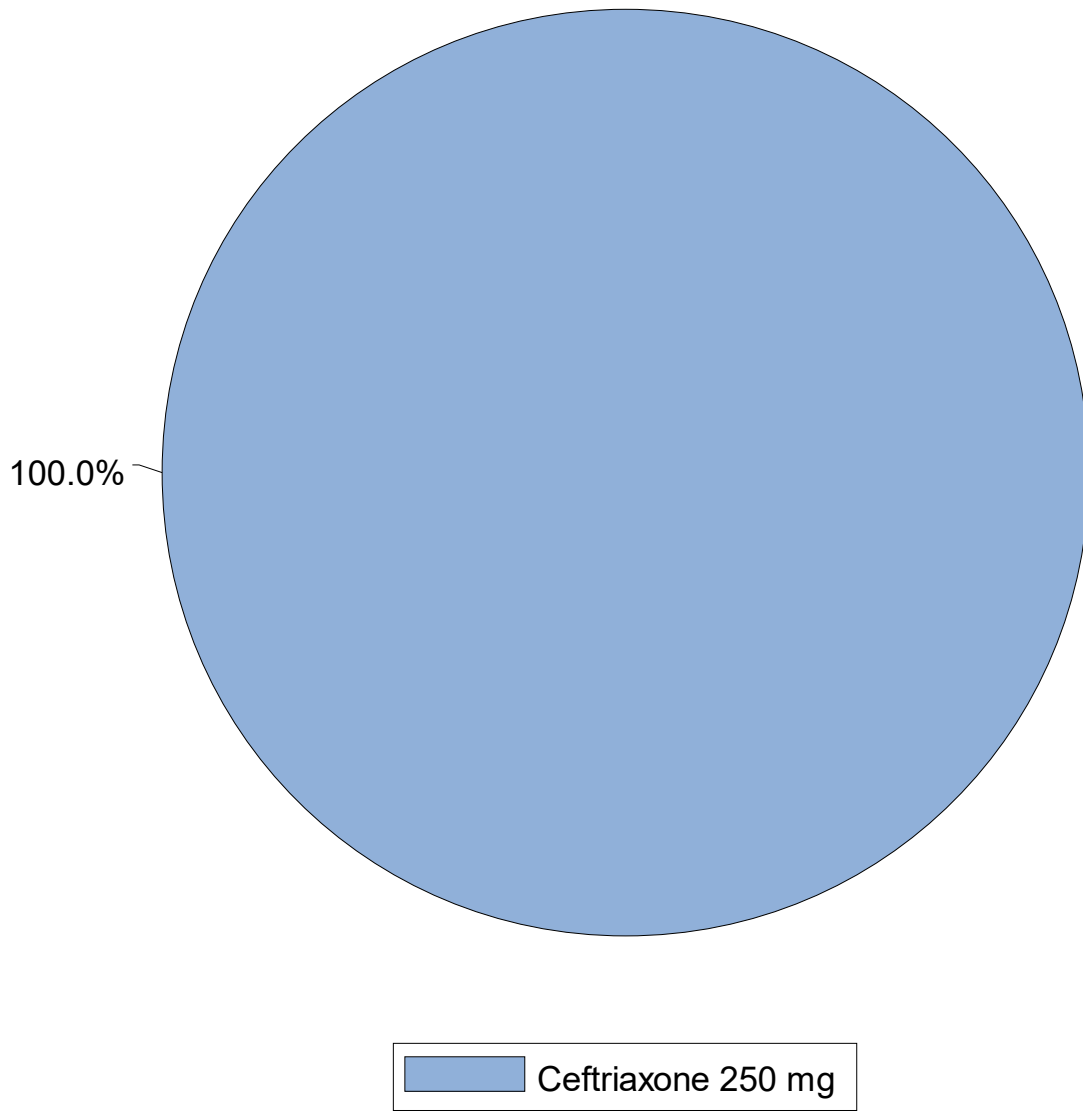


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	84 (41.6)	55 (20.8)	65 (34.0)	81 (40.1)	69 (43.1)	53 (44.5)	134 (64.4)	190 (72.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
108 (62.4)	101 (67.8)	141 (72.7)	132 (77.6)	65 (81.3)	81 (66.4)	125 (70.2)	141 (92.8)	136 (91.3)	28 (66.7)

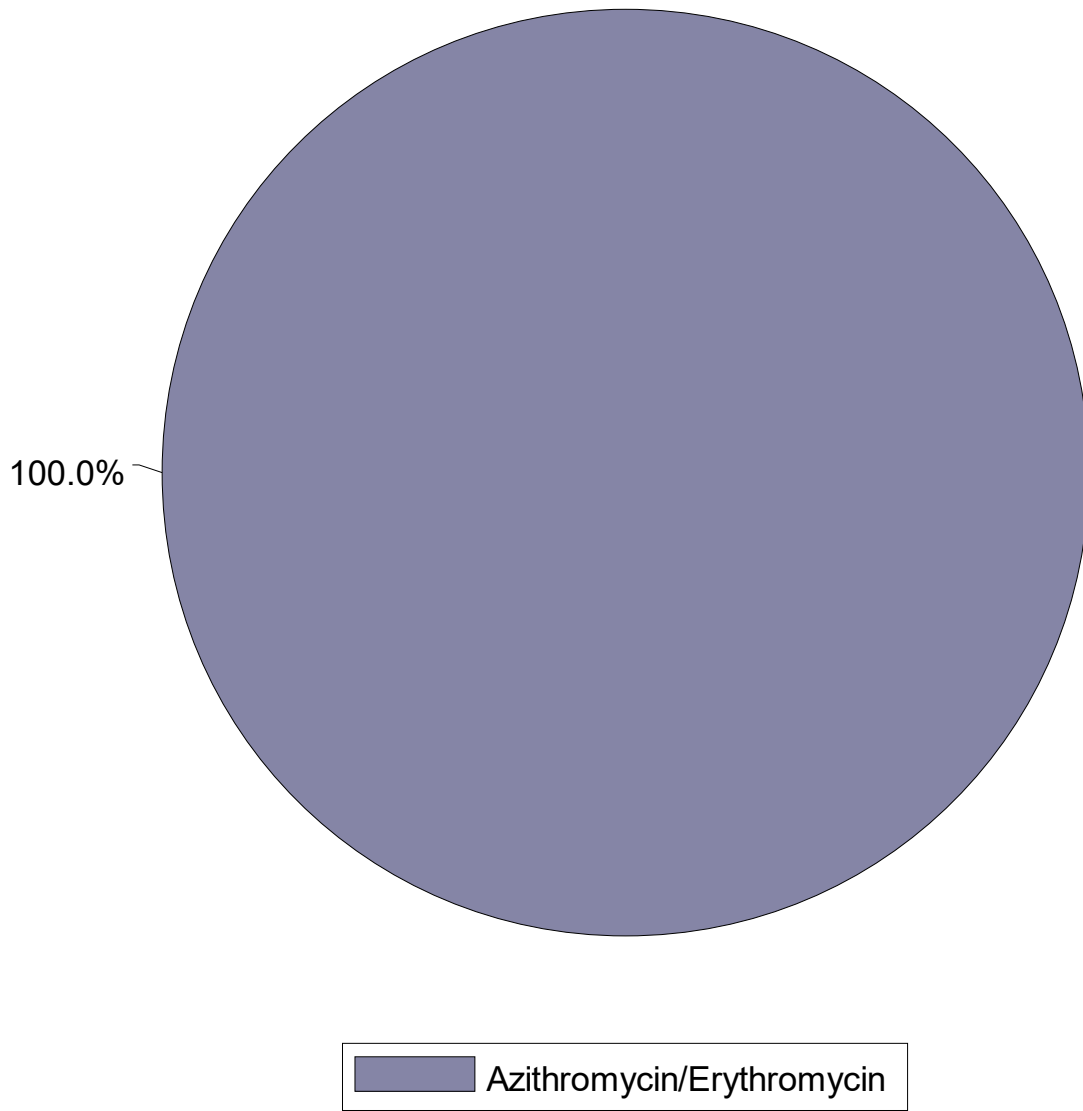
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2003-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2020



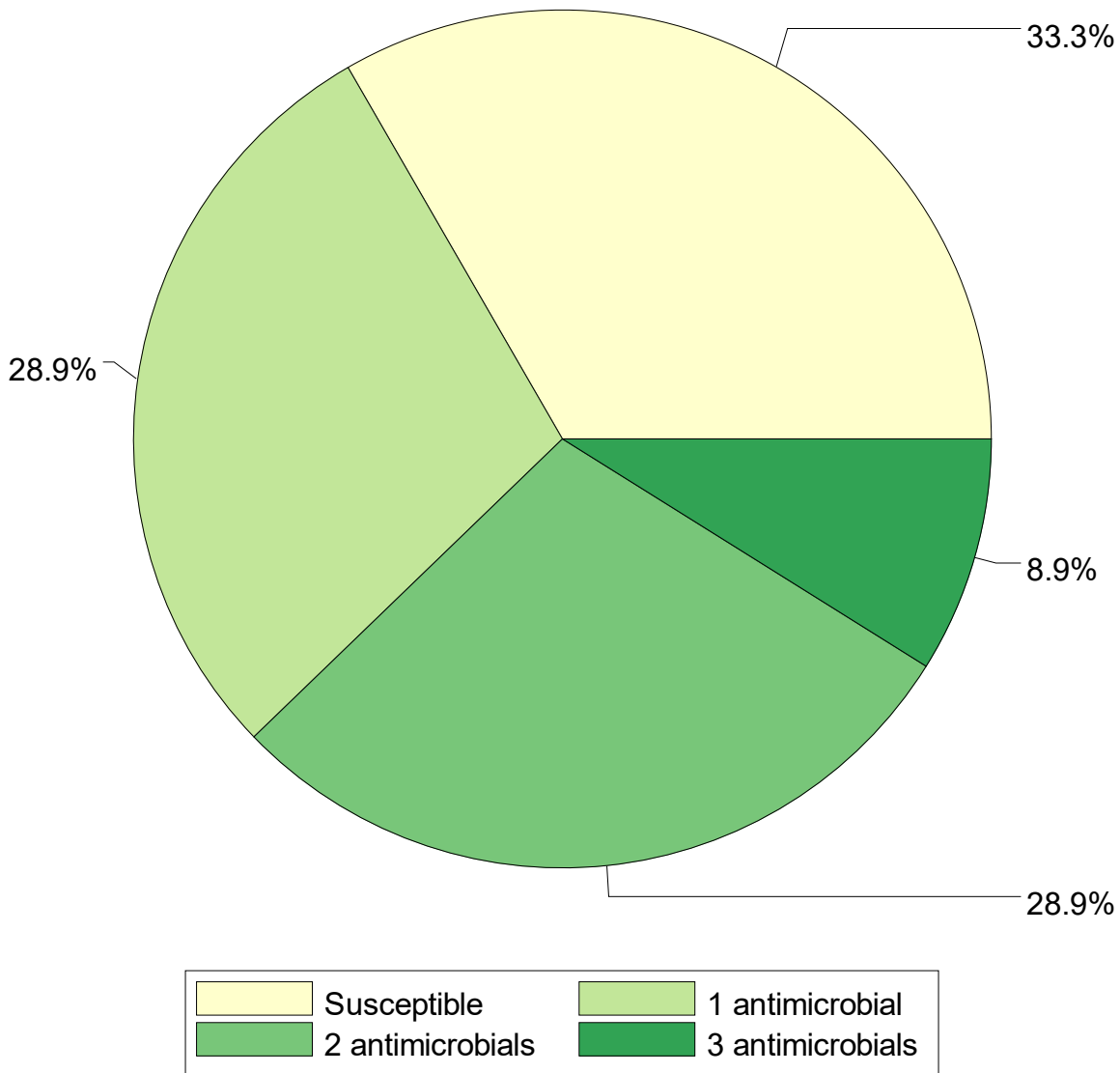
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	45	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	45	100.0

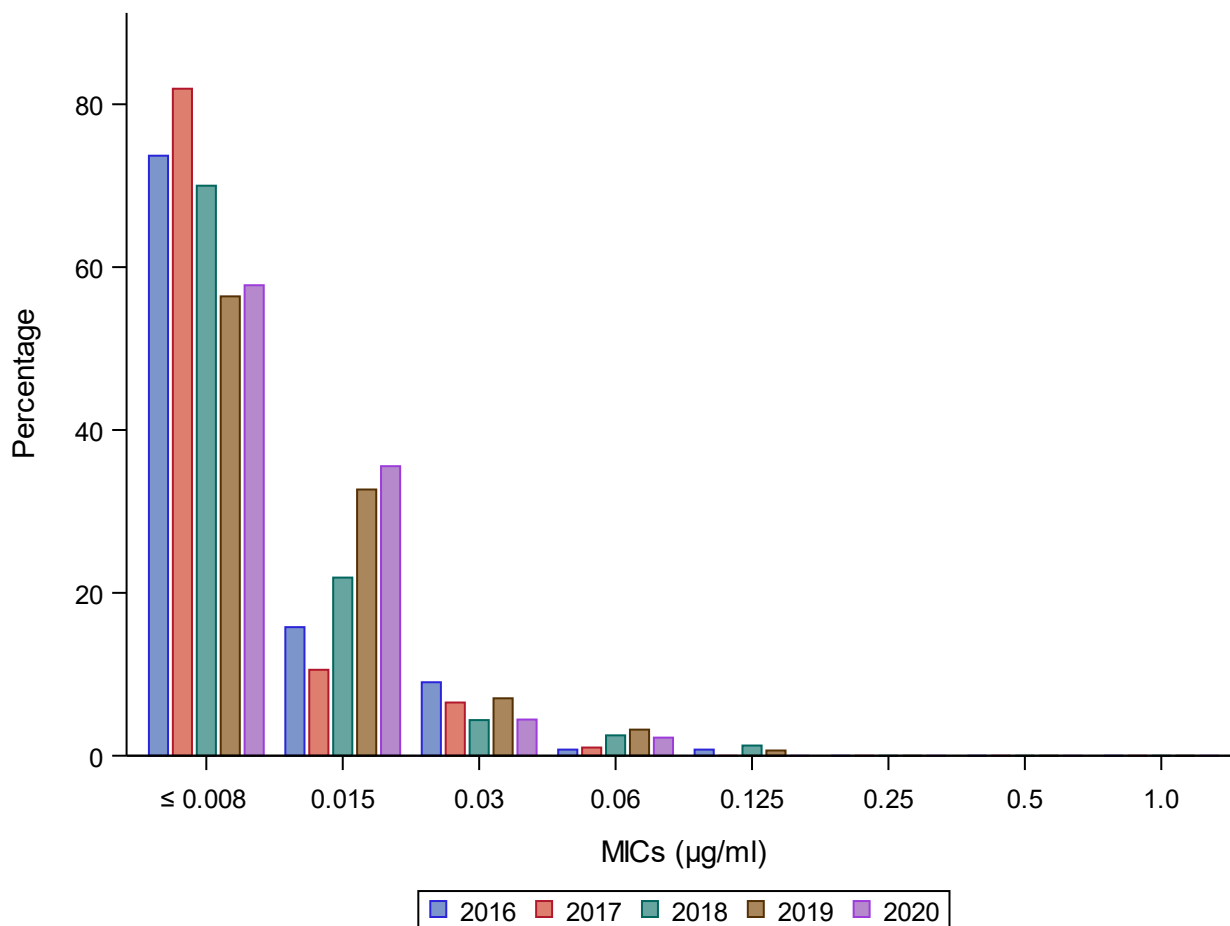
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	15	33.3
1 antimicrobial	13	28.9
2 antimicrobials	13	28.9
3 antimicrobials	4	8.9
4+ antimicrobials	0	0.0

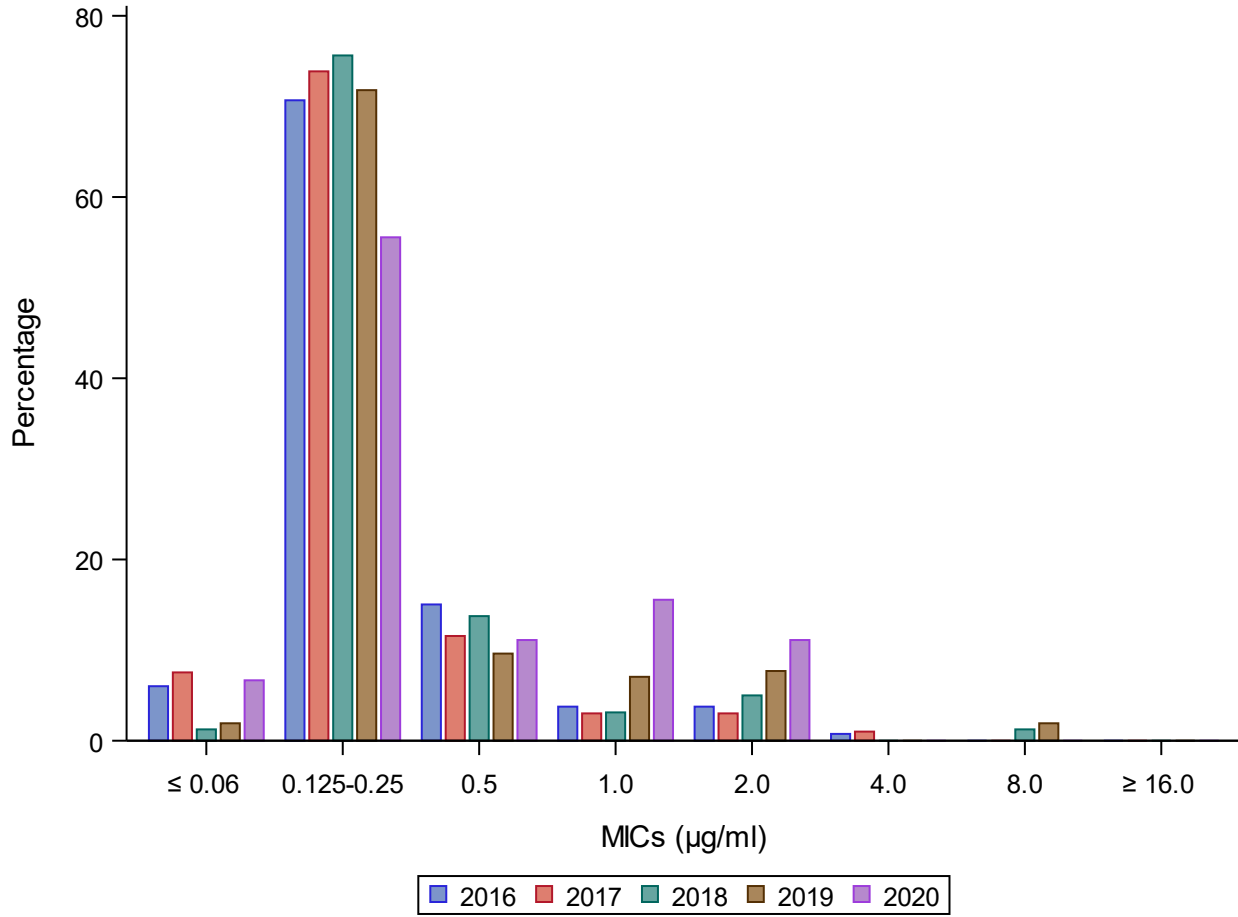
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 µg/mL; Cefixime: MICs ≥ 0.25 µg/mL; Azithromycin: MICs ≥ 2.0 µg/ml; Resistance = Tetracycline: MICs ≥ 2.0 µg/mL; Ciprofloxacin: MICs ≥ 1.0 µg/mL; Penicillin: MICs ≥ 2.0 µg/mL or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2016-2020



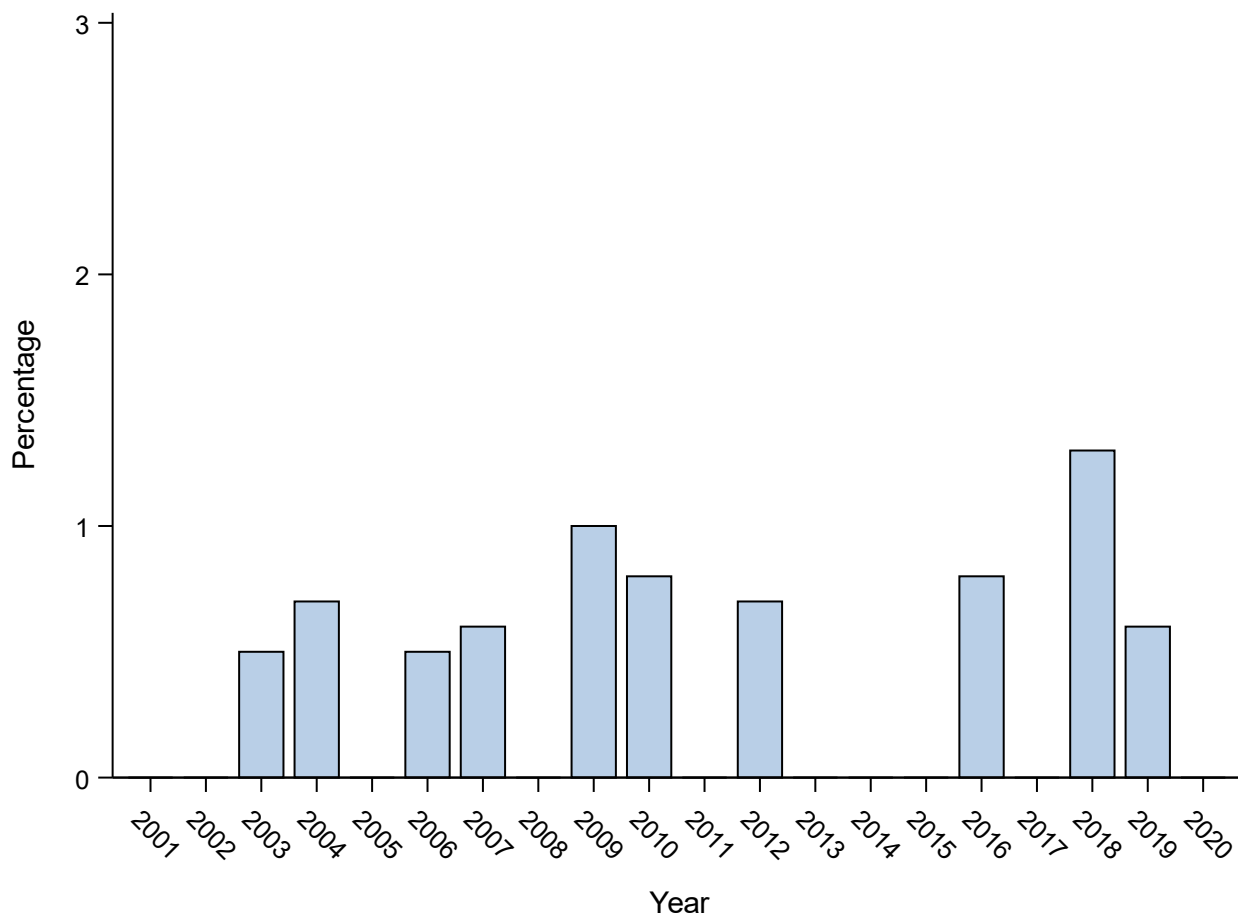
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	98 (73.7)	21 (15.8)	12 (9.0)	1 (0.8)	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	133
2017	163 (81.9)	21 (10.6)	13 (6.5)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	199
2018	112 (70.0)	35 (21.9)	7 (4.4)	4 (2.5)	2 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	160
2019	88 (56.4)	51 (32.7)	11 (7.1)	5 (3.2)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	156
2020	26 (57.8)	16 (35.6)	2 (4.4)	1 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	45

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2016-2020



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
2016	8 (6.0)	94 (70.7)	20 (15.0)	5 (3.8)	5 (3.8)	1 (0.8)	0 (0.0)	0 (0.0)	133
2017	15 (7.5)	147 (73.9)	23 (11.6)	6 (3.0)	6 (3.0)	2 (1.0)	0 (0.0)	0 (0.0)	199
2018	2 (1.3)	121 (75.6)	22 (13.8)	5 (3.1)	8 (5.0)	0 (0.0)	2 (1.3)	0 (0.0)	160
2019	3 (1.9)	112 (71.8)	15 (9.6)	11 (7.1)	12 (7.7)	0 (0.0)	3 (1.9)	0 (0.0)	156
2020	3 (6.7)	25 (55.6)	5 (11.1)	7 (15.6)	5 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	45

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2001-2020

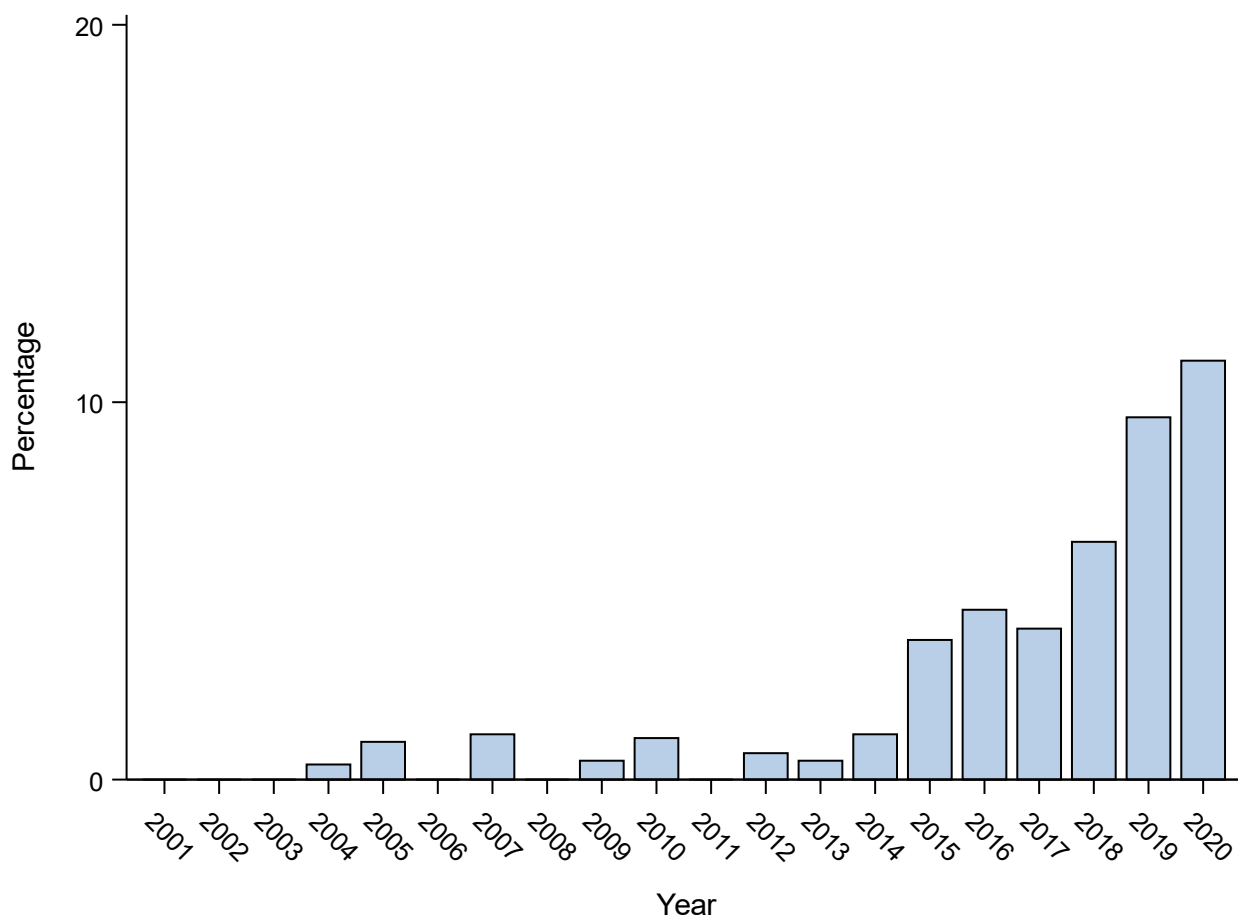


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.5)	2 (0.7)	0 (0.0)	1 (0.5)	1 (0.6)	0 (0.0)	2 (1.0)	2 (0.8)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.8)	0 (0.0)	2 (1.3)	1 (0.6)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2003-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Los Angeles, California, 2001-2020

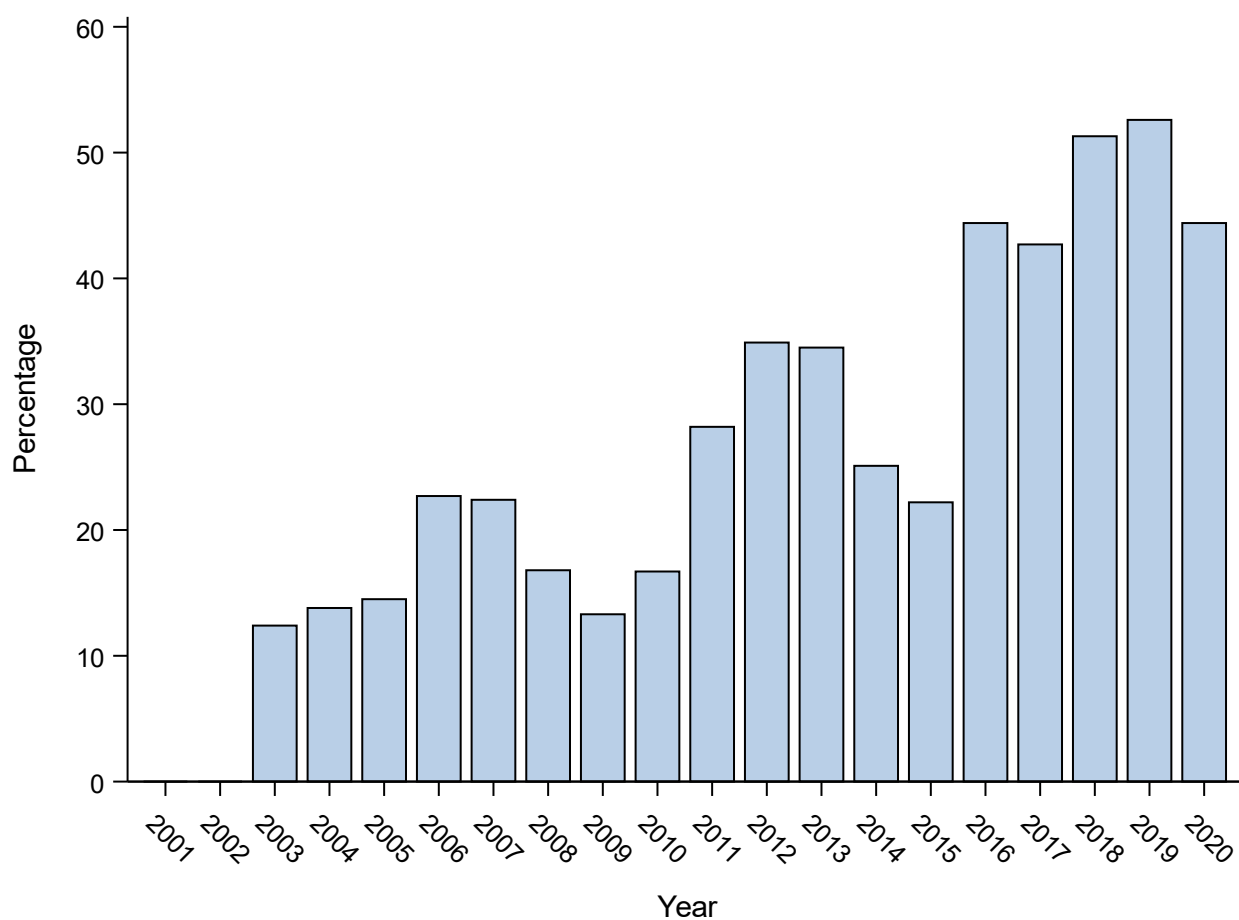


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	2 (1.0)	0 (0.0)	2 (1.2)	0 (0.0)	1 (0.5)	3 (1.1)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.7)	1 (0.5)	2 (1.2)	3 (3.7)	6 (4.5)	8 (4.0)	10 (6.3)	15 (9.6)	5 (11.1)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2003-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Los Angeles, California, 2001-2020

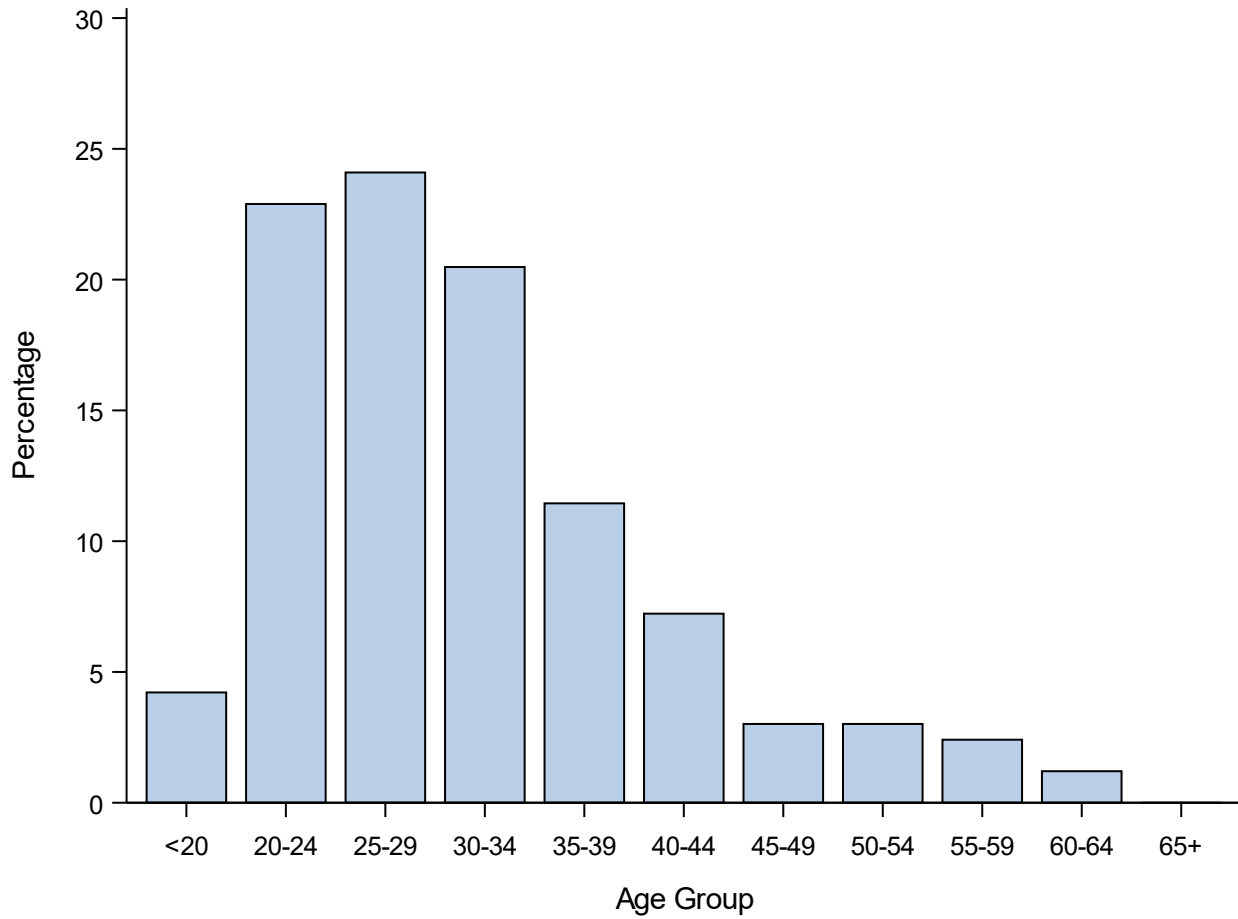


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	25 (12.4)	37 (13.8)	28 (14.5)	47 (22.7)	37 (22.4)	21 (16.8)	28 (13.3)	44 (16.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
49 (28.2)	52 (34.9)	67 (34.5)	43 (25.1)	18 (22.2)	59 (44.4)	85 (42.7)	82 (51.3)	82 (52.6)	20 (44.4)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2003-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

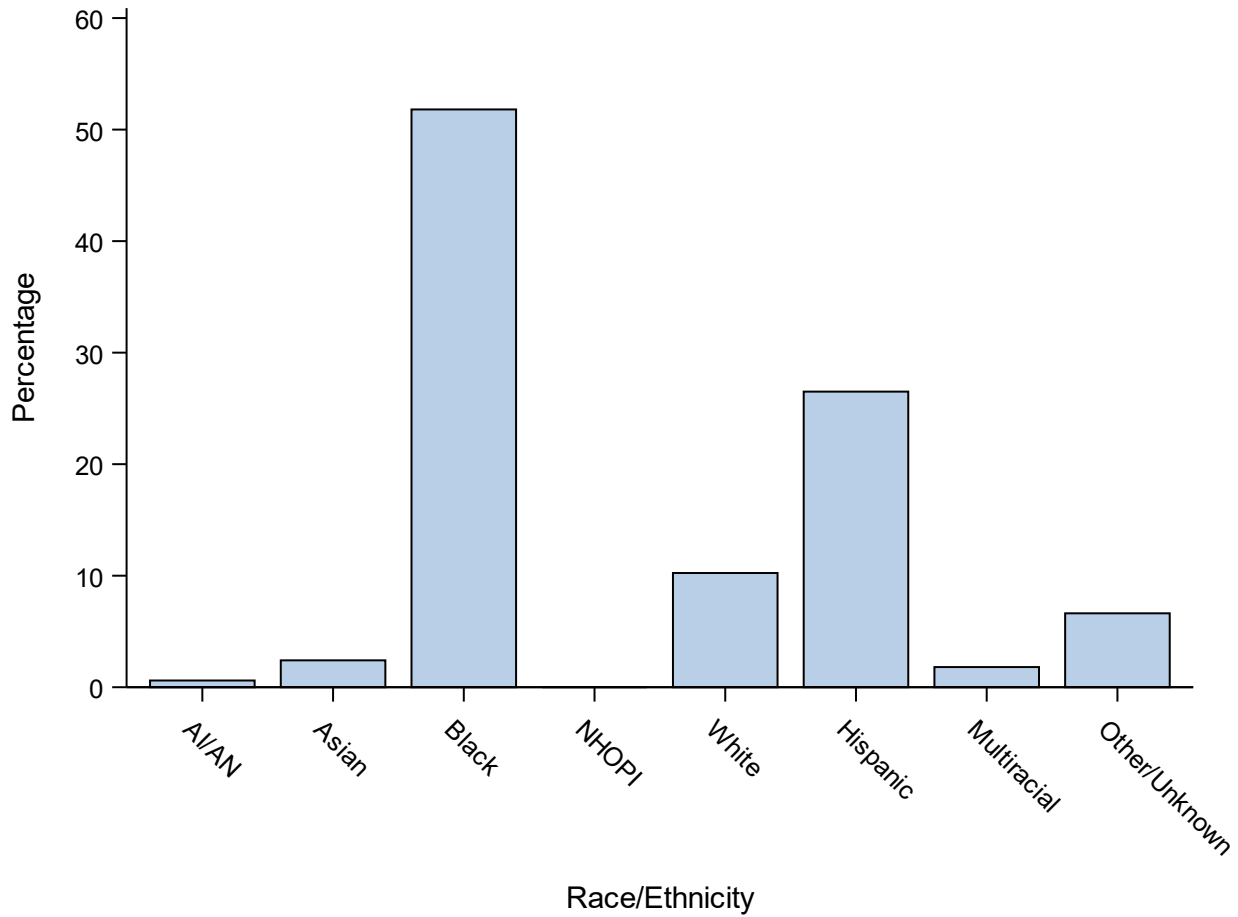
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
7 (4.2)	38 (22.9)	40 (24.1)	34 (20.5)	19 (11.4)	12 (7.2)	5 (3.0)	5 (3.0)	4 (2.4)	2 (1.2)	0 (0.0)	166

Note: Cases with unknown age were excluded.

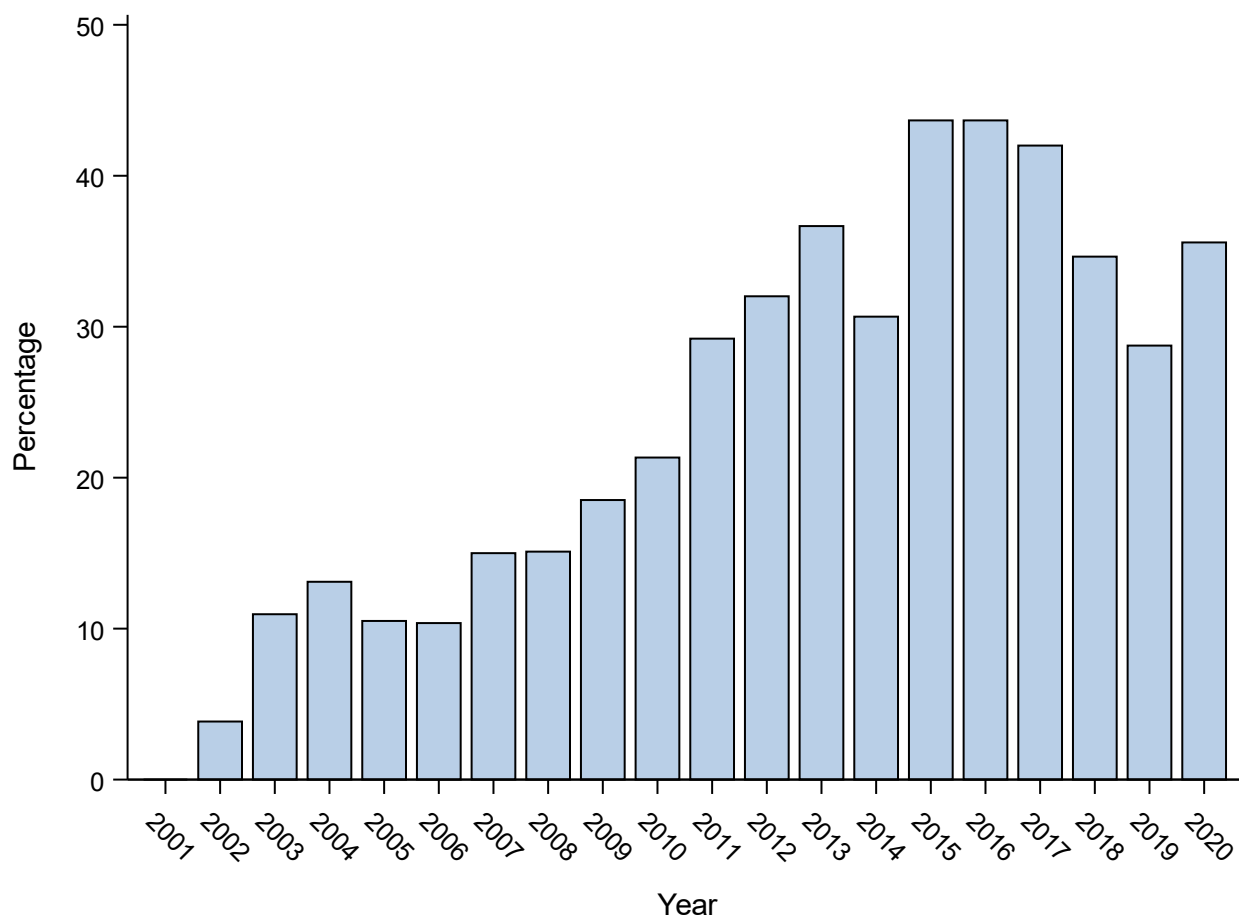
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (0.6)	4 (2.4)	86 (51.8)	0 (0.0)	17 (10.2)	44 (26.5)	3 (1.8)	11 (6.6)	166

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2001-2020

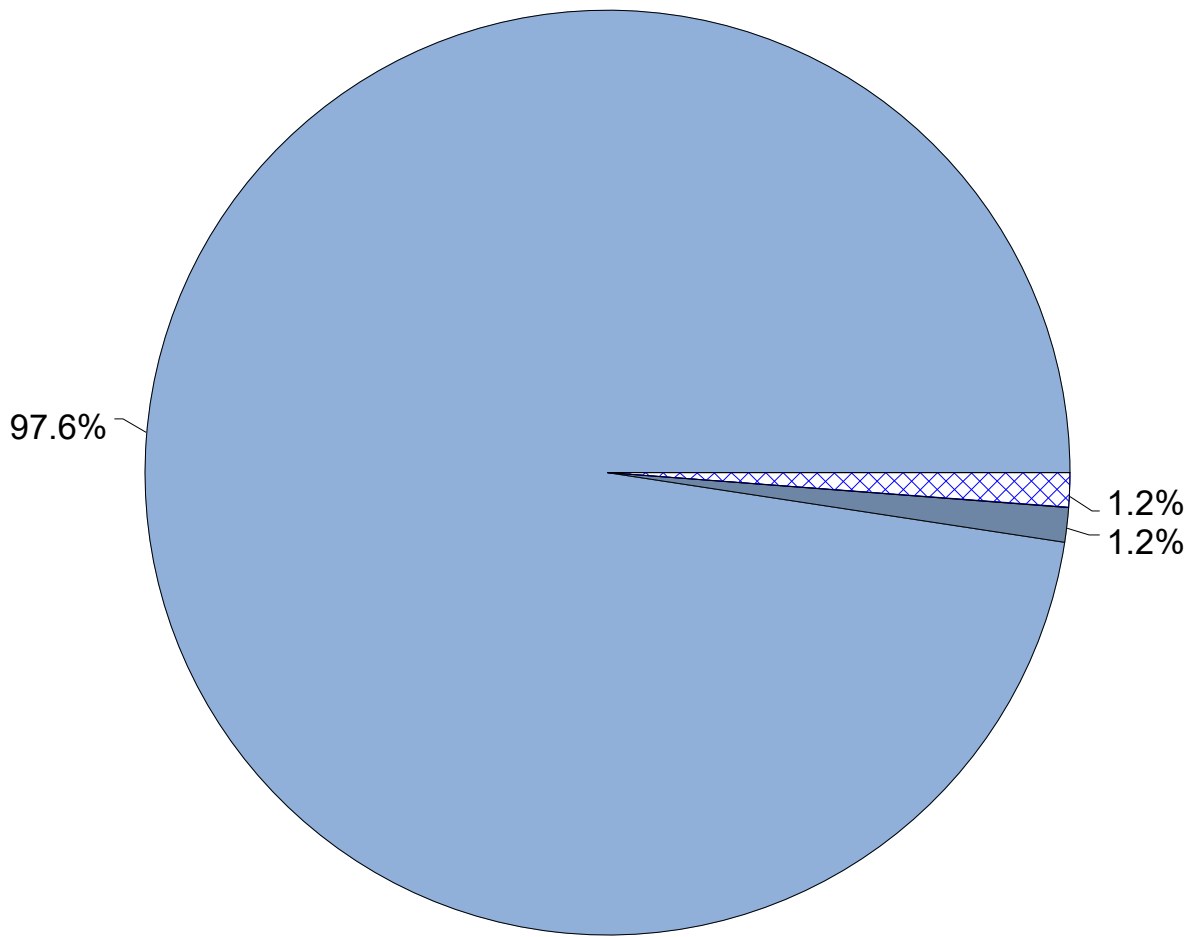


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	2 (3.8)	31 (11.0)	38 (13.1)	31 (10.5)	31 (10.4)	45 (15.0)	45 (15.1)	55 (18.5)	64 (21.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
85 (29.2)	81 (32.0)	110 (36.7)	92 (30.7)	131 (43.7)	131 (43.7)	126 (42.0)	97 (34.6)	69 (28.8)	58 (35.6)

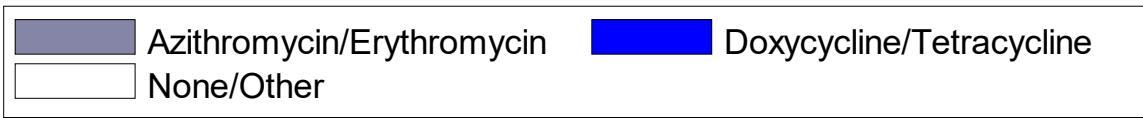
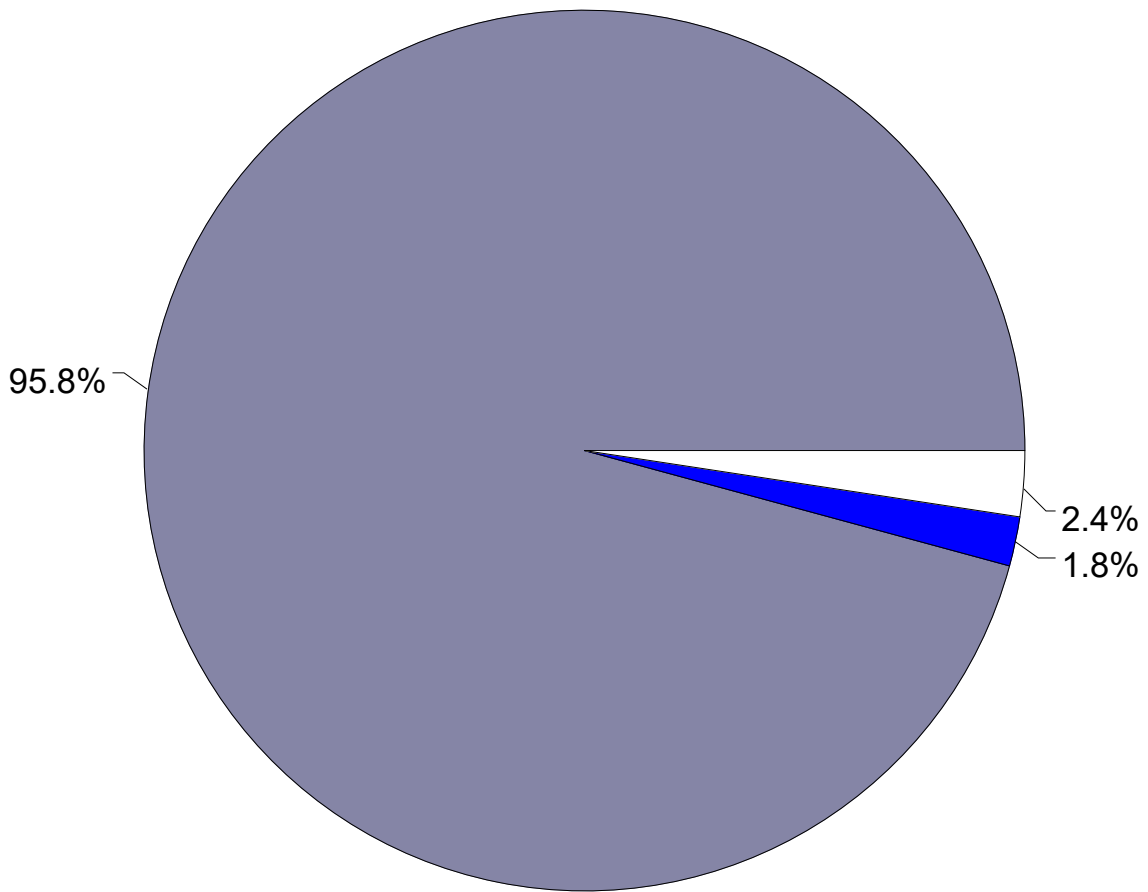
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2020



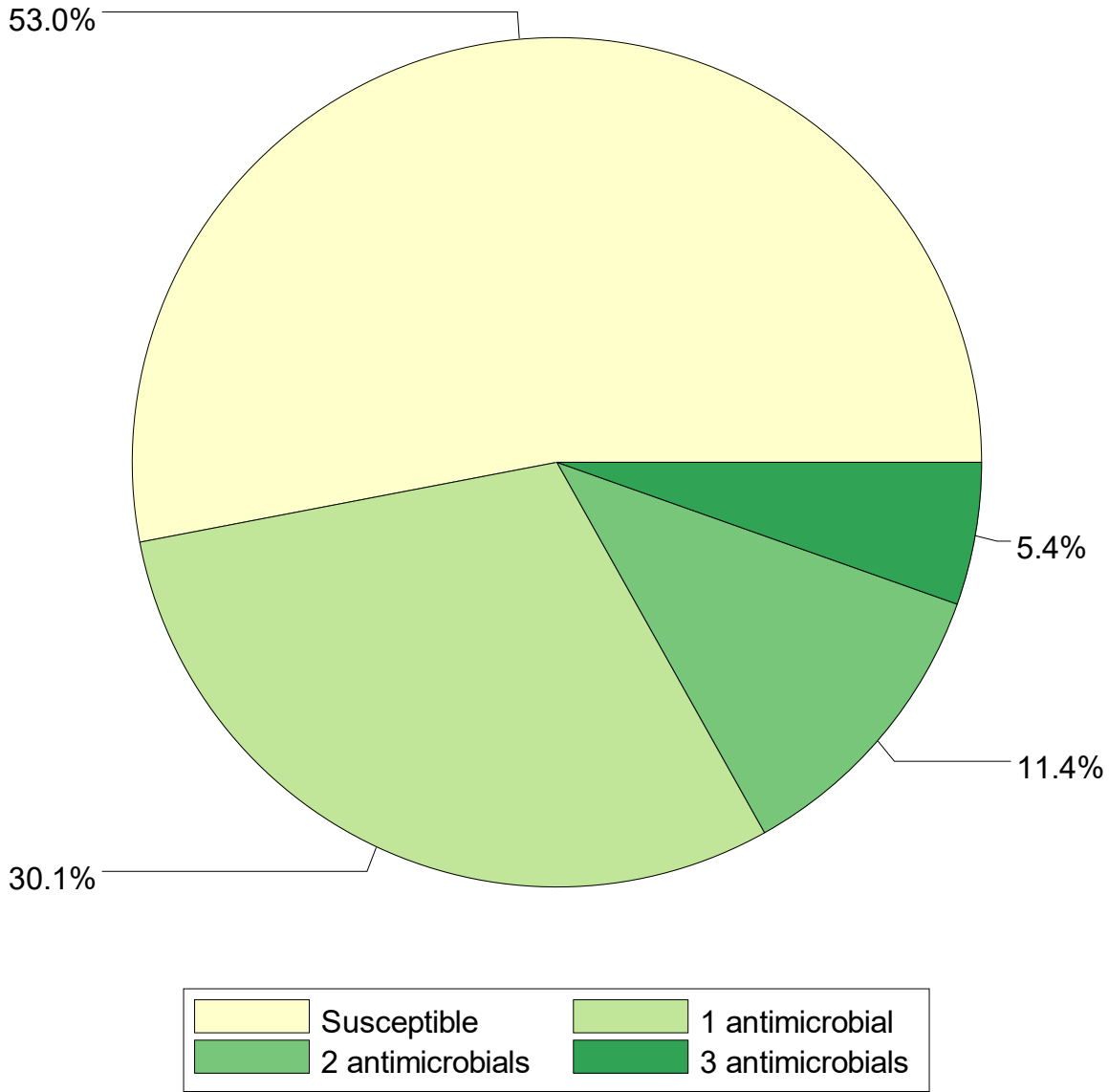
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	162	97.6
Gentamicin	2	1.2
Other	2	1.2

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	159	95.8
Doxycycline/Tetracycline	3	1.8
None/Other	4	2.4

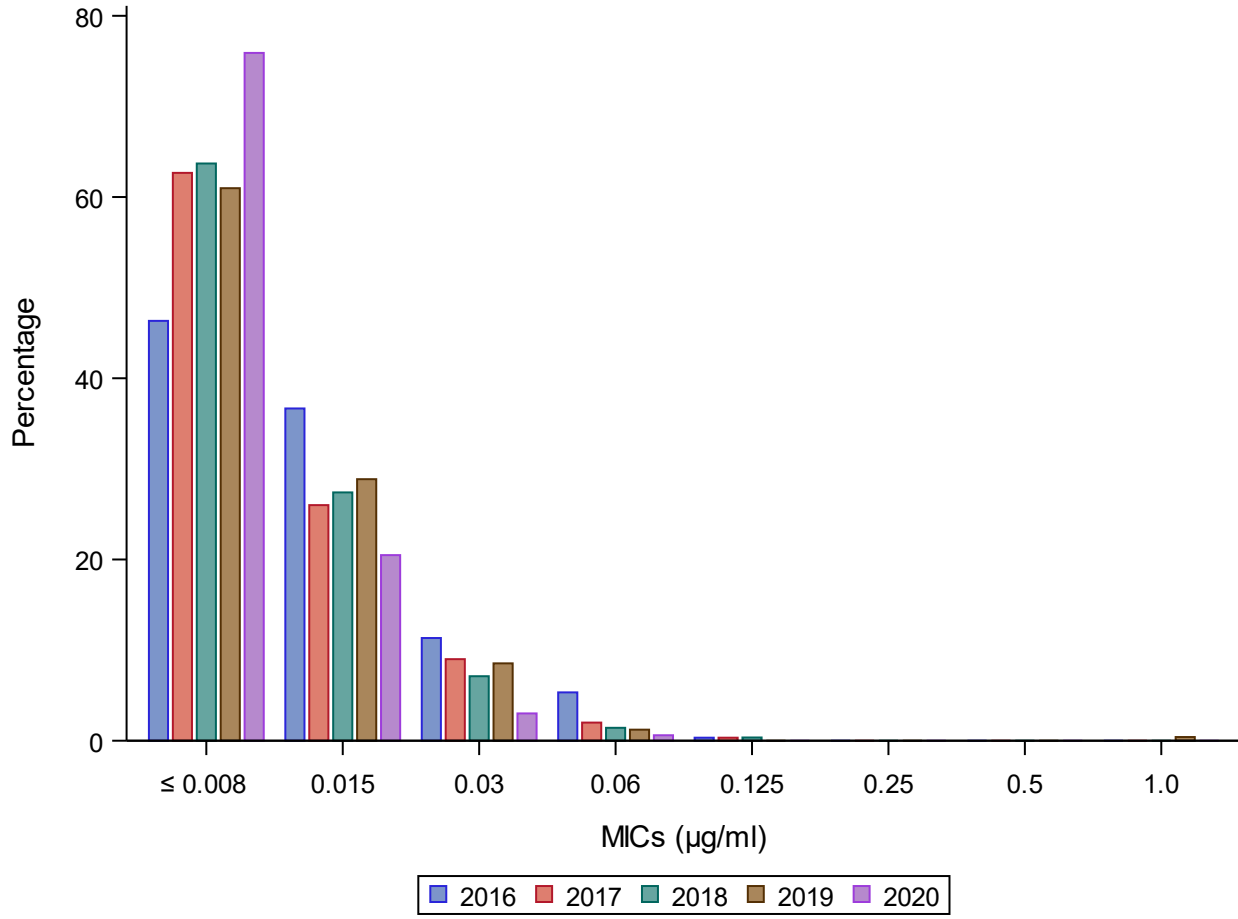
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	88	53.0
1 antimicrobial	50	30.1
2 antimicrobials	19	11.4
3 antimicrobials	9	5.4
4+ antimicrobials	0	0.0

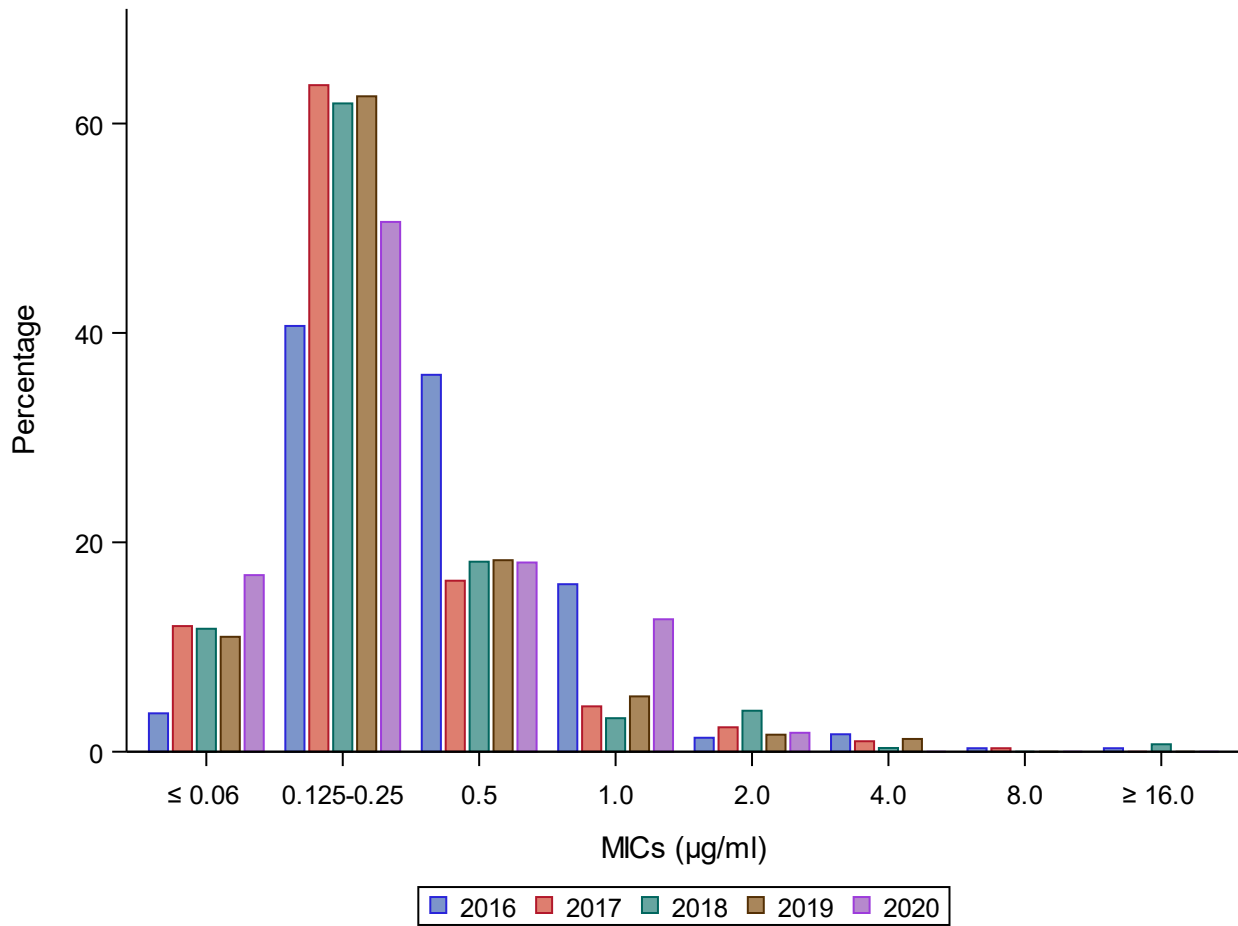
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2016-2020



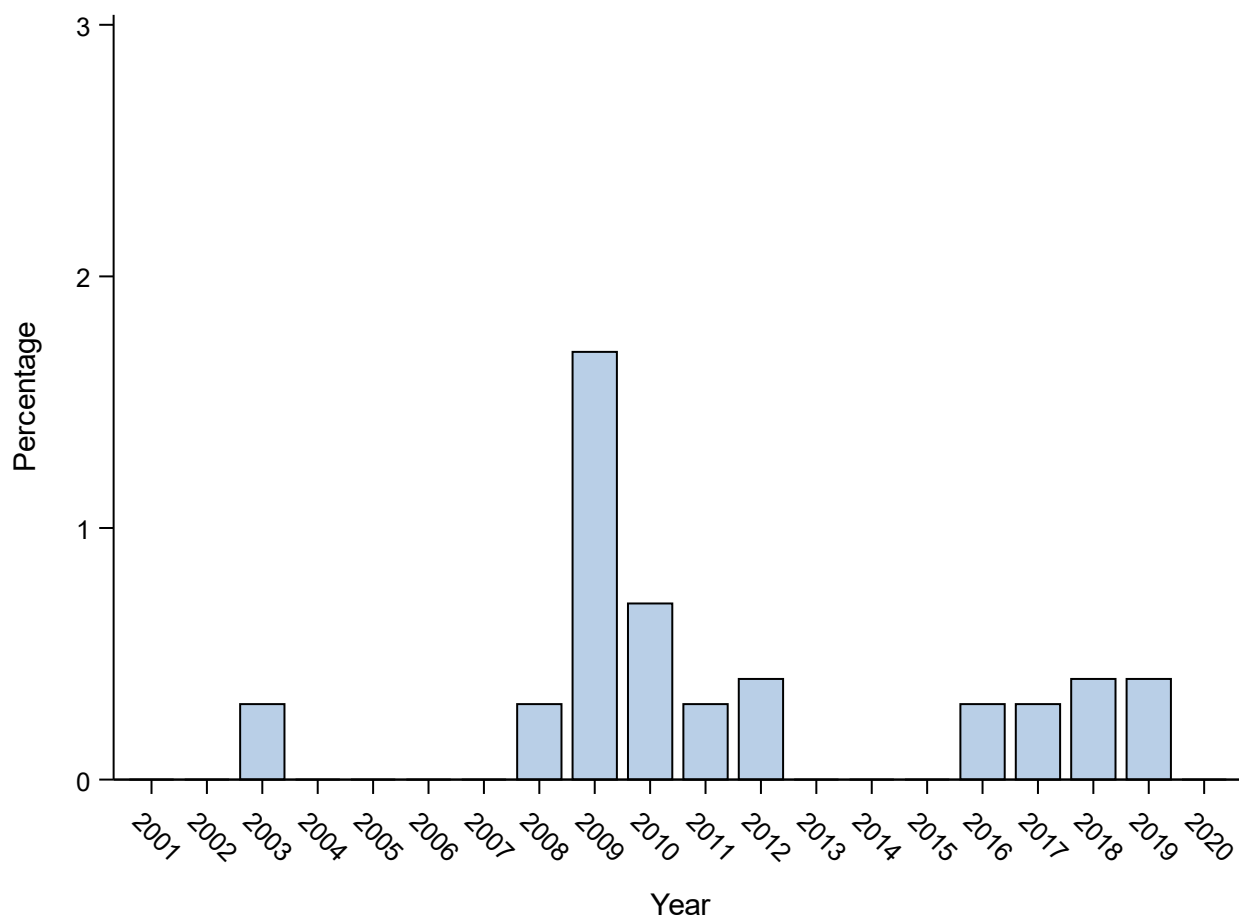
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	139 (46.3)	110 (36.7)	34 (11.3)	16 (5.3)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	188 (62.7)	78 (26.0)	27 (9.0)	6 (2.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	179 (63.7)	77 (27.4)	20 (7.1)	4 (1.4)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	281
2019	150 (61.0)	71 (28.9)	21 (8.5)	3 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	246
2020	126 (75.9)	34 (20.5)	5 (3.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	166

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2016-2020



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
2016	11 (3.7)	122 (40.7)	108 (36.0)	48 (16.0)	4 (1.3)	5 (1.7)	1 (0.3)	1 (0.3)	300
2017	36 (12.0)	191 (63.7)	49 (16.3)	13 (4.3)	7 (2.3)	3 (1.0)	1 (0.3)	0 (0.0)	300
2018	33 (11.7)	174 (61.9)	51 (18.1)	9 (3.2)	11 (3.9)	1 (0.4)	0 (0.0)	2 (0.7)	281
2019	27 (11.0)	154 (62.6)	45 (18.3)	13 (5.3)	4 (1.6)	3 (1.2)	0 (0.0)	0 (0.0)	246
2020	28 (16.9)	84 (50.6)	30 (18.1)	21 (12.7)	3 (1.8)	0 (0.0)	0 (0.0)	0 (0.0)	166

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2001-2020

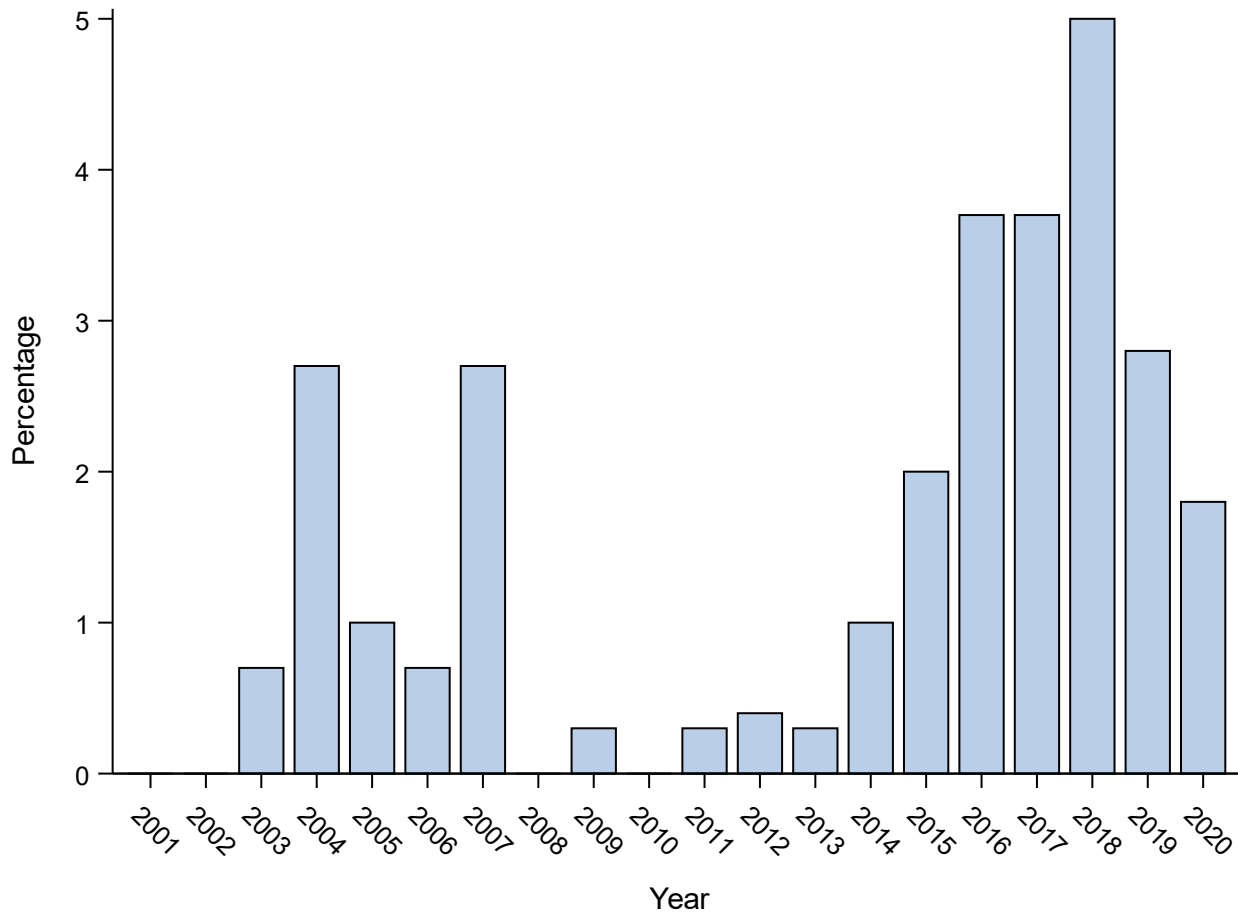


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	5 (1.7)	2 (0.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.3)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	1 (0.3)	1 (0.4)	1 (0.4)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Las Vegas, Nevada, 2001-2020

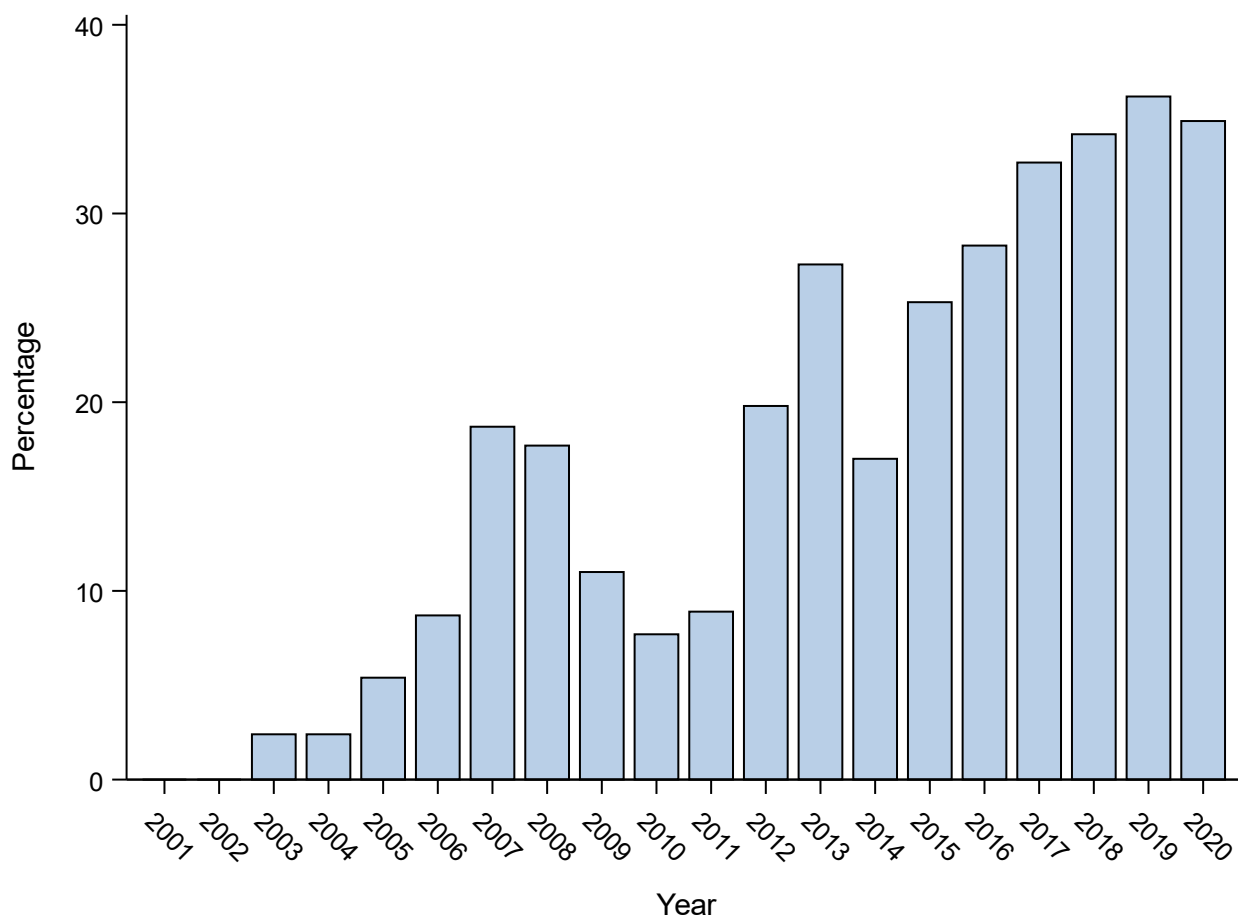


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	2 (0.7)	8 (2.7)	3 (1.0)	2 (0.7)	8 (2.7)	0 (0.0)	1 (0.3)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.3)	1 (0.4)	1 (0.3)	3 (1.0)	6 (2.0)	11 (3.7)	11 (3.7)	14 (5.0)	7 (2.8)	3 (1.8)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Las Vegas, Nevada, 2001-2020

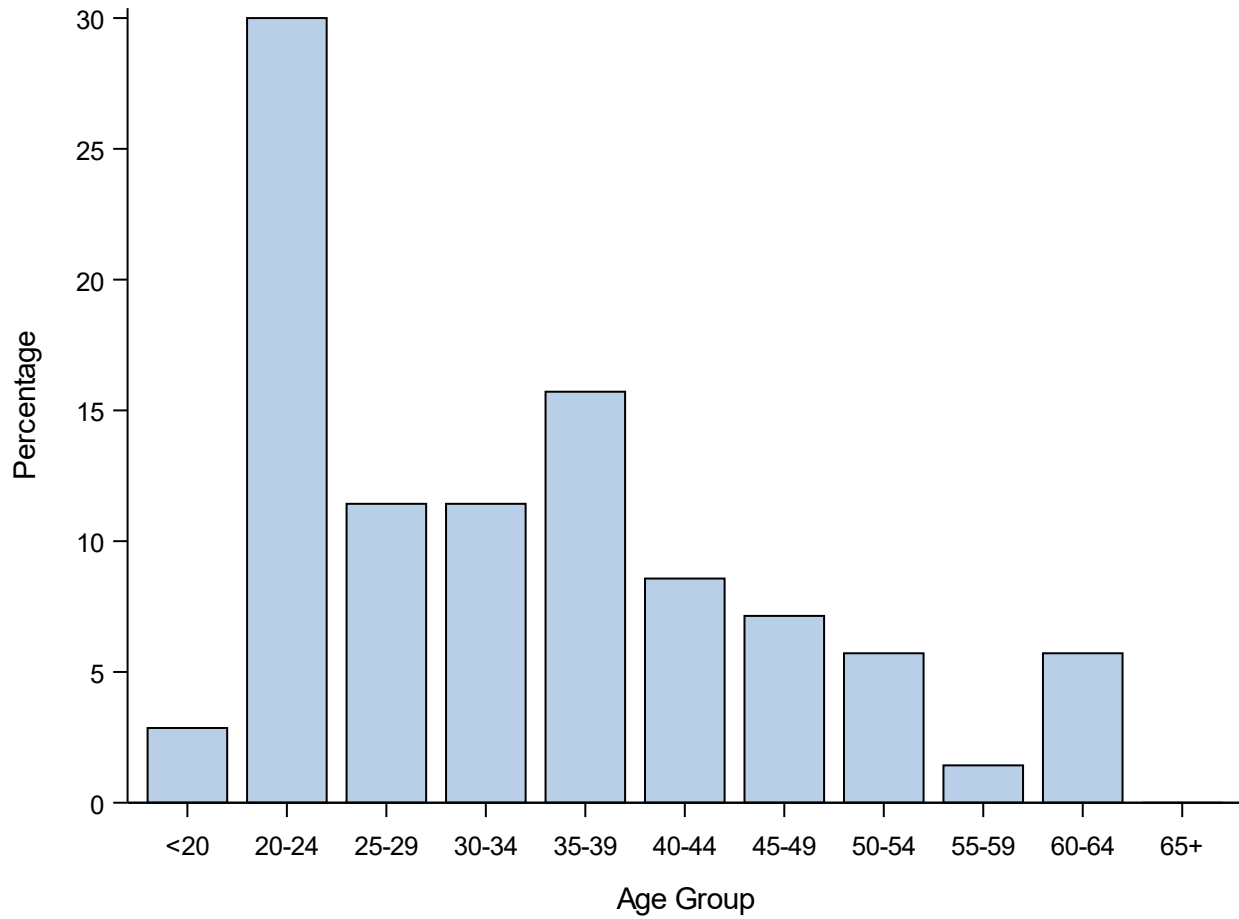


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	7 (2.4)	7 (2.4)	16 (5.4)	26 (8.7)	56 (18.7)	53 (17.7)	33 (11.0)	23 (7.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
26 (8.9)	50 (19.8)	82 (27.3)	51 (17.0)	76 (25.3)	85 (28.3)	98 (32.7)	96 (34.2)	89 (36.2)	58 (34.9)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2002-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

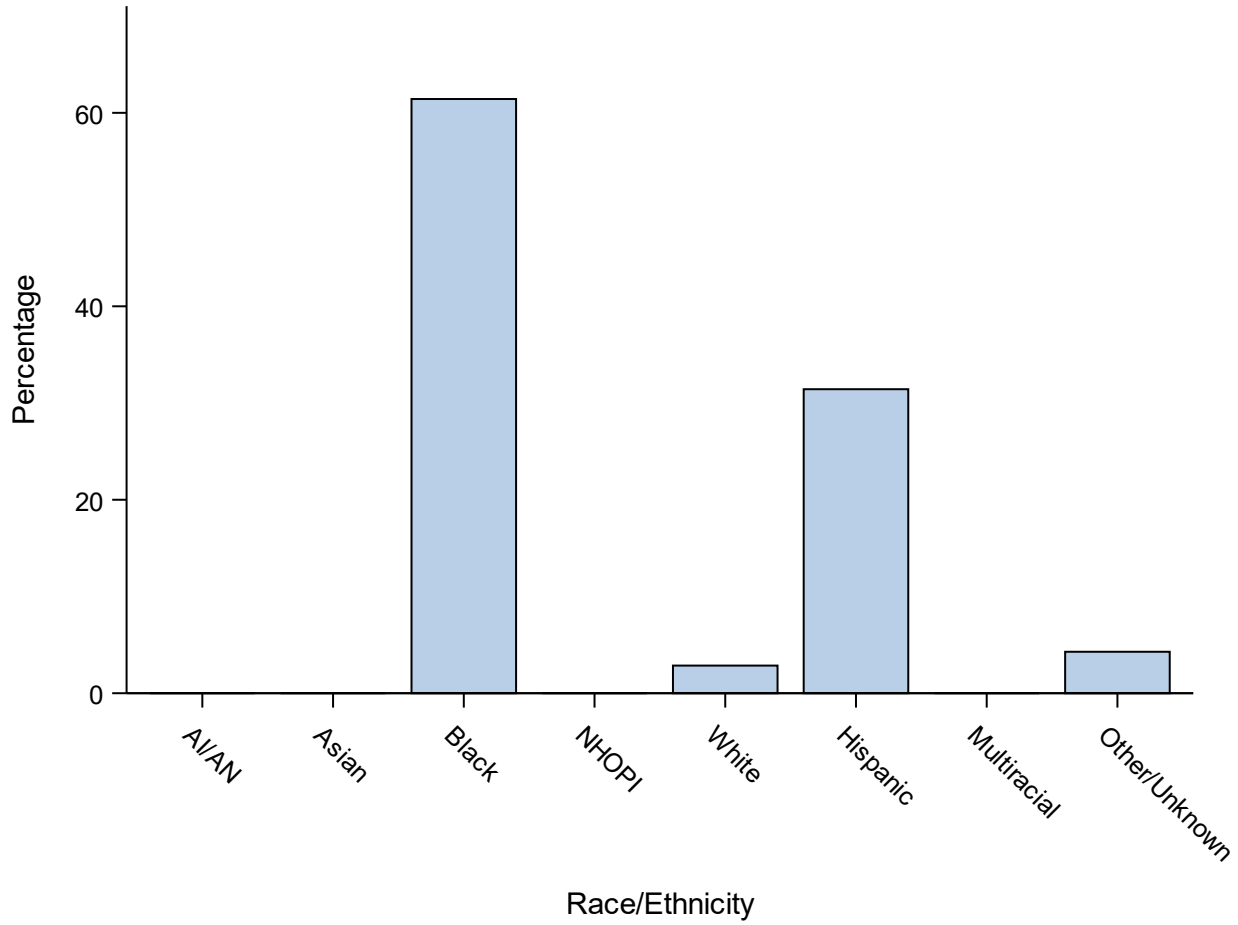
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (2.9)	21 (30.0)	8 (11.4)	8 (11.4)	11 (15.7)	6 (8.6)	5 (7.1)	4 (5.7)	1 (1.4)	4 (5.7)	0 (0.0)	70

Note: Cases with unknown age were excluded.

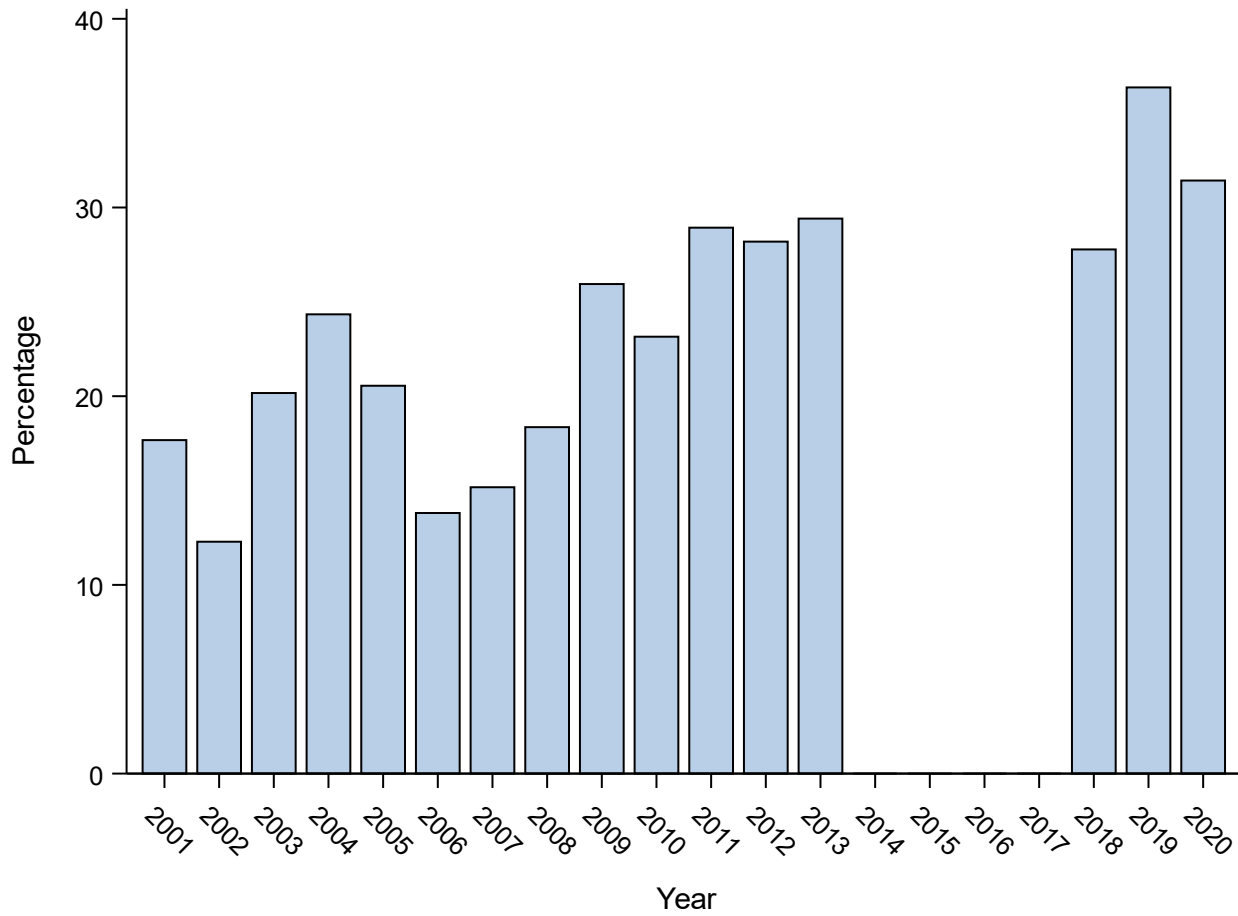
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	43 (61.4)	0 (0.0)	2 (2.9)	22 (31.4)	0 (0.0)	3 (4.3)	70

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2001-2020

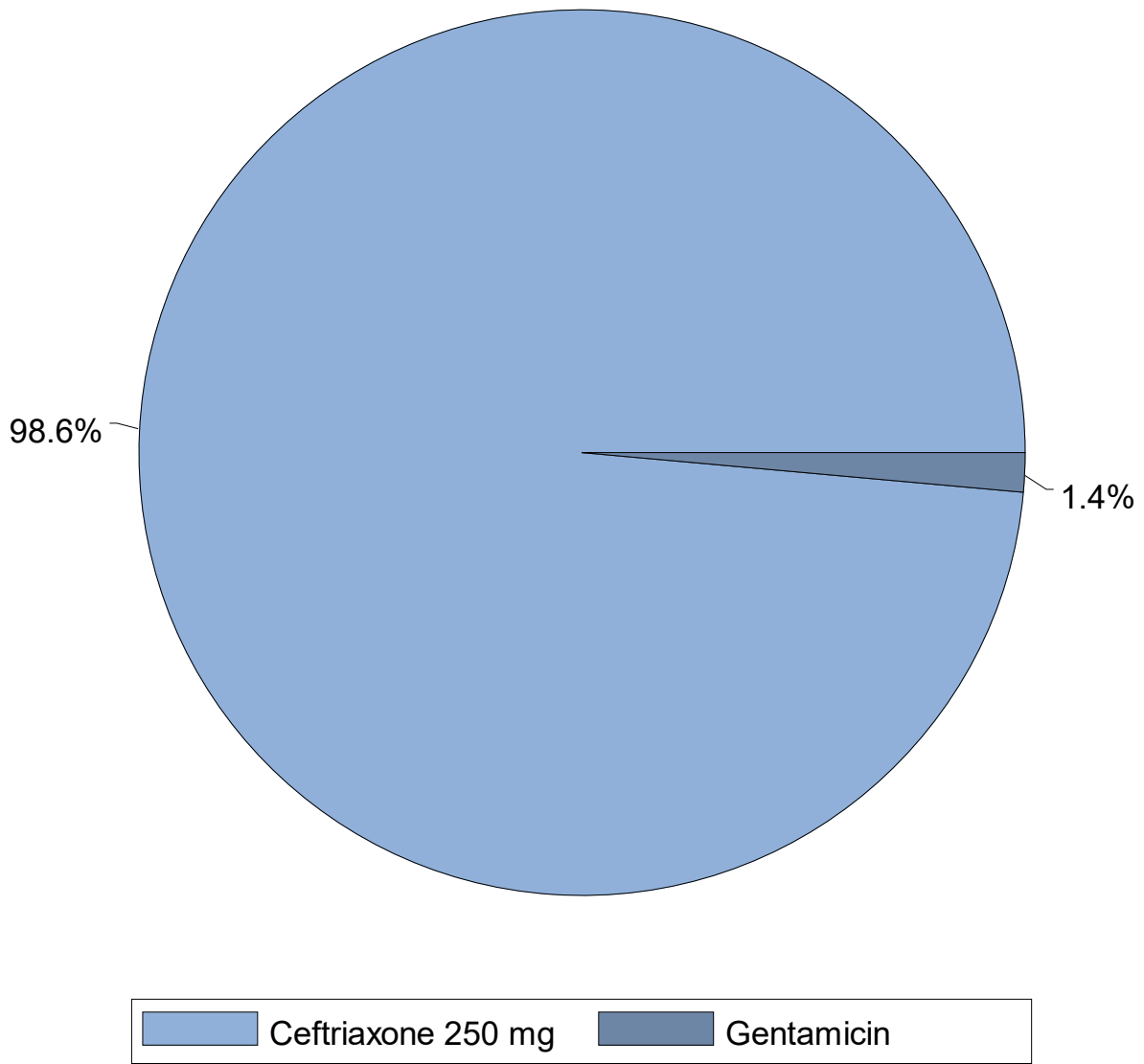


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
41 (17.7)	29 (12.3)	48 (20.2)	46 (24.3)	52 (20.6)	29 (13.8)	39 (15.2)	47 (18.4)	55 (25.9)	47 (23.2)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
46 (28.9)	53 (28.2)	55 (29.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (27.8)	24 (36.4)	22 (31.4)

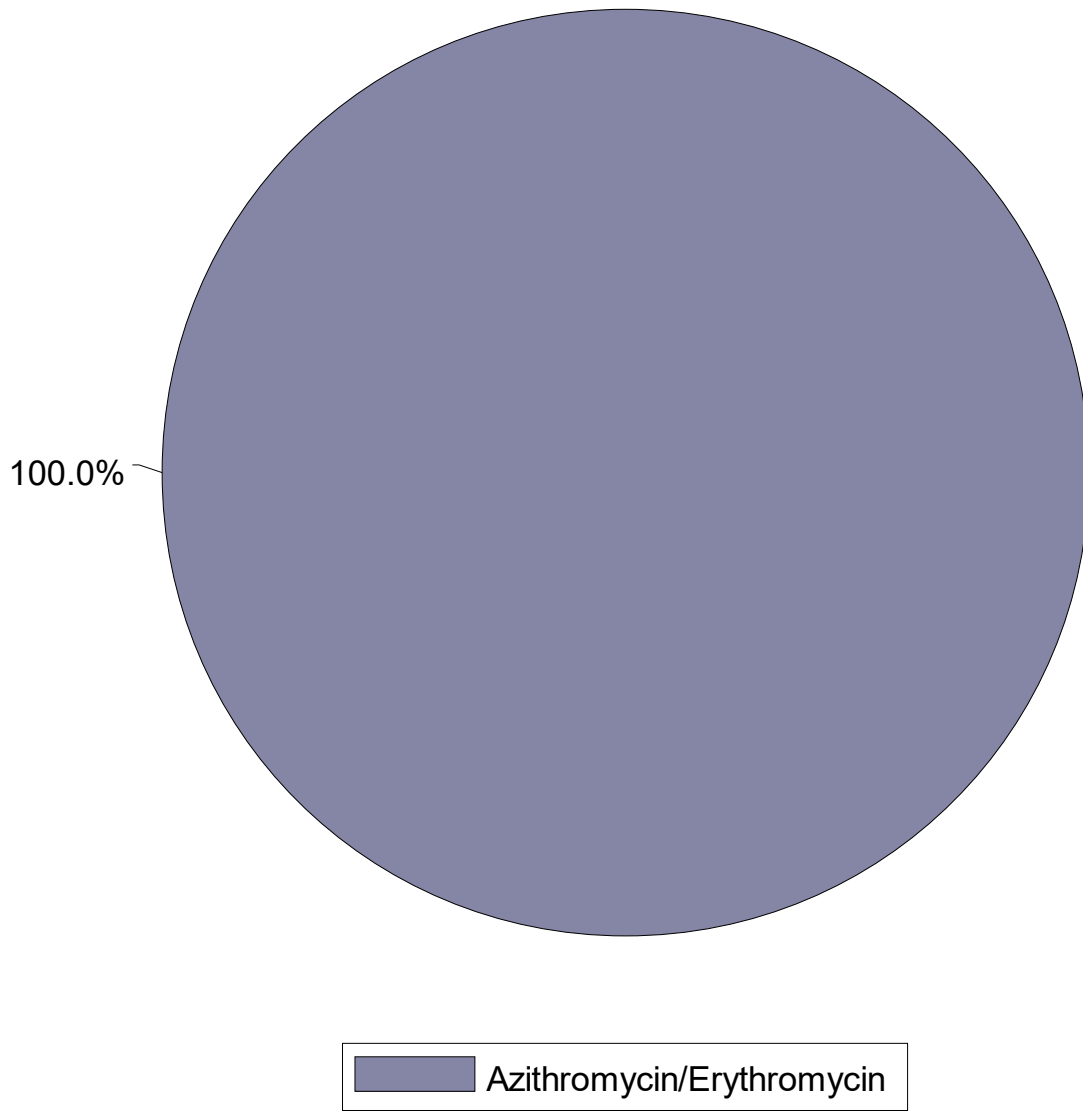
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2020



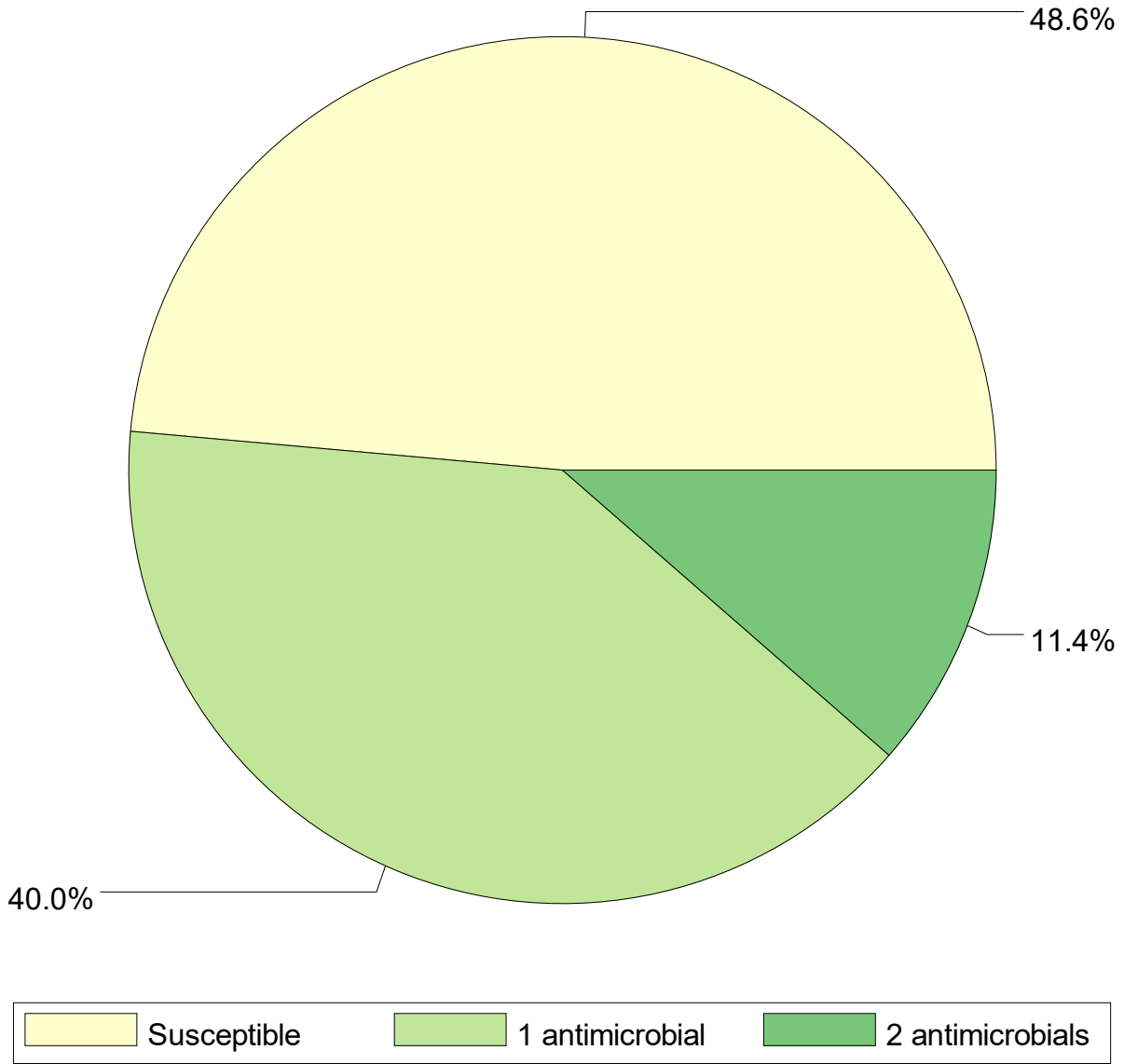
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	69	98.6
Gentamicin	1	1.4

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	70	100.0

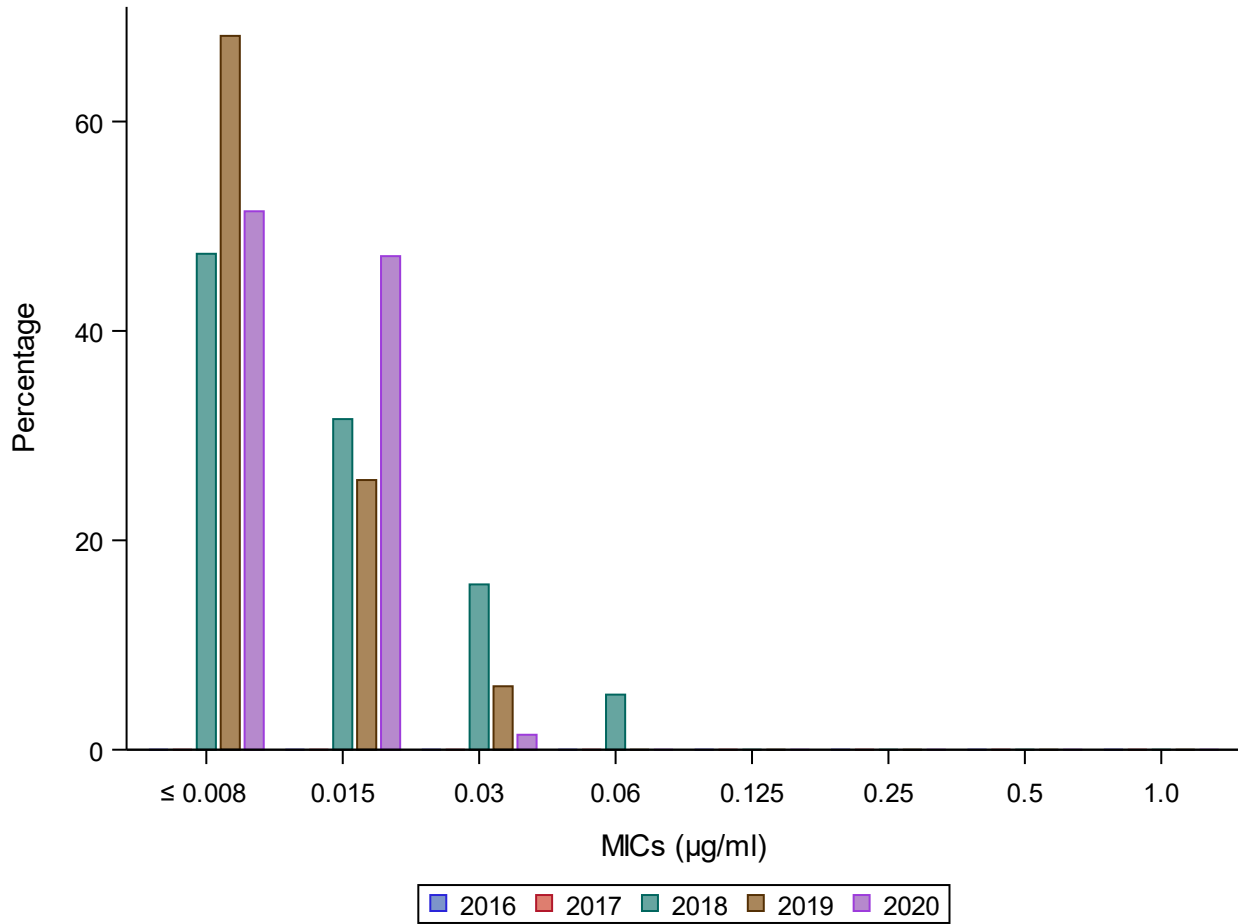
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	34	48.6
1 antimicrobial	28	40.0
2 antimicrobials	8	11.4
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

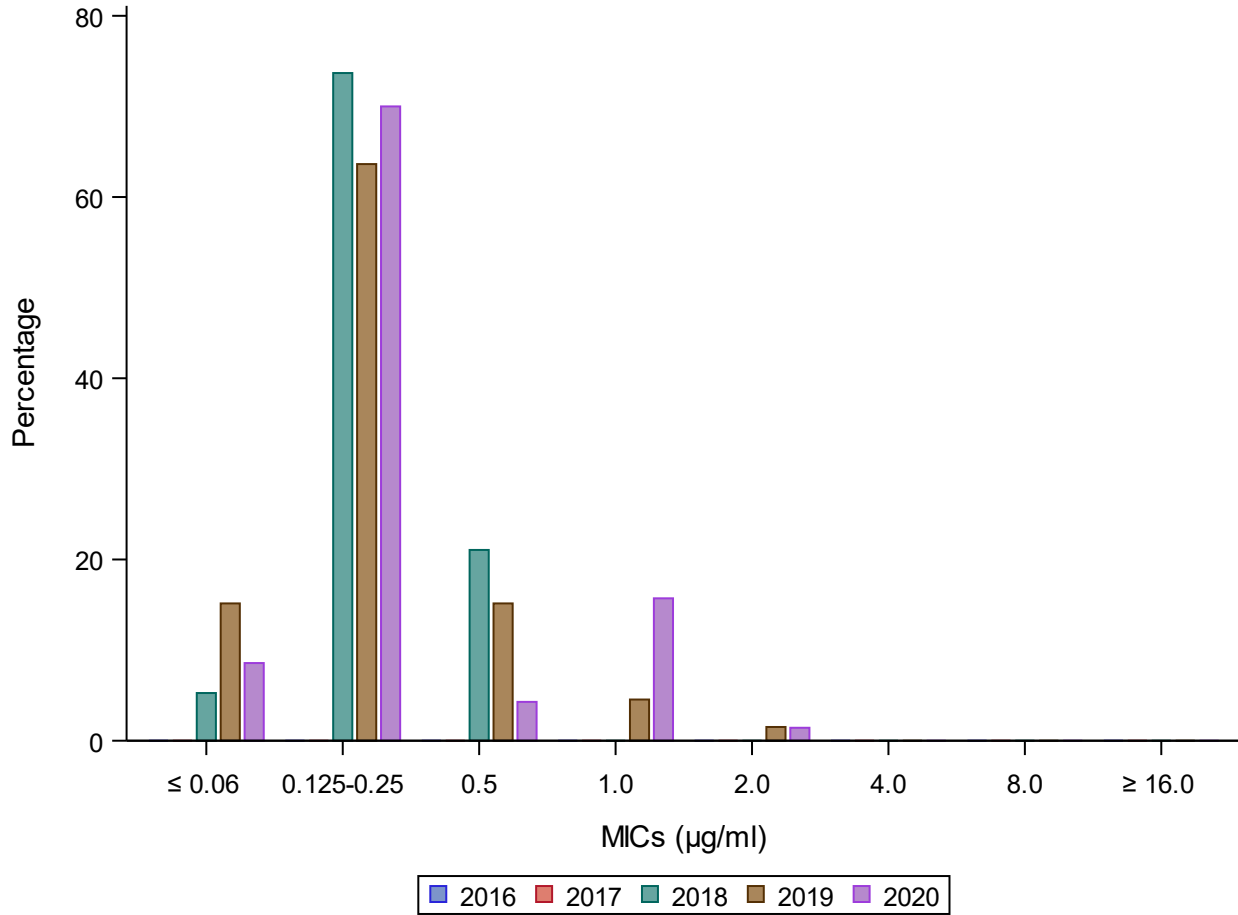
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2016-2020



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
2016	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
2017	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
2018	9 (47.4)	6 (31.6)	3 (15.8)	1 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	19
2019	45 (68.2)	17 (25.8)	4 (6.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	66
2020	36 (51.4)	33 (47.1)	1 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	70

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

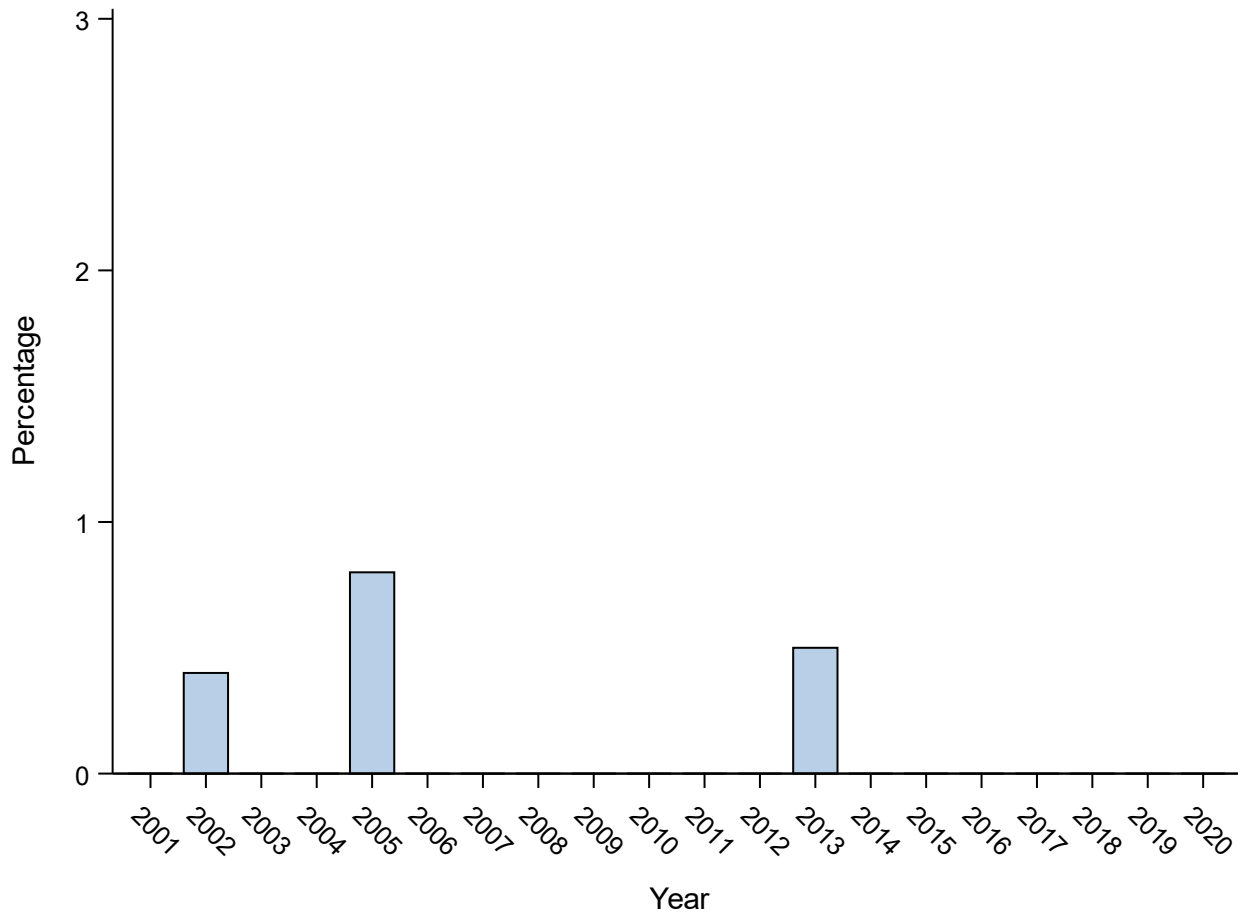
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2016-2020



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
2016	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
2017	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
2018	1 (5.3)	14 (73.7)	4 (21.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	19
2019	10 (15.2)	42 (63.6)	10 (15.2)	3 (4.5)	1 (1.5)	0 (0.0)	0 (0.0)	0 (0.0)	66
2020	6 (8.6)	49 (70.0)	3 (4.3)	11 (15.7)	1 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	70

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2001-2020

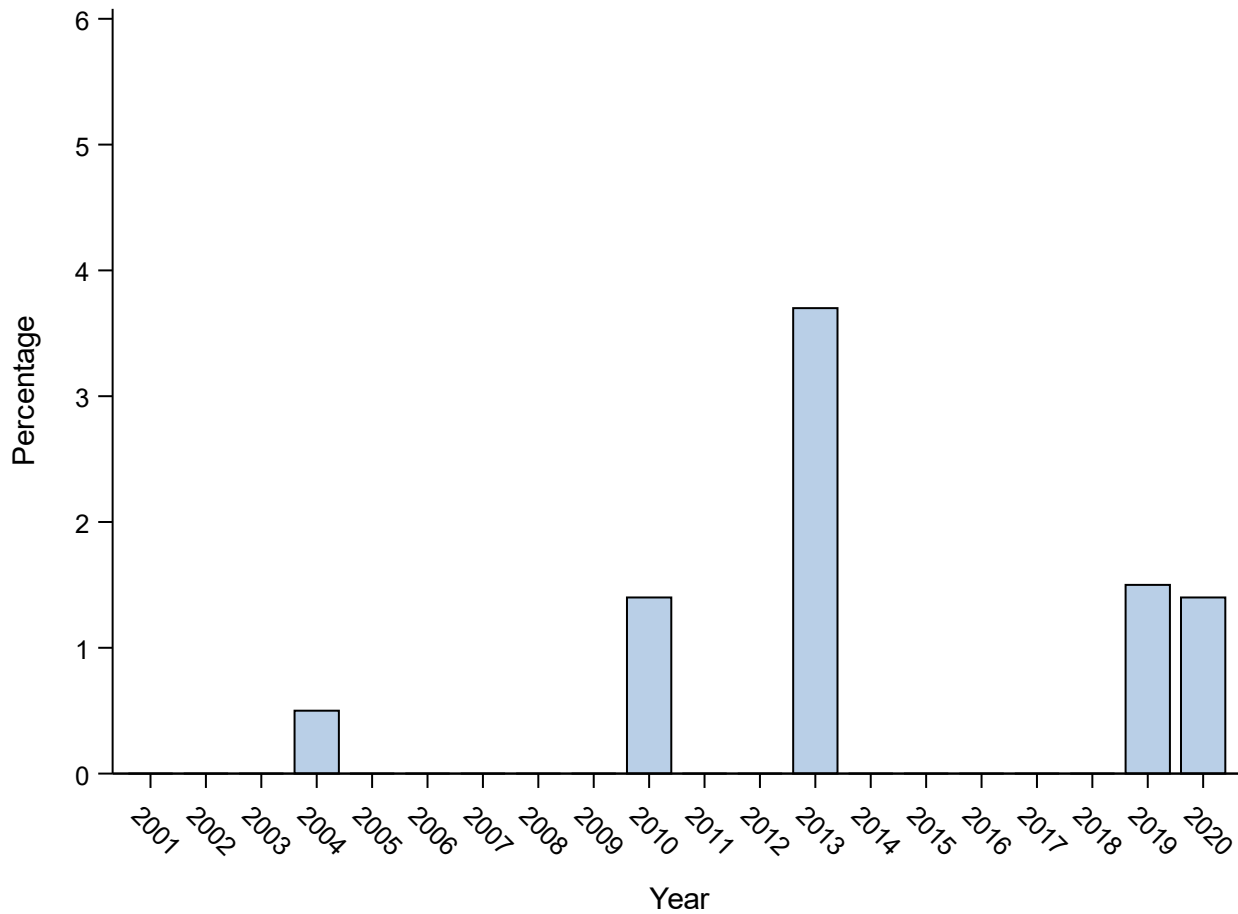


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2001-2020

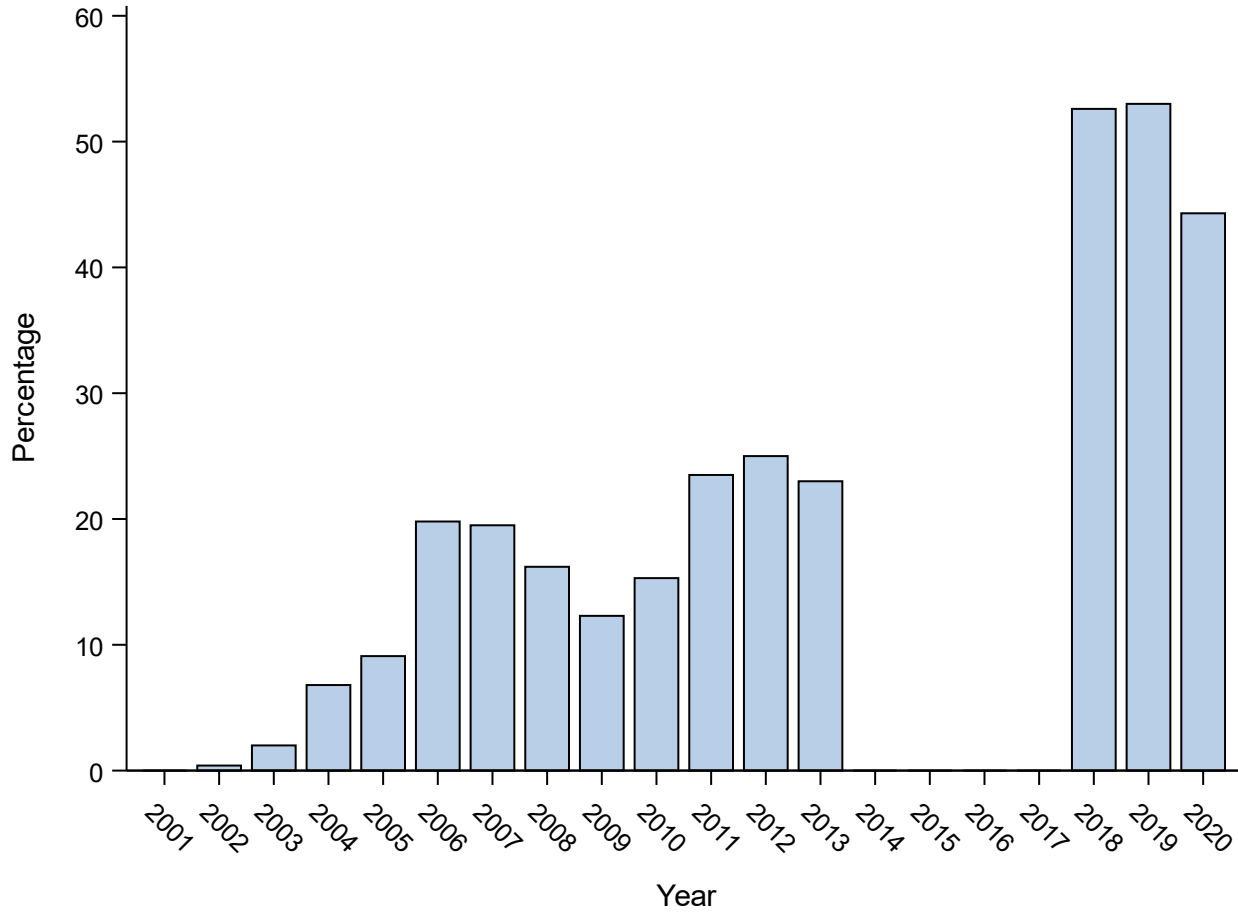


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	7 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.5)	1 (1.4)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Miami, Florida, 2001-2020

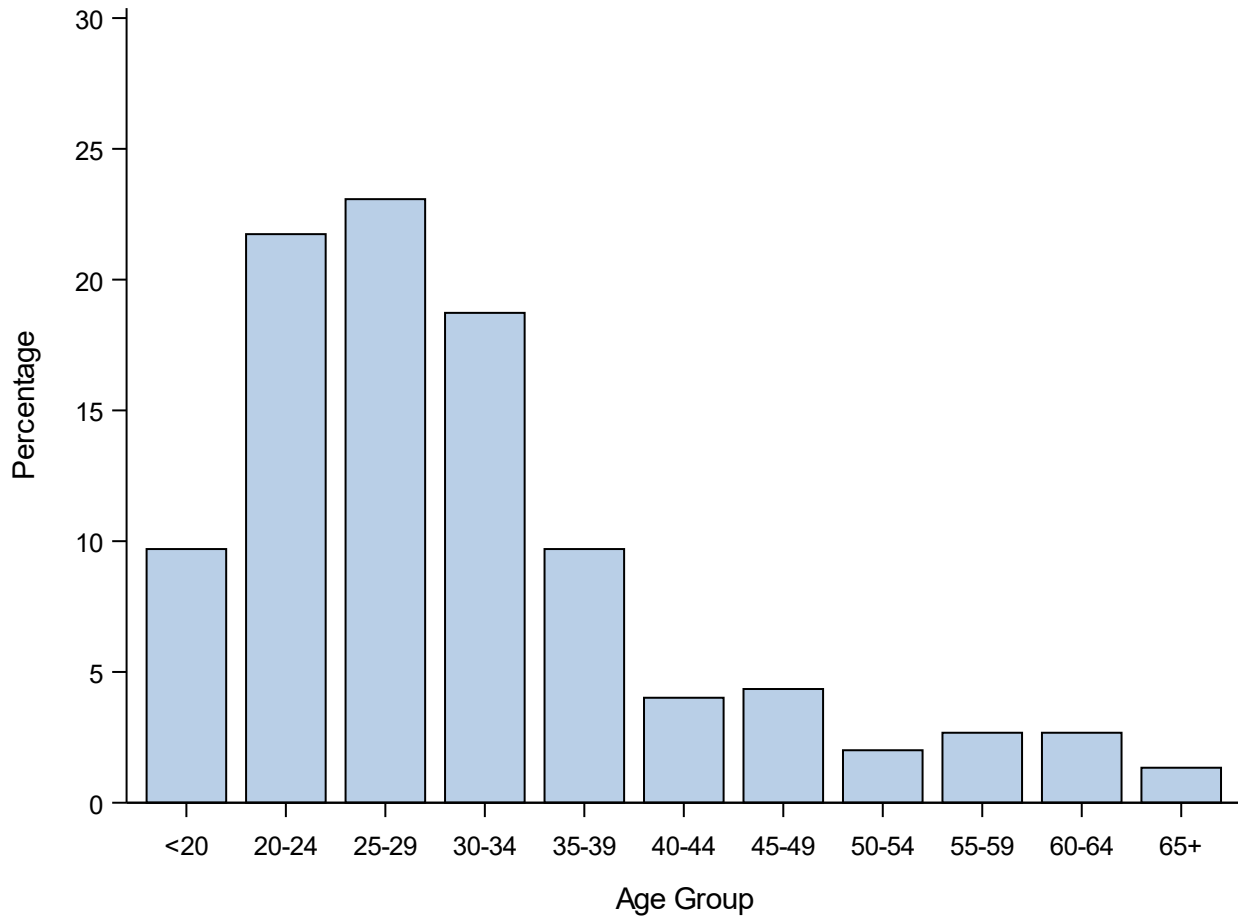


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.4)	5 (2.0)	13 (6.8)	24 (9.1)	42 (19.8)	52 (19.5)	42 (16.2)	27 (12.3)	32 (15.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
38 (23.5)	47 (25.0)	43 (23.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	10 (52.6)	35 (53.0)	31 (44.3)

Note: Ciprofloxacin resistance MICs $\geq 1.0 \mu\text{g/ml}$. Site participated in GISP during 2001-2013 and 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

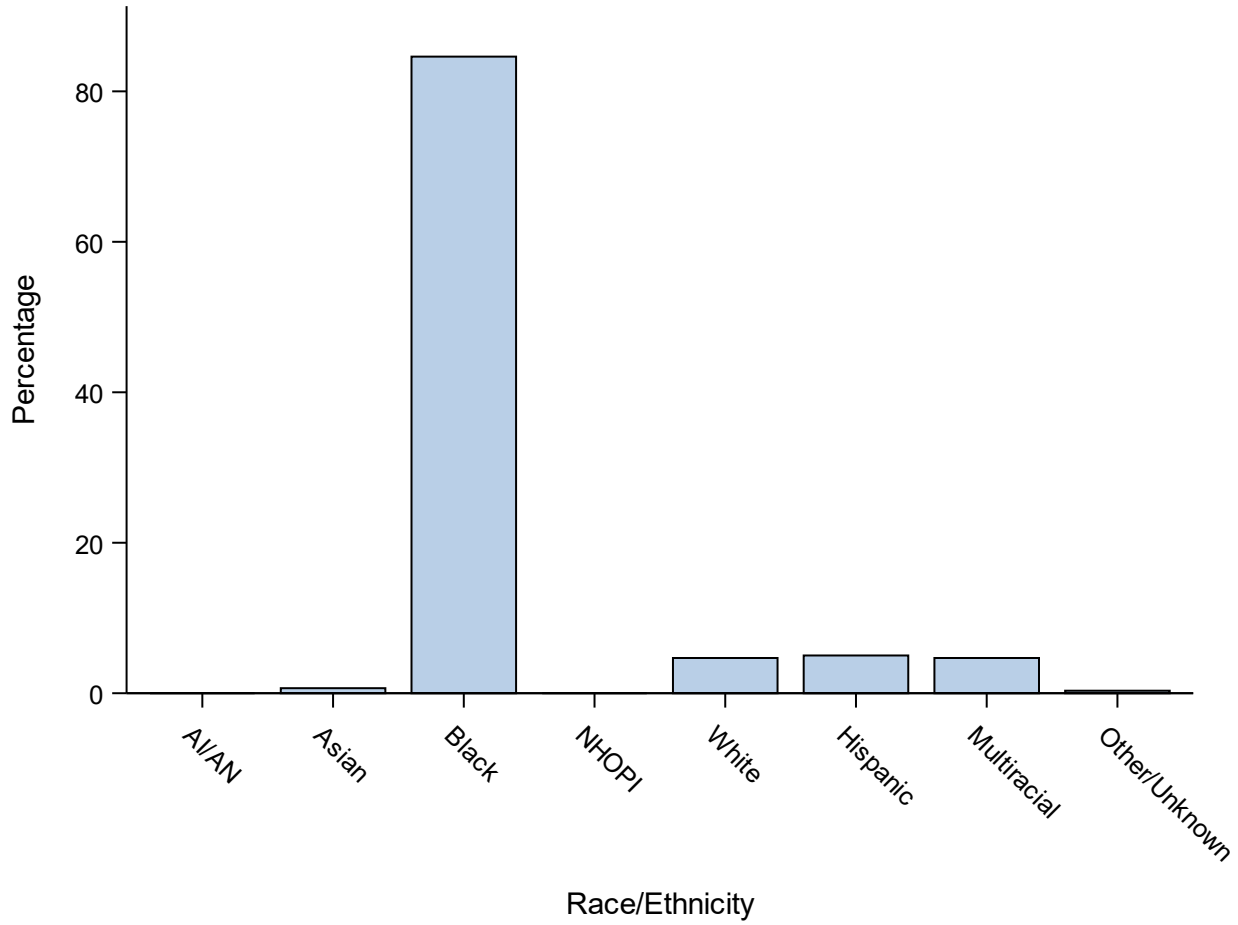
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
29 (9.7)	65 (21.7)	69 (23.1)	56 (18.7)	29 (9.7)	12 (4.0)	13 (4.3)	6 (2.0)	8 (2.7)	8 (2.7)	4 (1.3)	299

Note: Cases with unknown age were excluded.

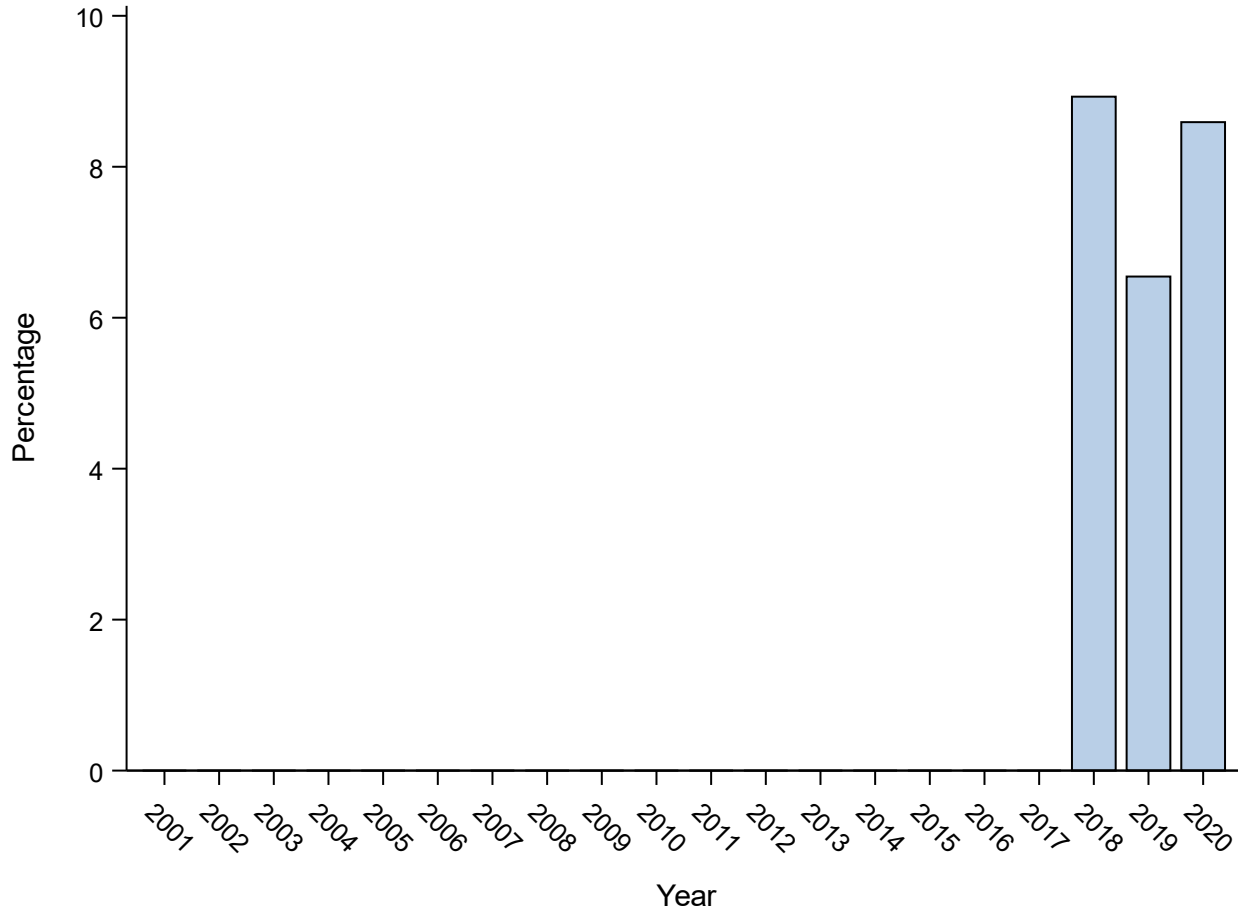
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	2 (0.7)	253 (84.6)	0 (0.0)	14 (4.7)	15 (5.0)	14 (4.7)	1 (0.3)	299

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2001-2020

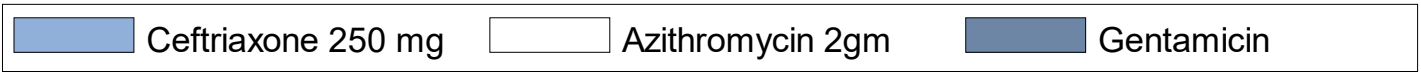
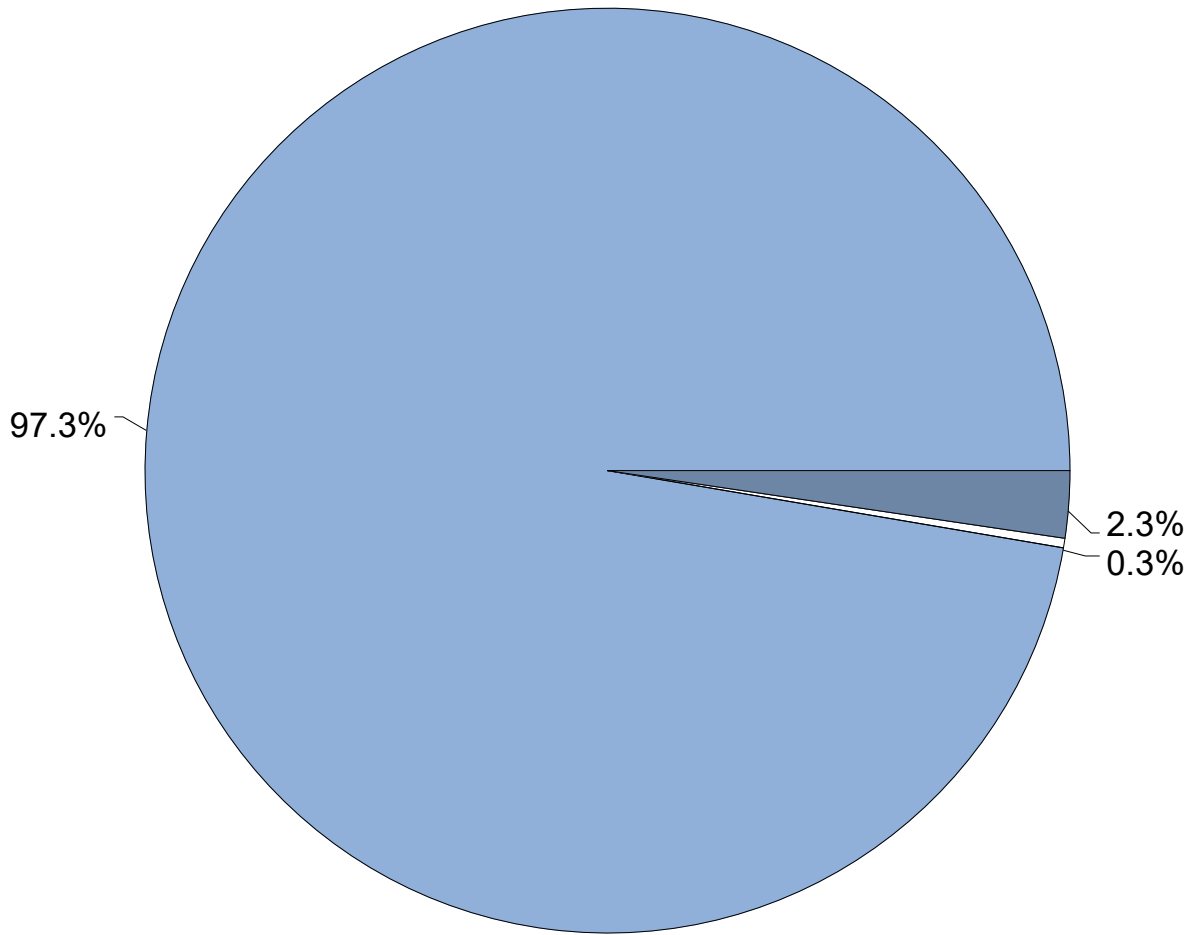


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (8.9)	18 (6.5)	25 (8.6)

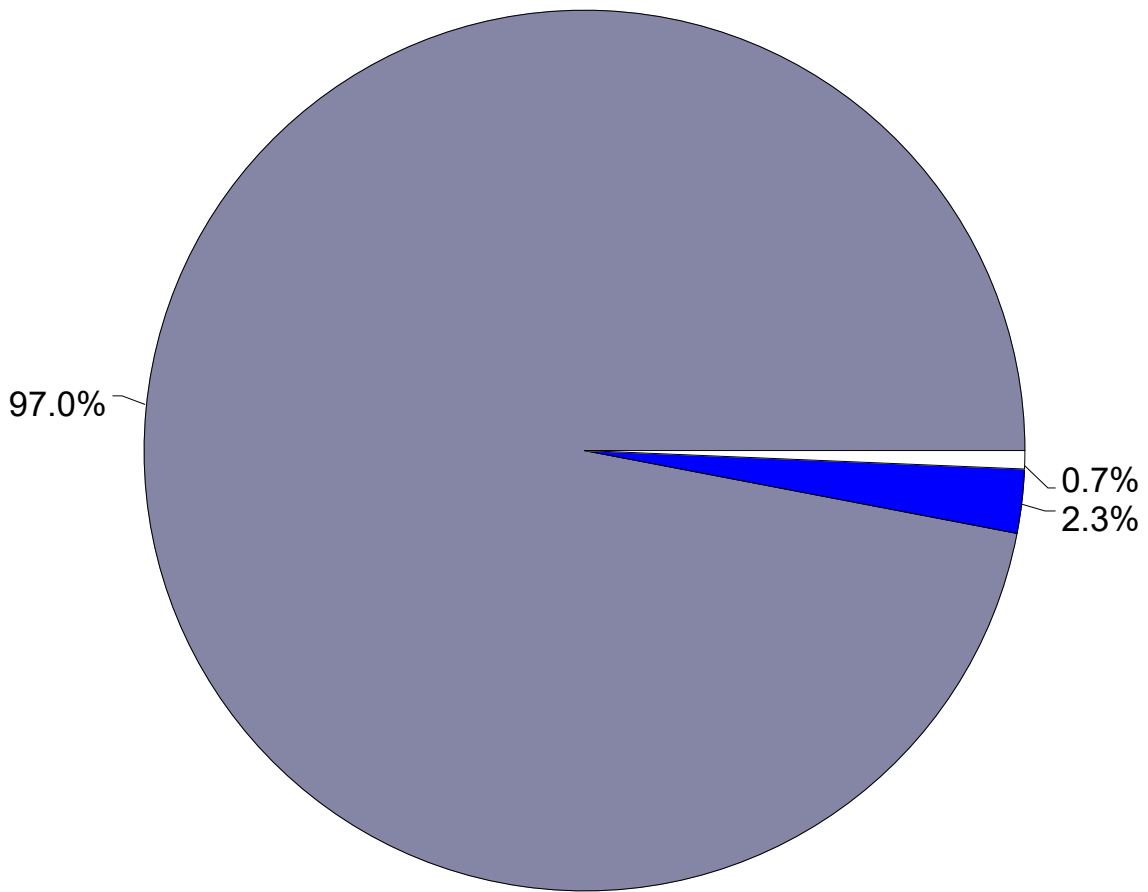
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2020



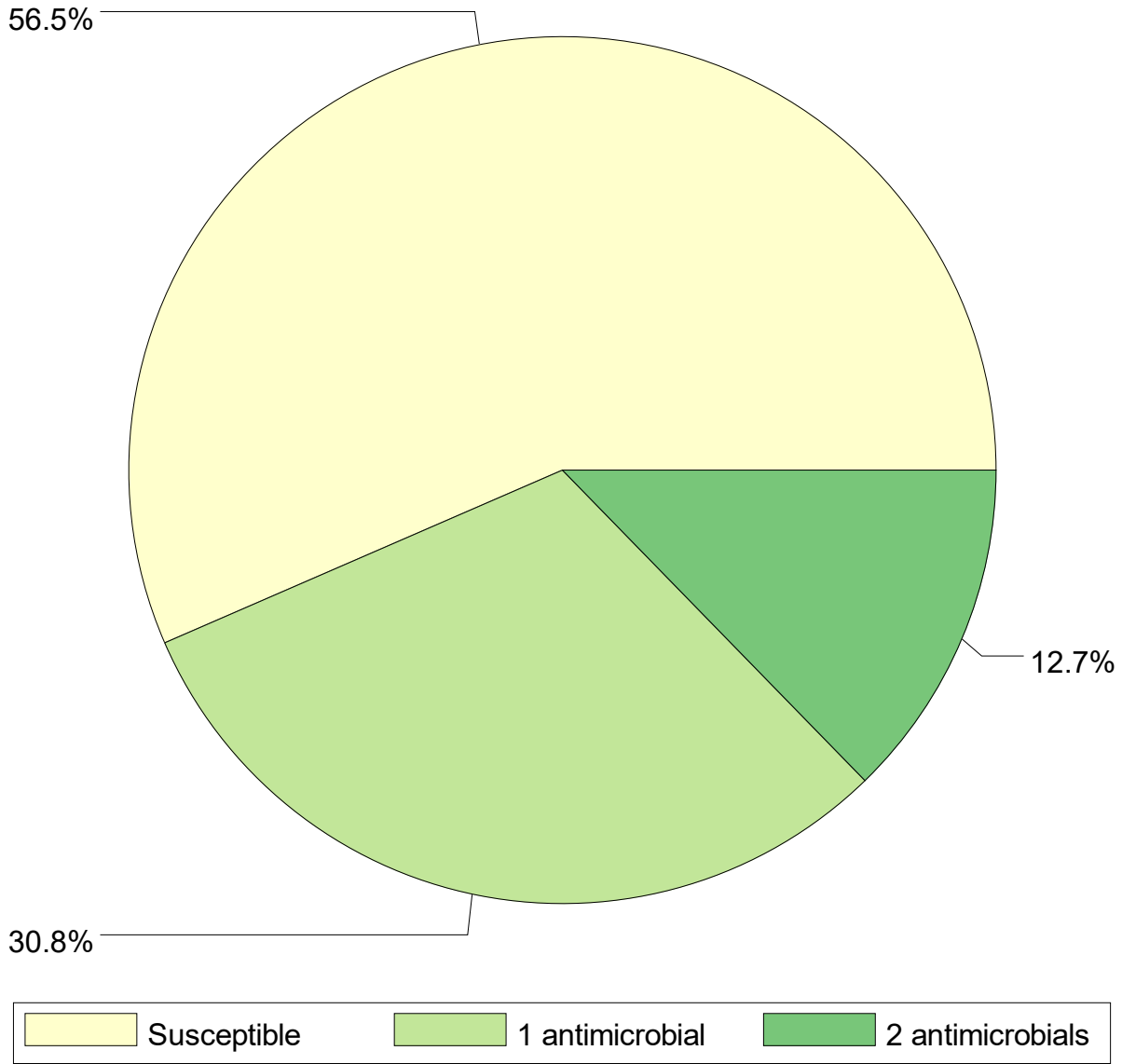
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	291	97.3
Azithromycin 2gm	1	0.3
Gentamicin	7	2.3

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	290	97.0
Doxycycline/Tetracycline	7	2.3
None/Other	2	0.7

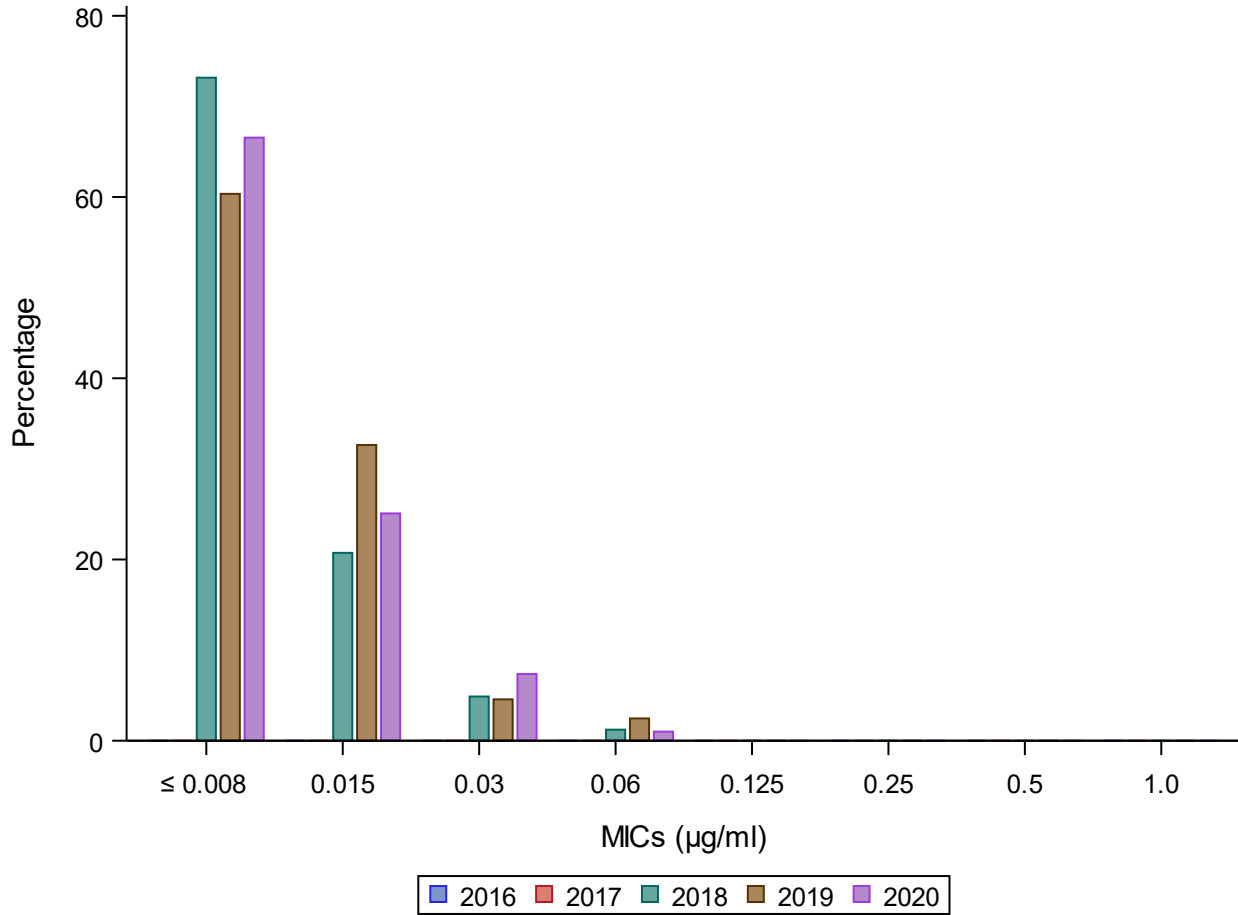
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	169	56.5
1 antimicrobial	92	30.8
2 antimicrobials	38	12.7
3 antimicrobials	0	0.0
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

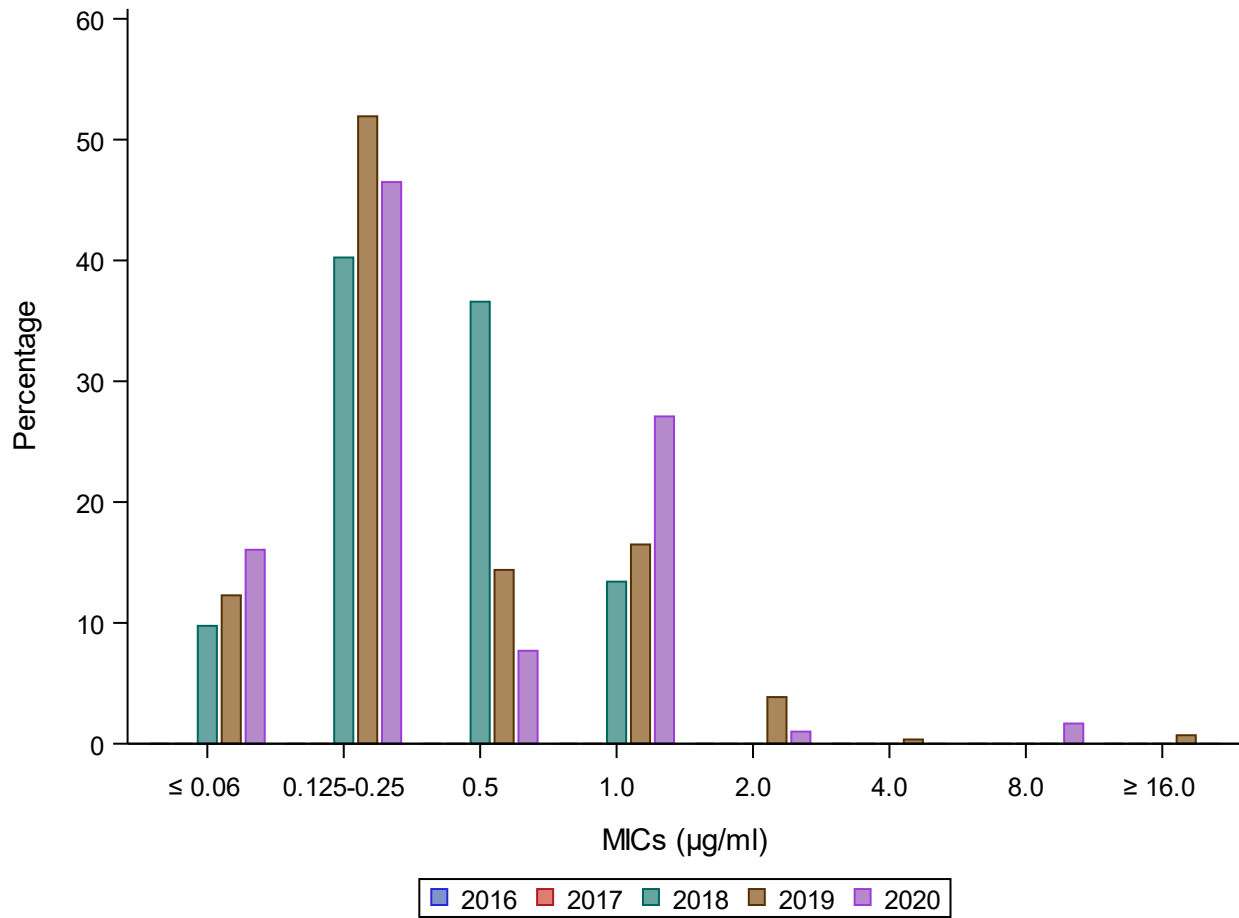
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2016-2020



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
2016	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
2017	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
2018	60 (73.2)	17 (20.7)	4 (4.9)	1 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	82
2019	172 (60.4)	93 (32.6)	13 (4.6)	7 (2.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	285
2020	199 (66.6)	75 (25.1)	22 (7.4)	3 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	299

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

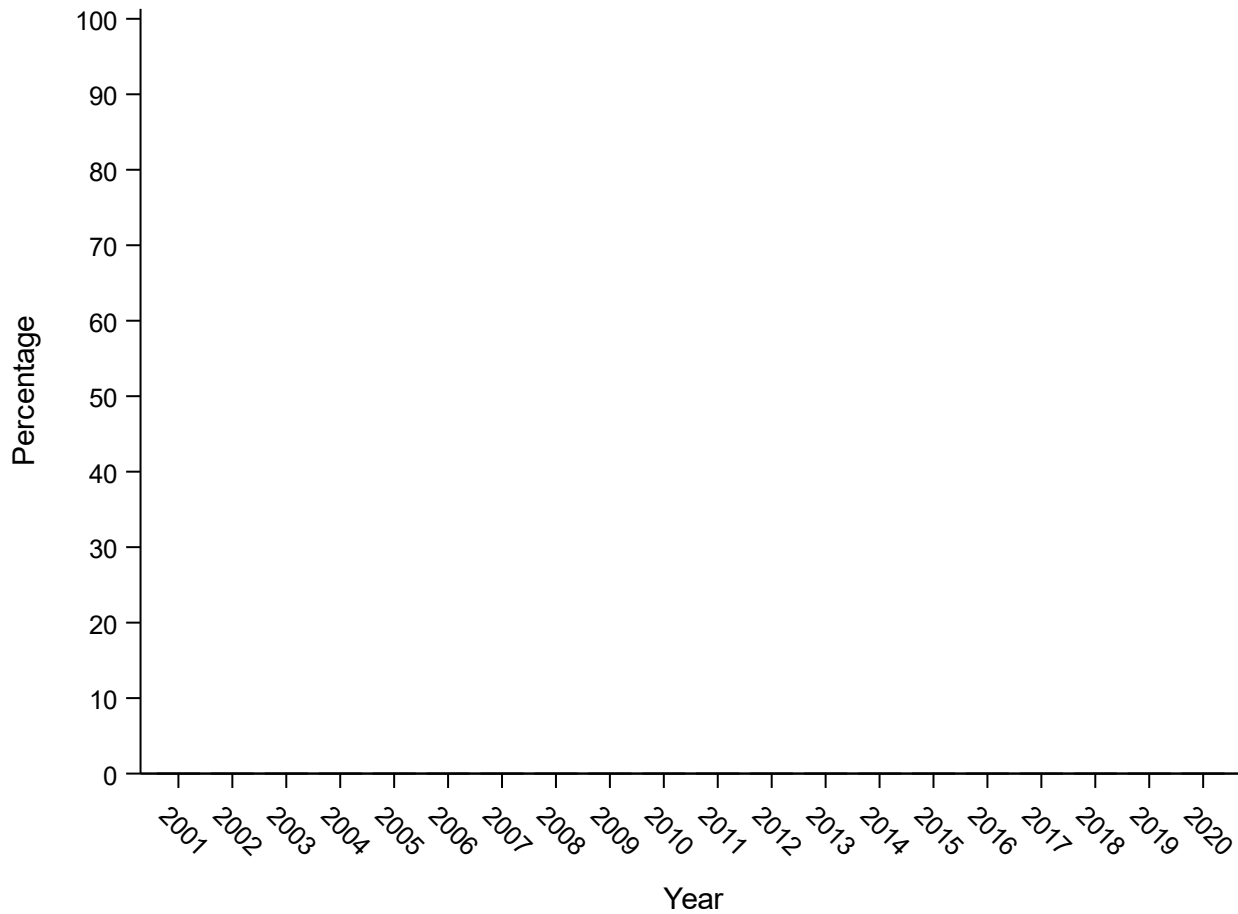
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2016-2020



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
2016	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
2017	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
2018	8 (9.8)	33 (40.2)	30 (36.6)	11 (13.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	82
2019	35 (12.3)	148 (51.9)	41 (14.4)	47 (16.5)	11 (3.9)	1 (0.4)	0 (0.0)	2 (0.7)	285
2020	48 (16.1)	139 (46.5)	23 (7.7)	81 (27.1)	3 (1.0)	0 (0.0)	5 (1.7)	0 (0.0)	299

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2001-2020

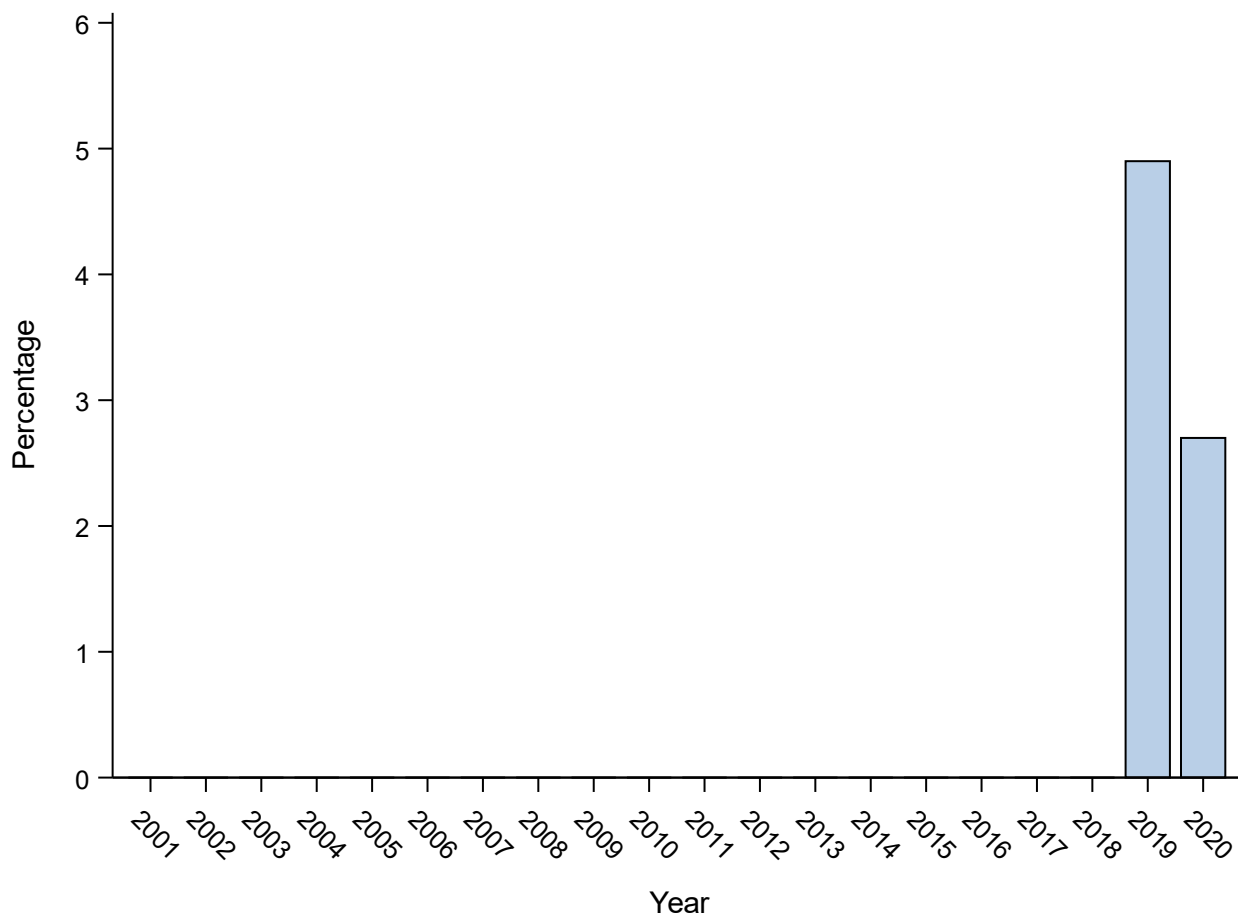


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2001-2020

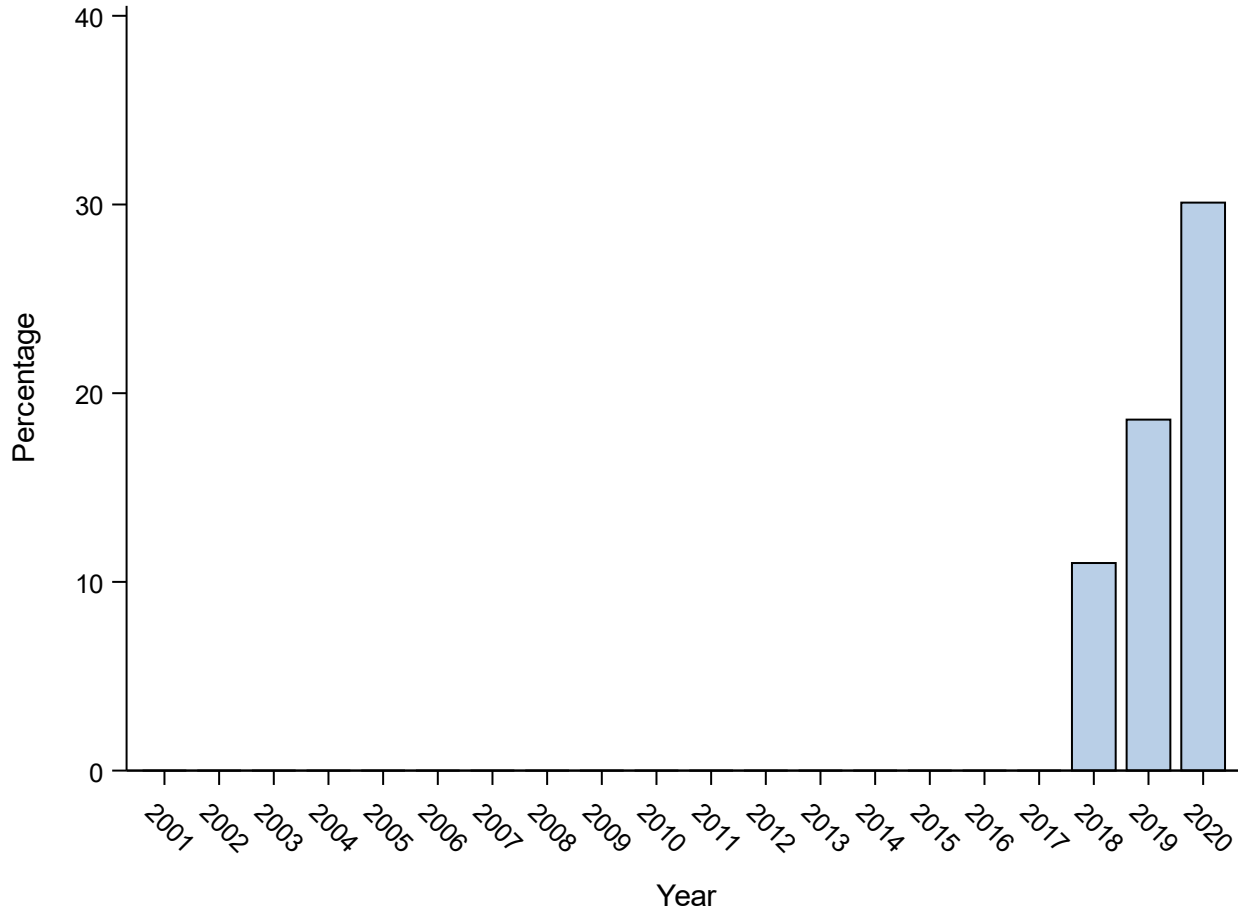


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (4.9)	8 (2.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Milwaukee, Wisconsin, 2001-2020

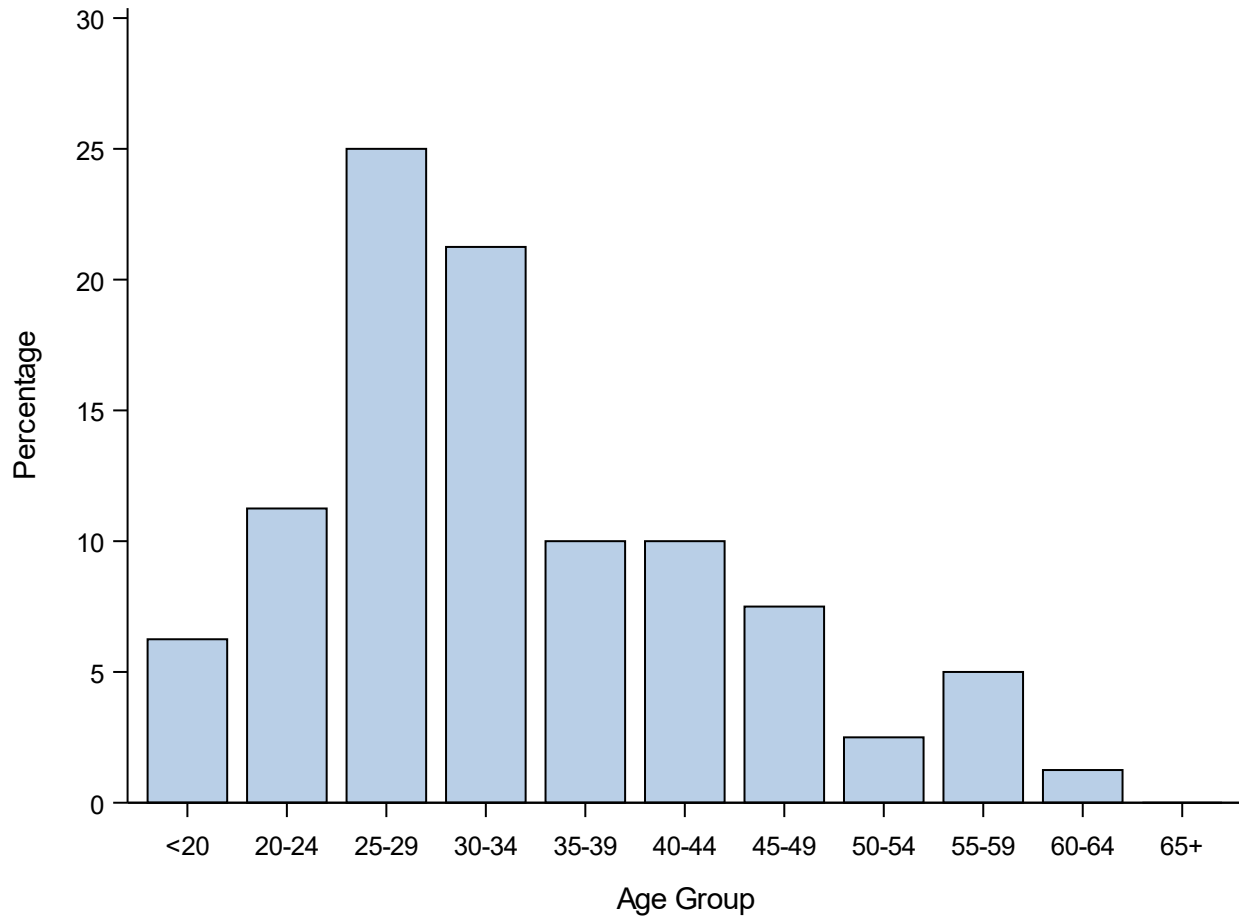


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (11.0)	53 (18.6)	90 (30.1)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

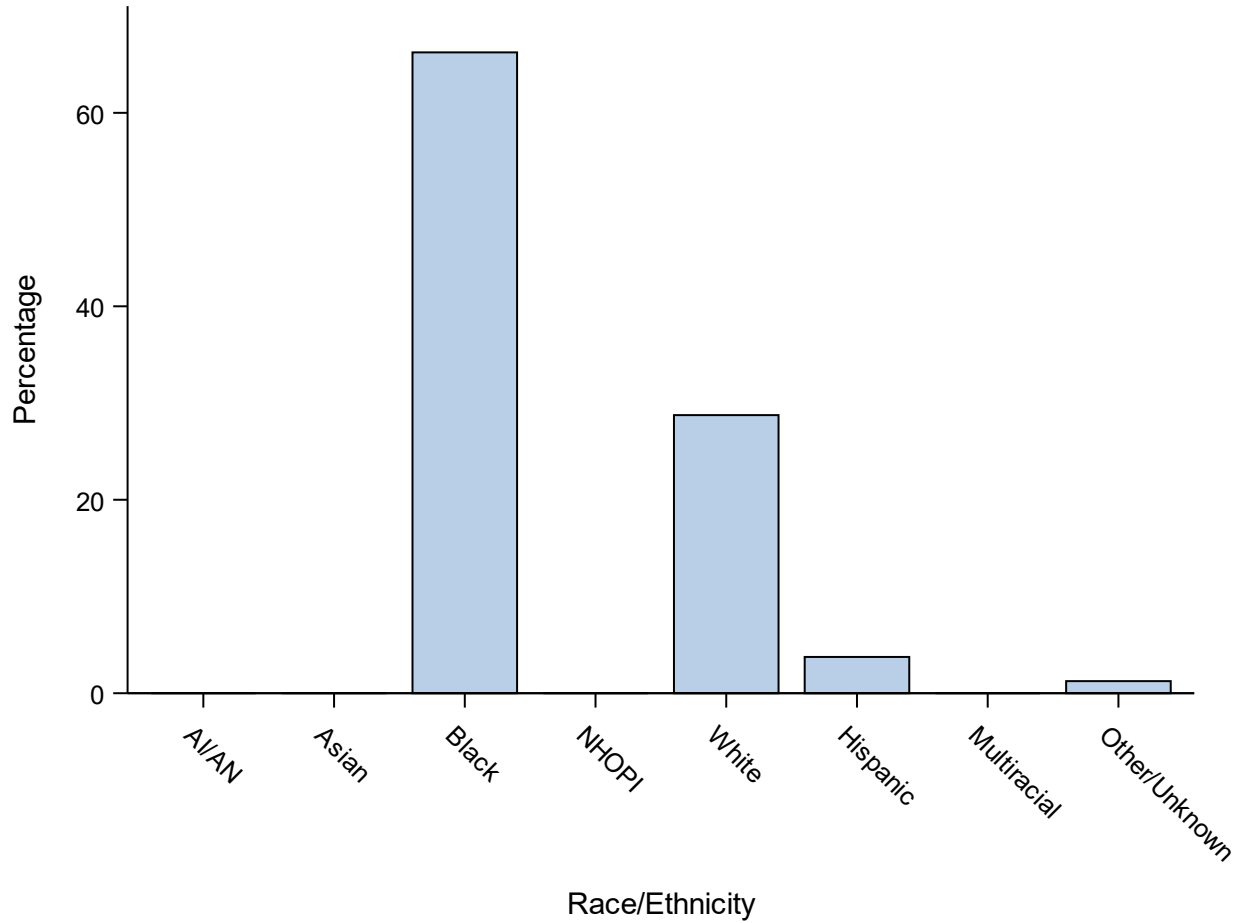
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
5 (6.3)	9 (11.3)	20 (25.0)	17 (21.3)	8 (10.0)	8 (10.0)	6 (7.5)	2 (2.5)	4 (5.0)	1 (1.3)	0 (0.0)	80

Note: Cases with unknown age were excluded.

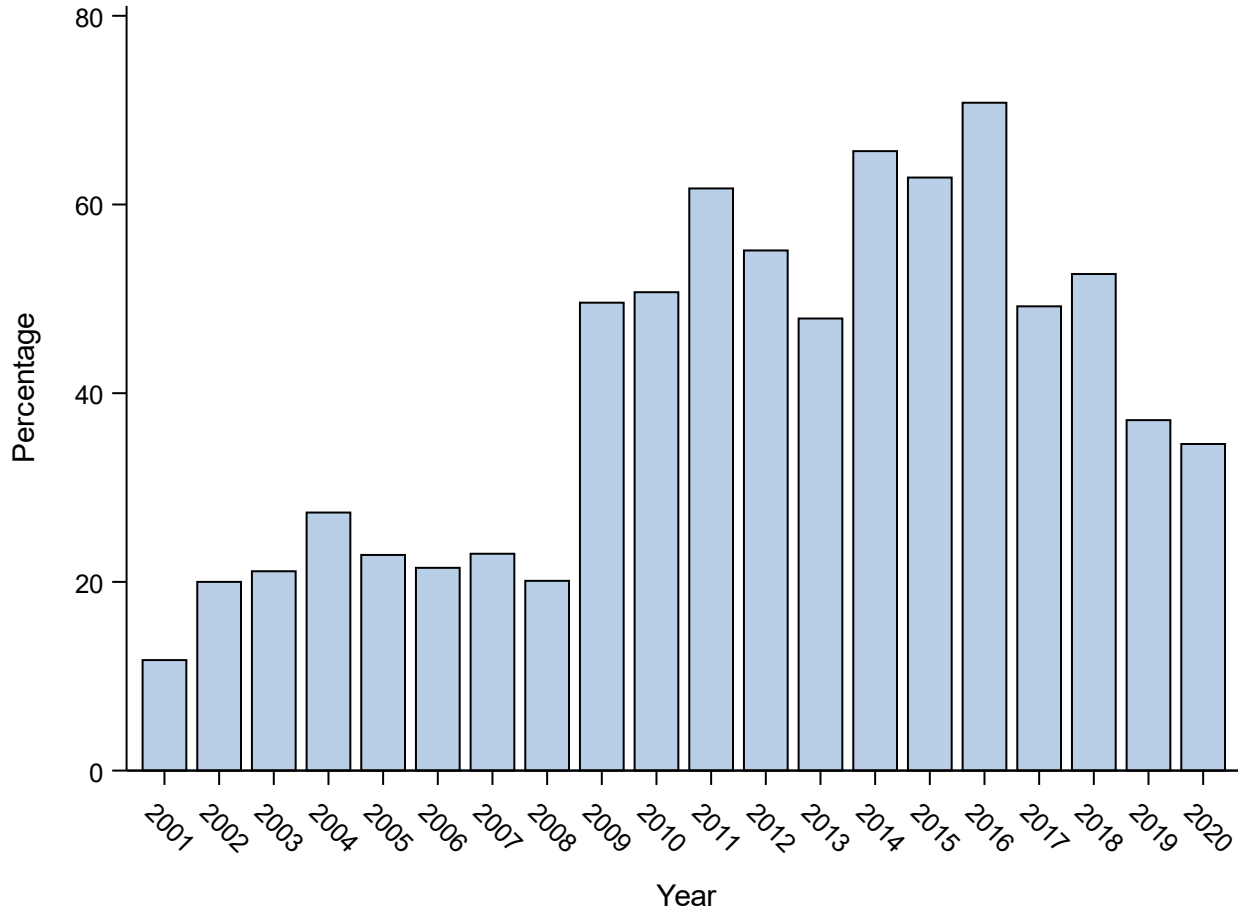
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	53 (66.3)	0 (0.0)	23 (28.8)	3 (3.8)	0 (0.0)	1 (1.3)	80

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2001-2020

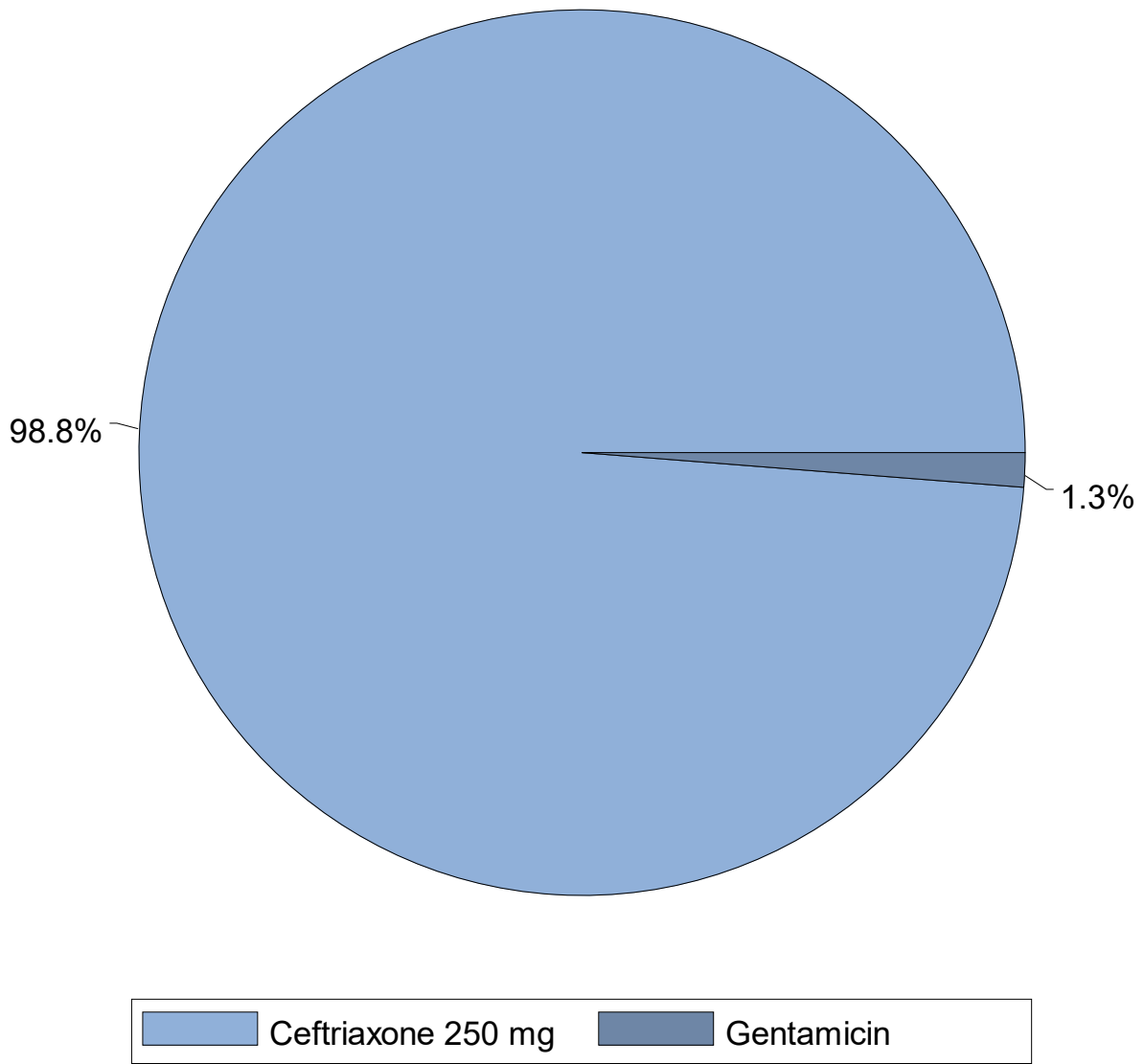


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
13 (11.7)	38 (20.0)	45 (21.1)	64 (27.4)	56 (22.9)	49 (21.5)	57 (23.0)	36 (20.1)	61 (49.6)	36 (50.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
29 (61.7)	43 (55.1)	46 (47.9)	65 (65.7)	66 (62.9)	63 (70.8)	31 (49.2)	40 (52.6)	26 (37.1)	27 (34.6)

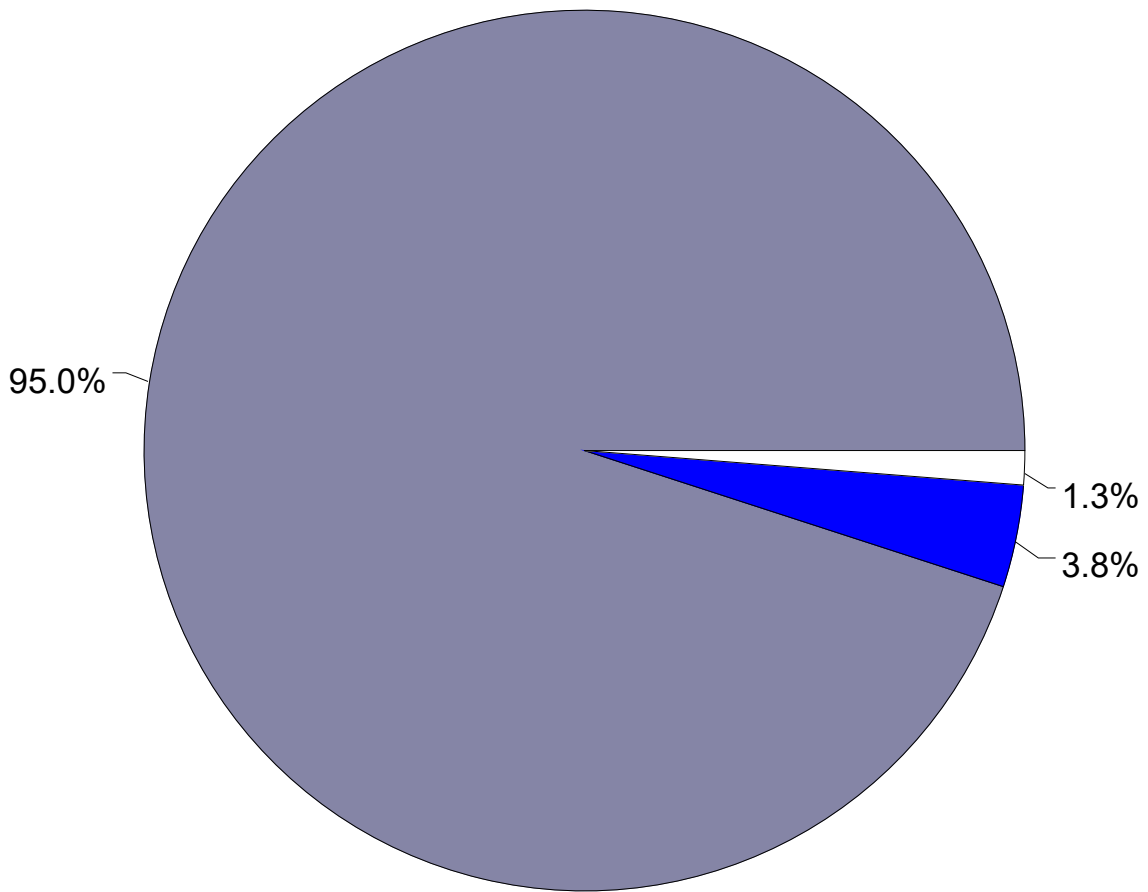
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2020



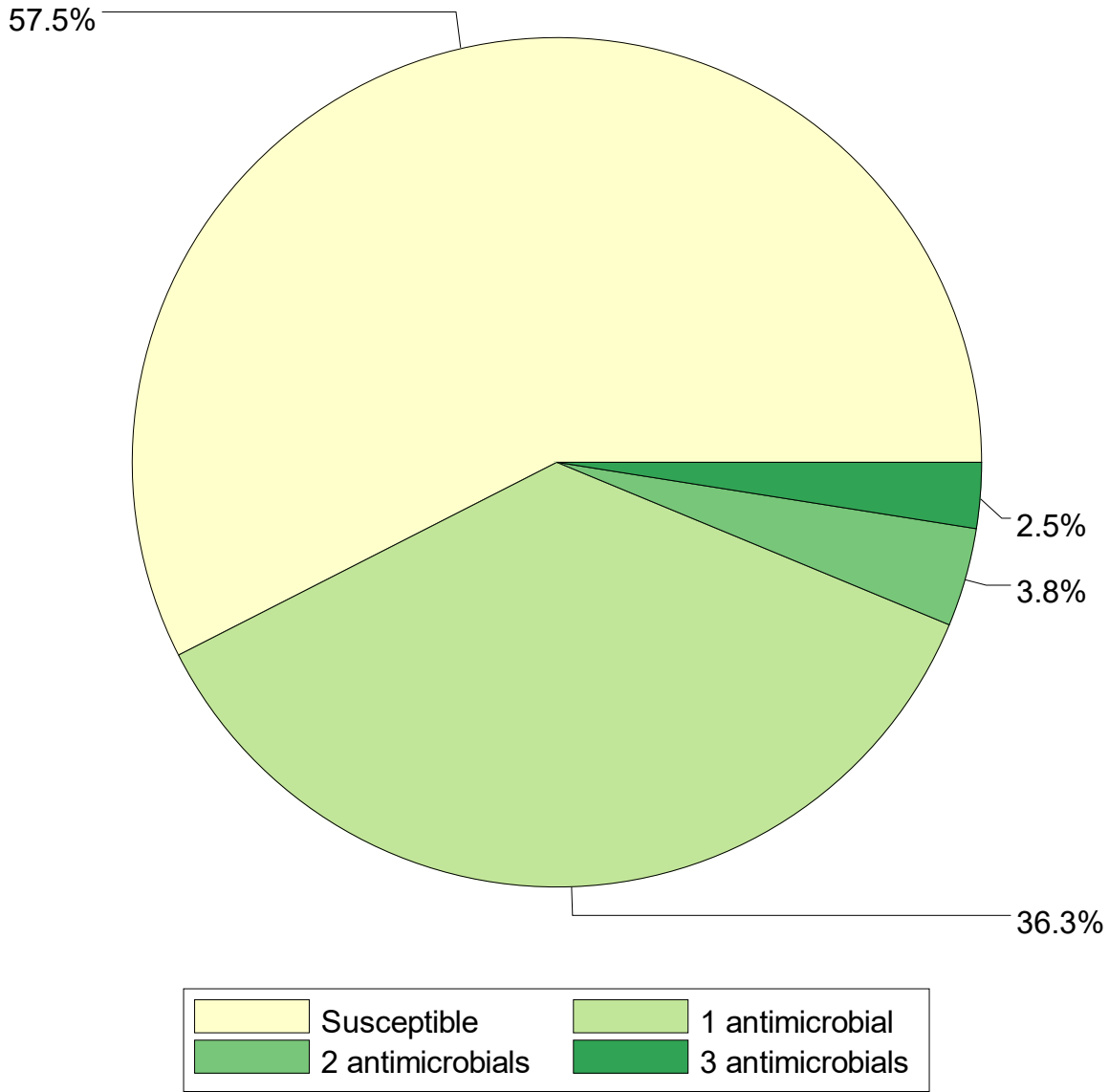
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	79	98.8
Gentamicin	1	1.3

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2020



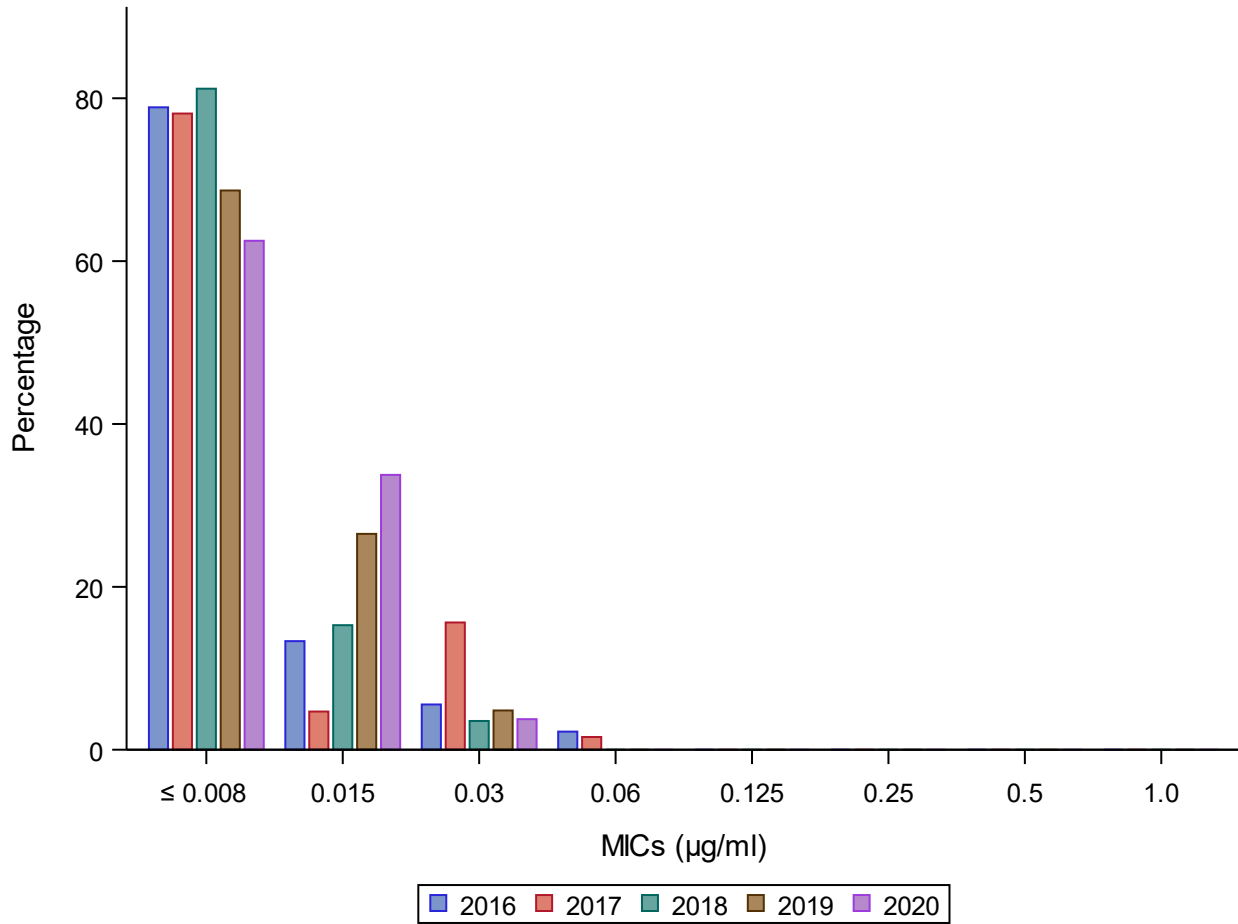
Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	76	95.0
Doxycycline/Tetracycline	3	3.8
None/Other	1	1.3

Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2020



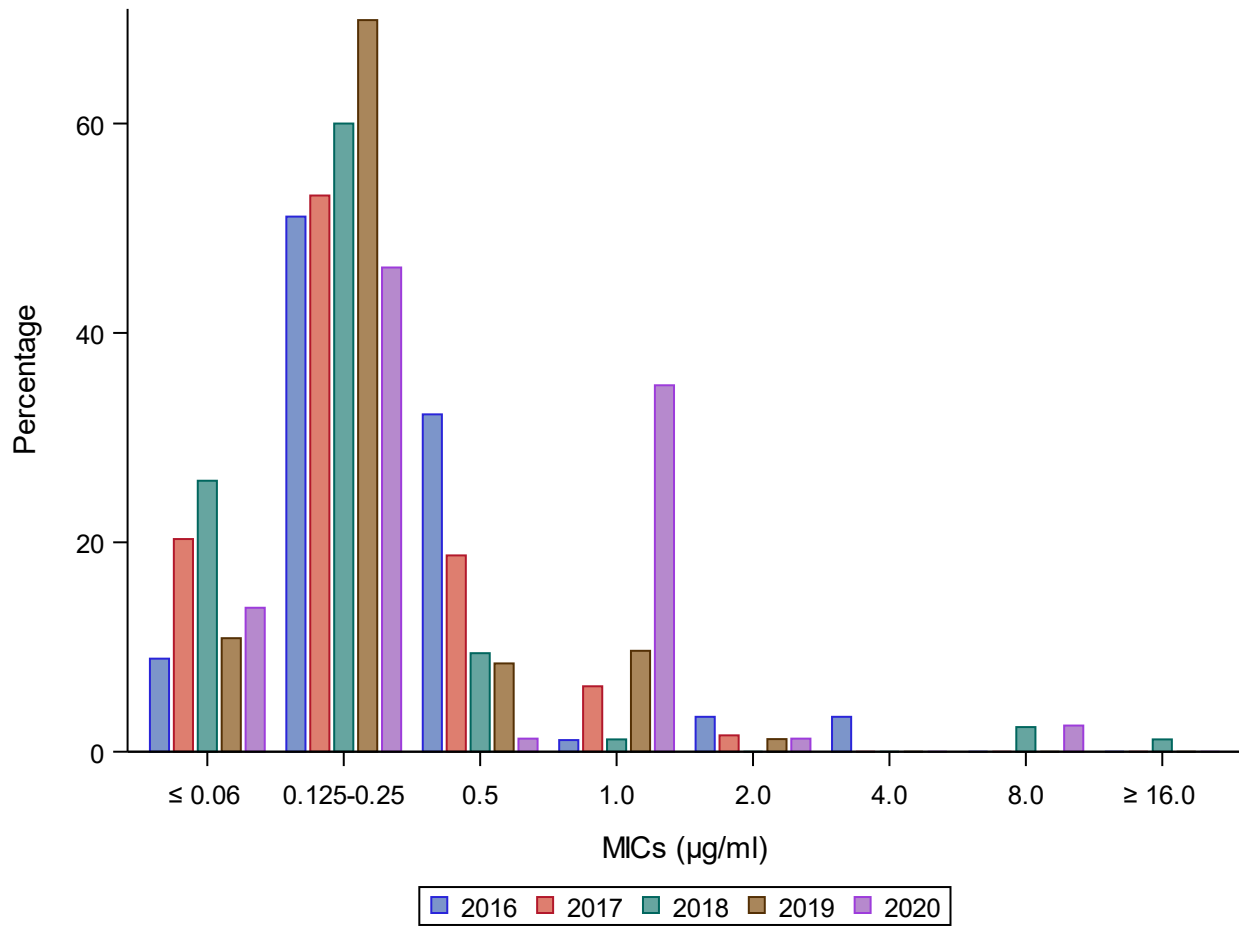
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2016-2020



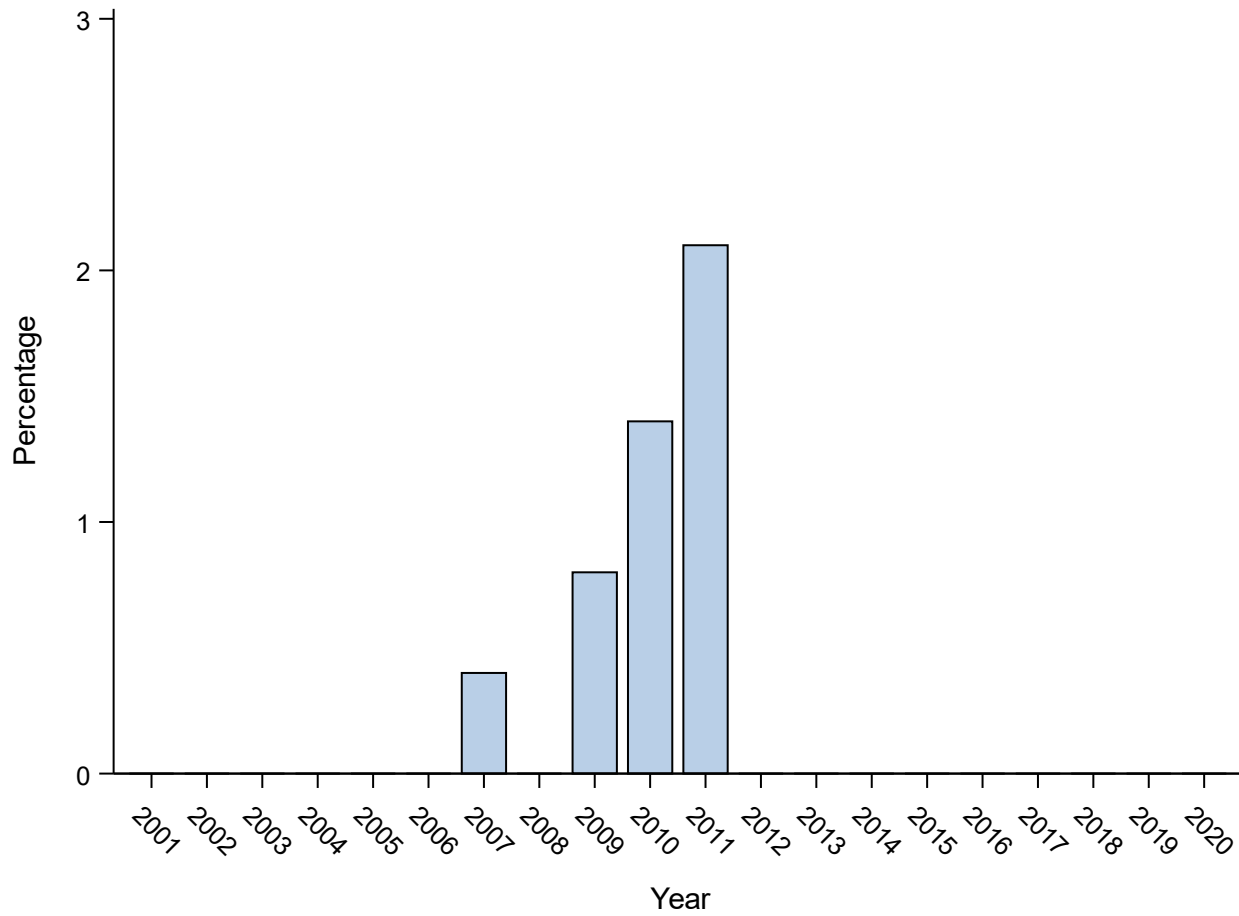
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	71 (78.9)	12 (13.3)	5 (5.6)	2 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	90
2017	50 (78.1)	3 (4.7)	10 (15.6)	1 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	64
2018	69 (81.2)	13 (15.3)	3 (3.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	85
2019	57 (68.7)	22 (26.5)	4 (4.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	83
2020	50 (62.5)	27 (33.8)	3 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	80

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2016-2020



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
2016	8 (8.9)	46 (51.1)	29 (32.2)	1 (1.1)	3 (3.3)	3 (3.3)	0 (0.0)	0 (0.0)	90
2017	13 (20.3)	34 (53.1)	12 (18.8)	4 (6.3)	1 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	64
2018	22 (25.9)	51 (60.0)	8 (9.4)	1 (1.2)	0 (0.0)	0 (0.0)	2 (2.4)	1 (1.2)	85
2019	9 (10.8)	58 (69.9)	7 (8.4)	8 (9.6)	1 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	83
2020	11 (13.8)	37 (46.3)	1 (1.3)	28 (35.0)	1 (1.3)	0 (0.0)	2 (2.5)	0 (0.0)	80

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2001-2020

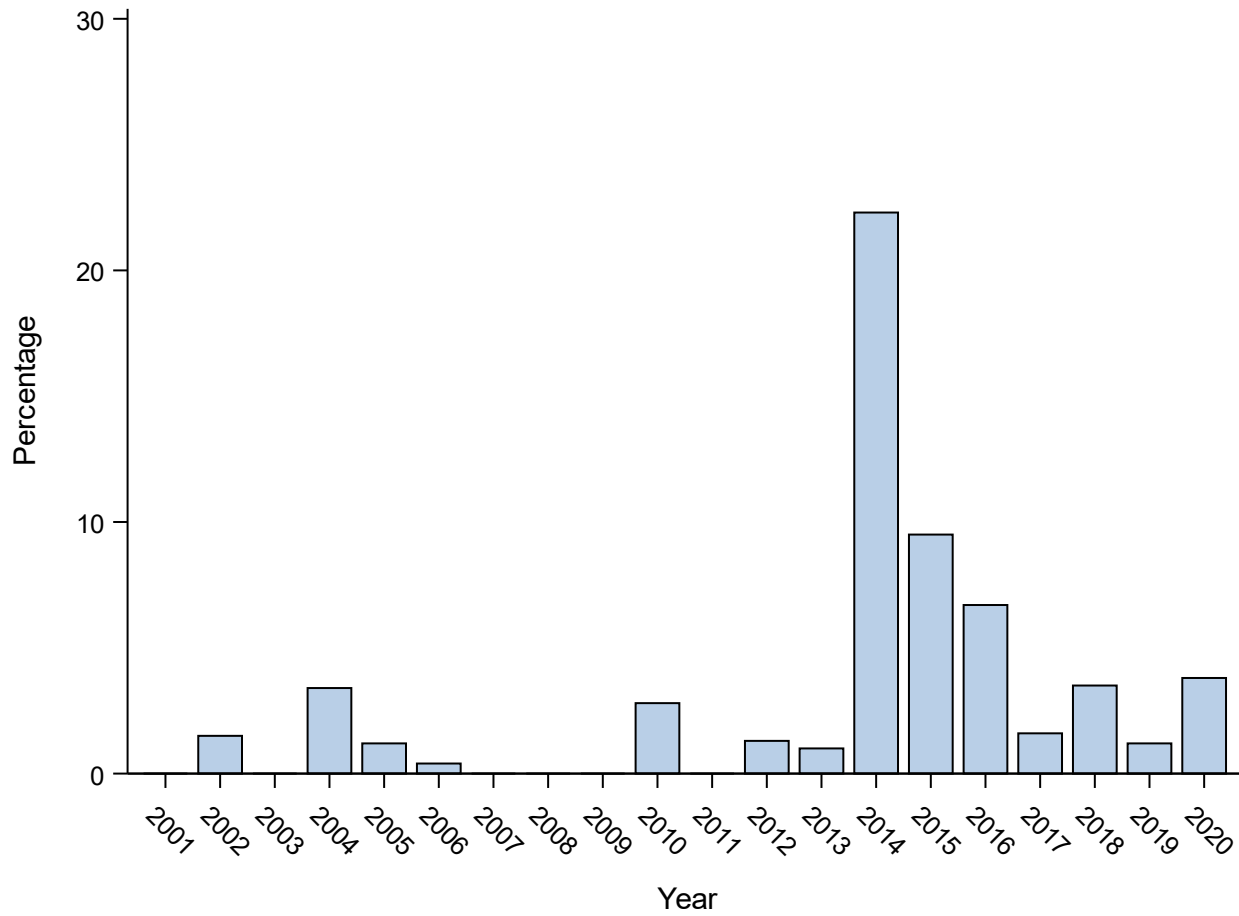


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	1 (0.8)	1 (1.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (2.1)	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 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2001-2020

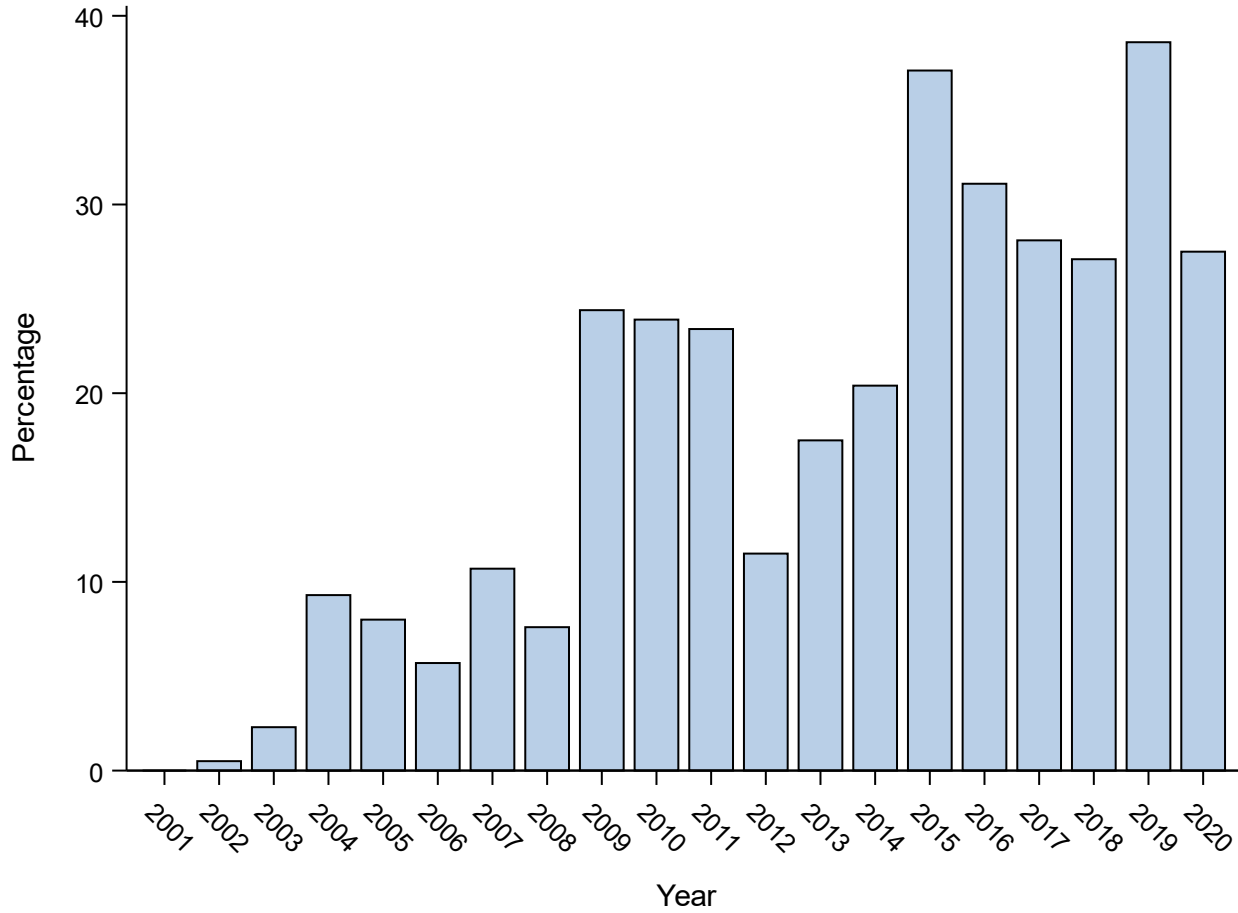


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	3 (1.5)	0 (0.0)	8 (3.4)	3 (1.2)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.8)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (1.3)	1 (1.0)	23 (22.3)	10 (9.5)	6 (6.7)	1 (1.6)	3 (3.5)	1 (1.2)	3 (3.8)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Minneapolis, Minnesota, 2001-2020

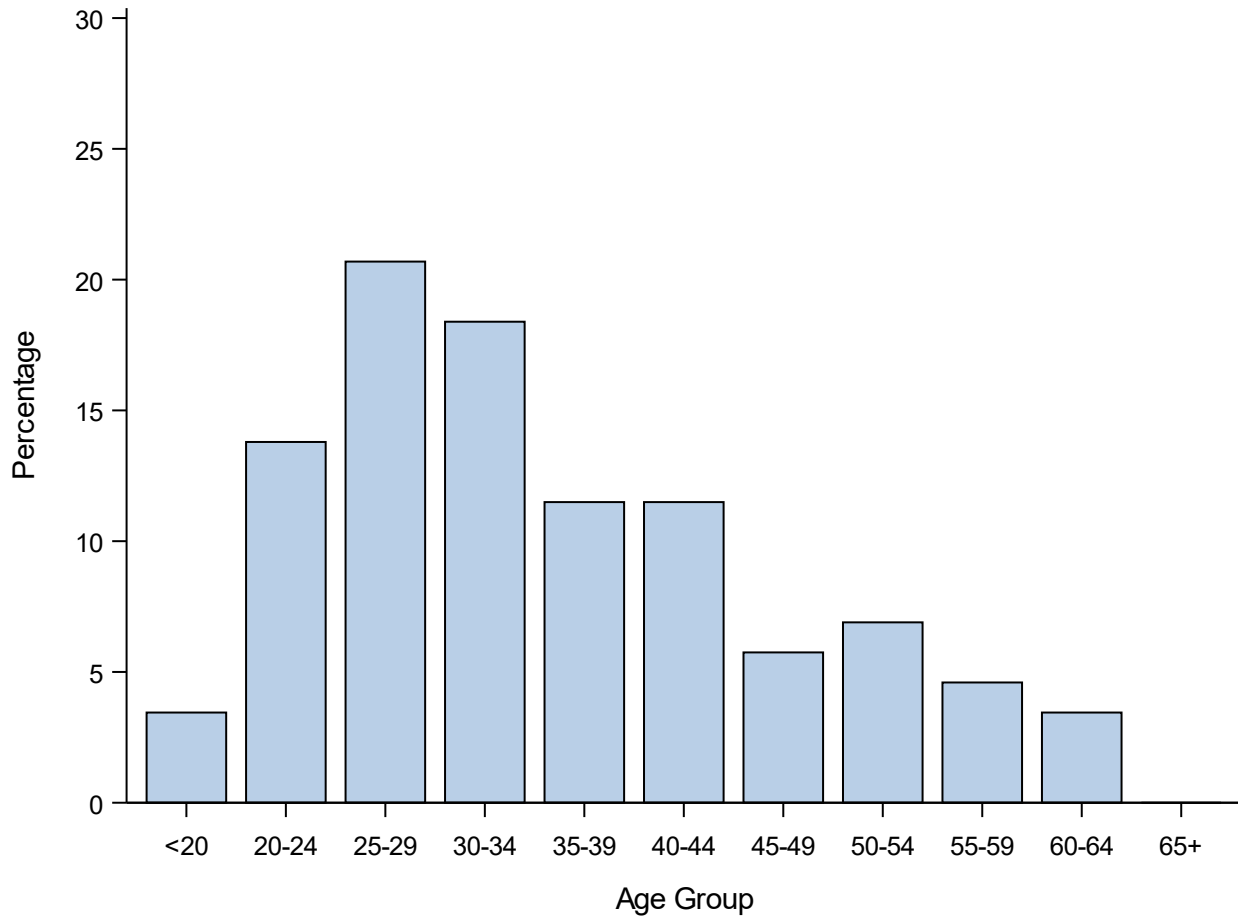


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.5)	5 (2.3)	22 (9.3)	20 (8.0)	13 (5.7)	27 (10.7)	14 (7.6)	30 (24.4)	17 (23.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
11 (23.4)	9 (11.5)	17 (17.5)	21 (20.4)	39 (37.1)	28 (31.1)	18 (28.1)	23 (27.1)	32 (38.6)	22 (27.5)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

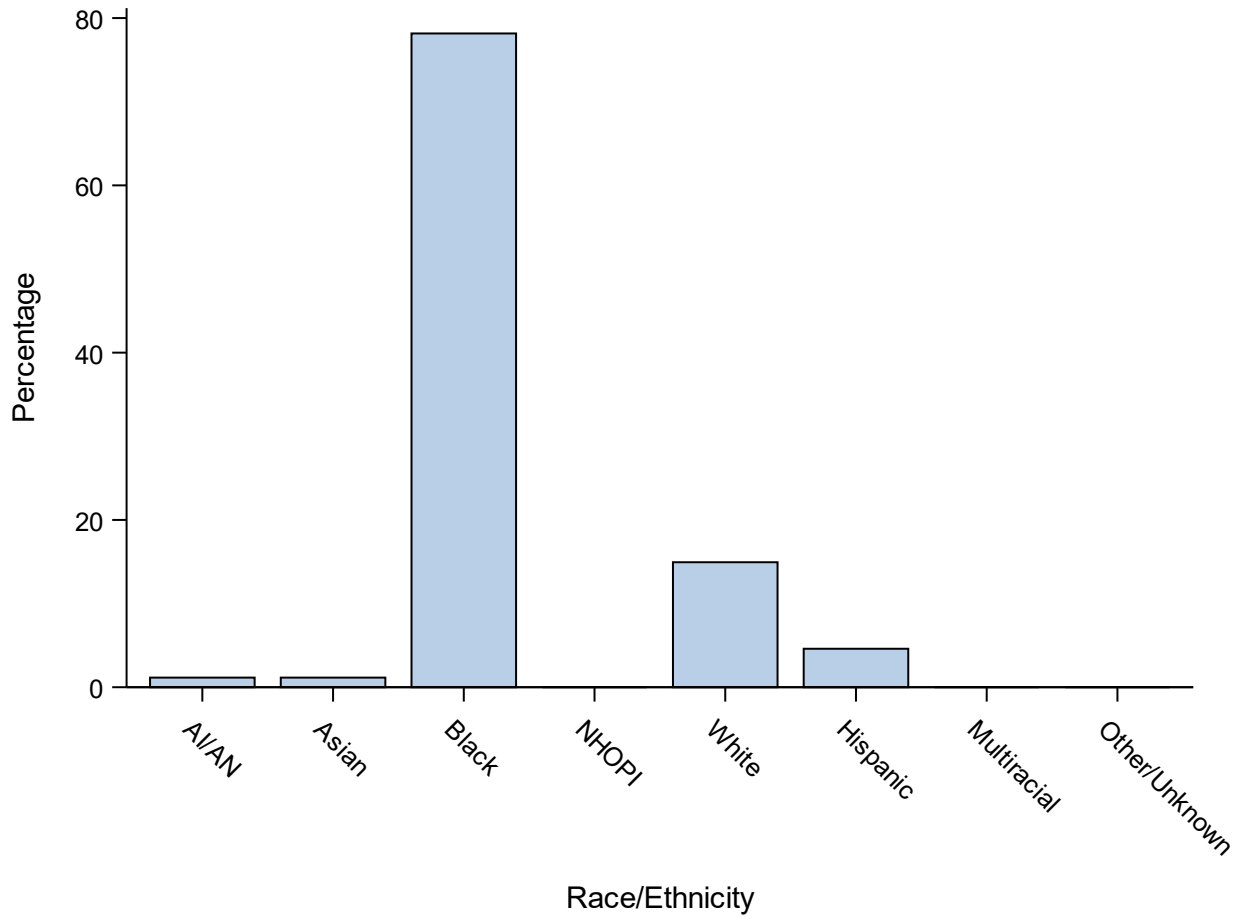
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
3 (3.4)	12 (13.8)	18 (20.7)	16 (18.4)	10 (11.5)	10 (11.5)	5 (5.7)	6 (6.9)	4 (4.6)	3 (3.4)	0 (0.0)	87

Note: Cases with unknown age were excluded.

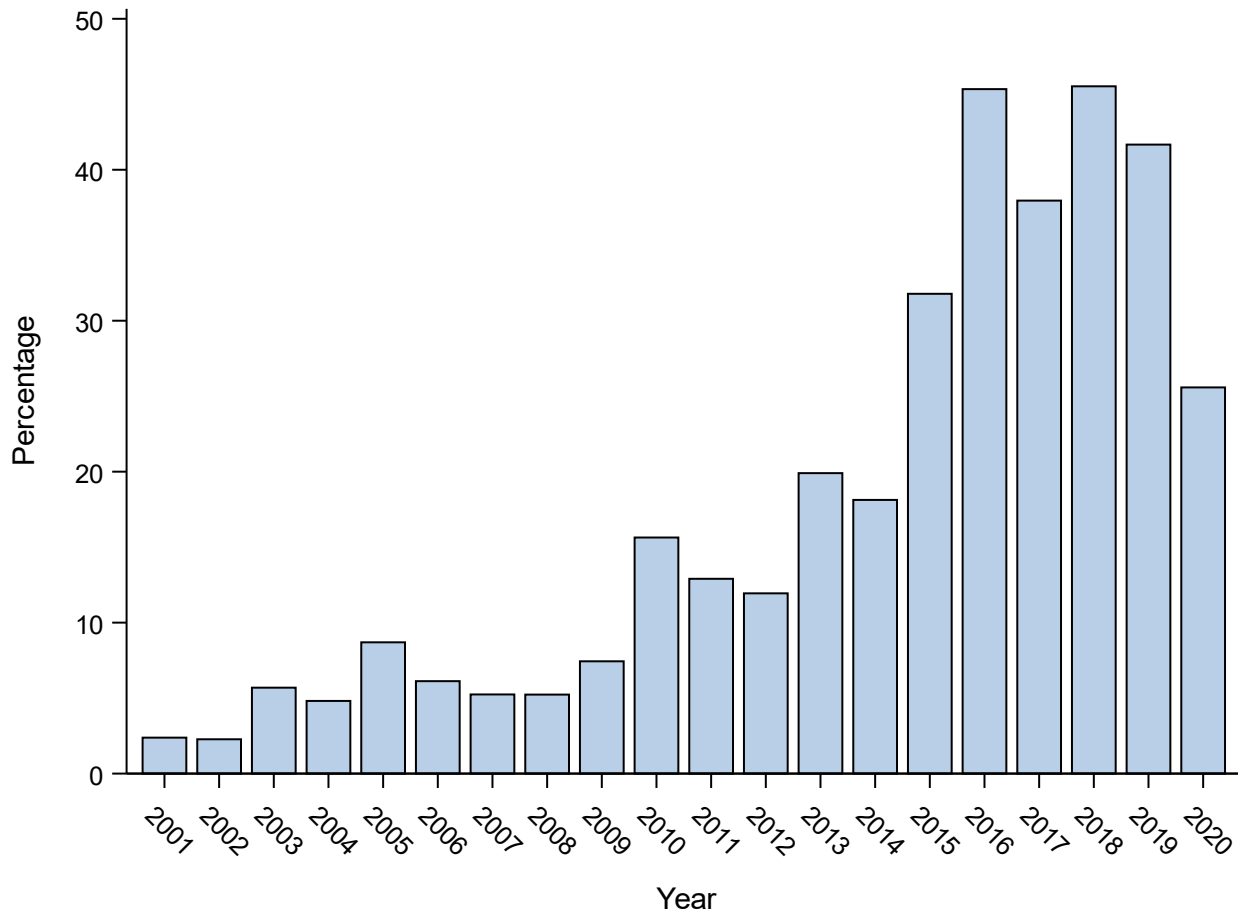
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (1.1)	1 (1.1)	68 (78.2)	0 (0.0)	13 (14.9)	4 (4.6)	0 (0.0)	0 (0.0)	87

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2001-2020

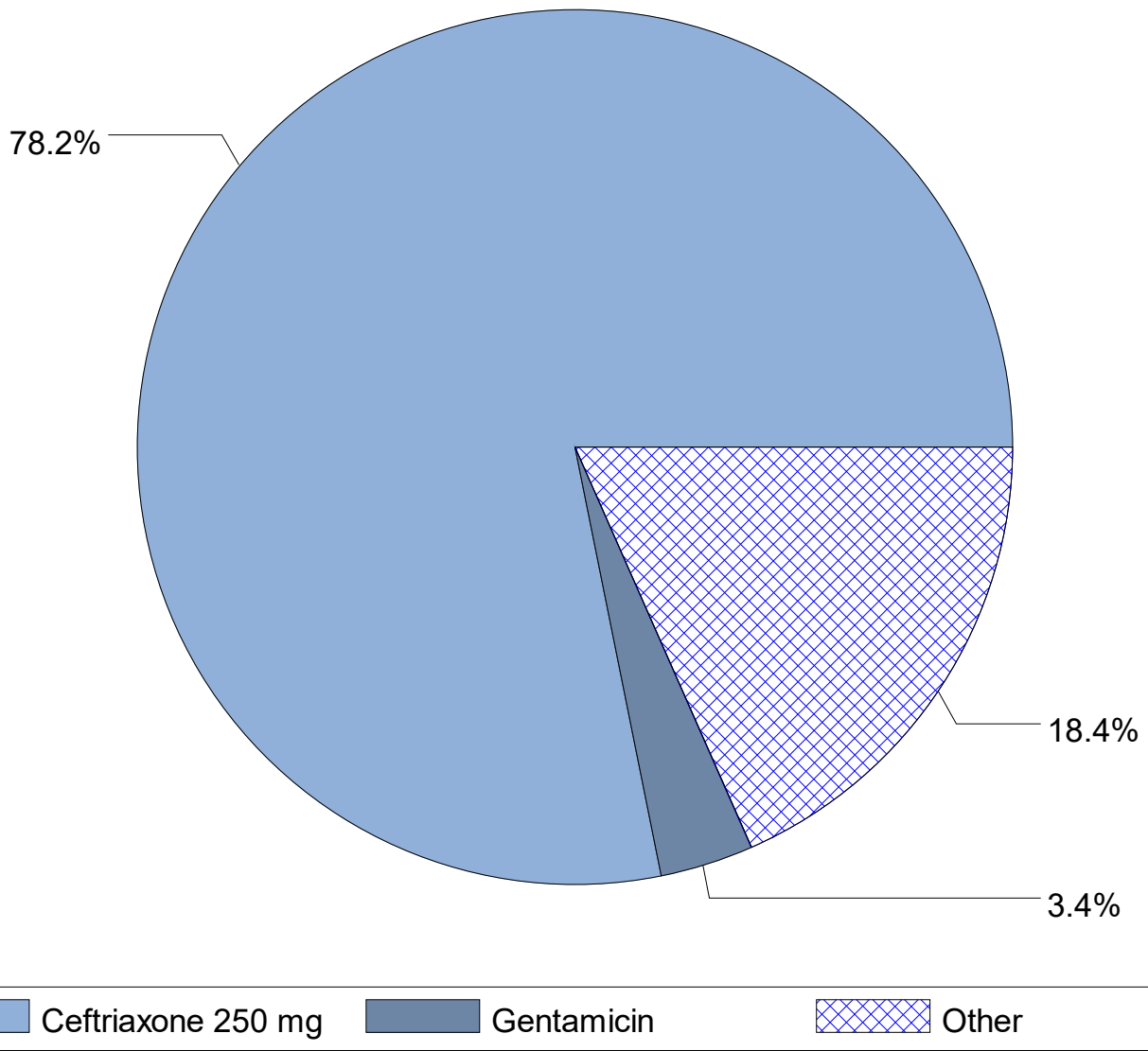


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
3 (2.4)	3 (2.3)	14 (5.7)	9 (4.8)	8 (8.7)	3 (6.1)	13 (5.2)	9 (5.2)	18 (7.4)	38 (15.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
32 (12.9)	24 (11.9)	41 (19.9)	31 (18.1)	41 (31.8)	73 (45.3)	52 (38.0)	56 (45.5)	50 (41.7)	22 (25.6)

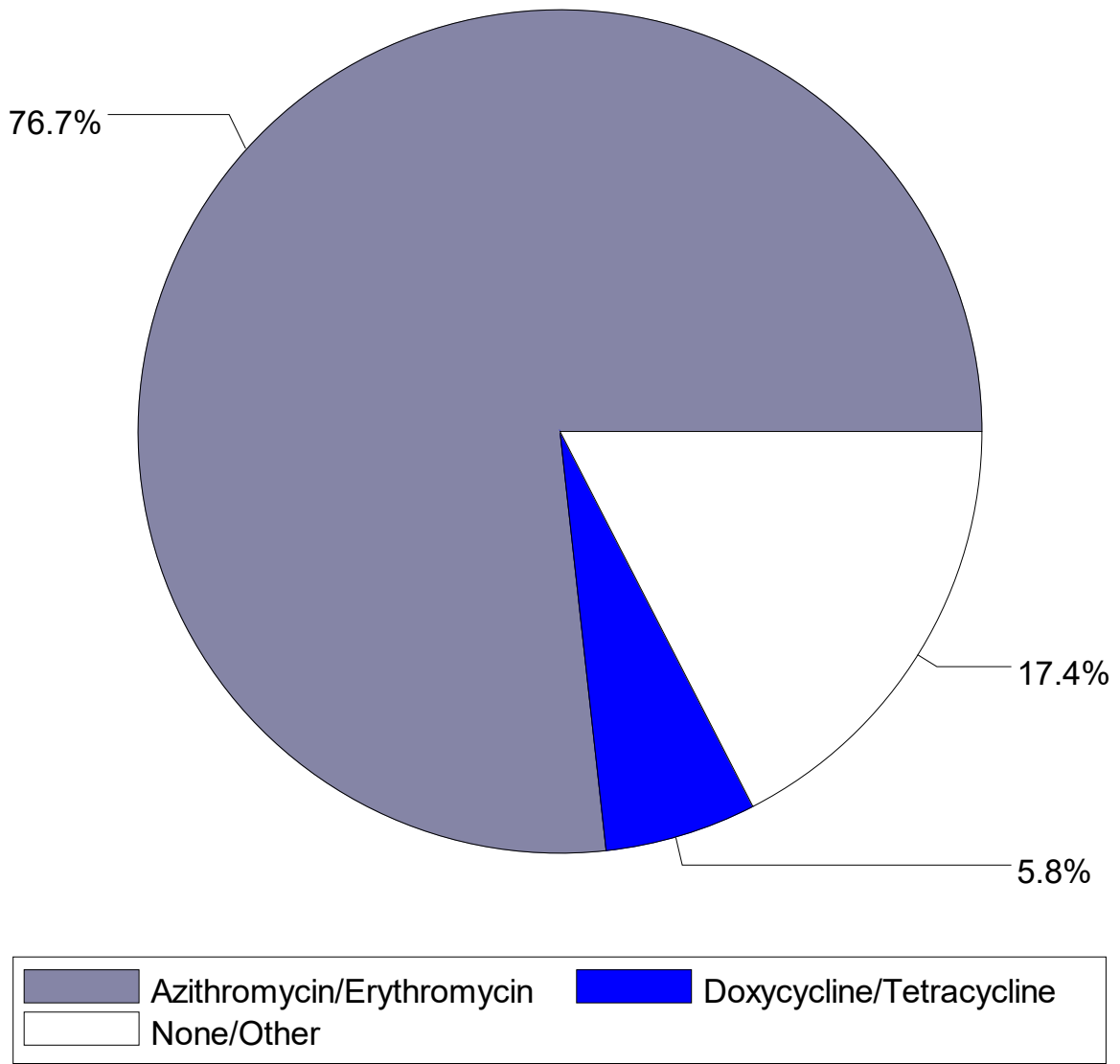
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2020



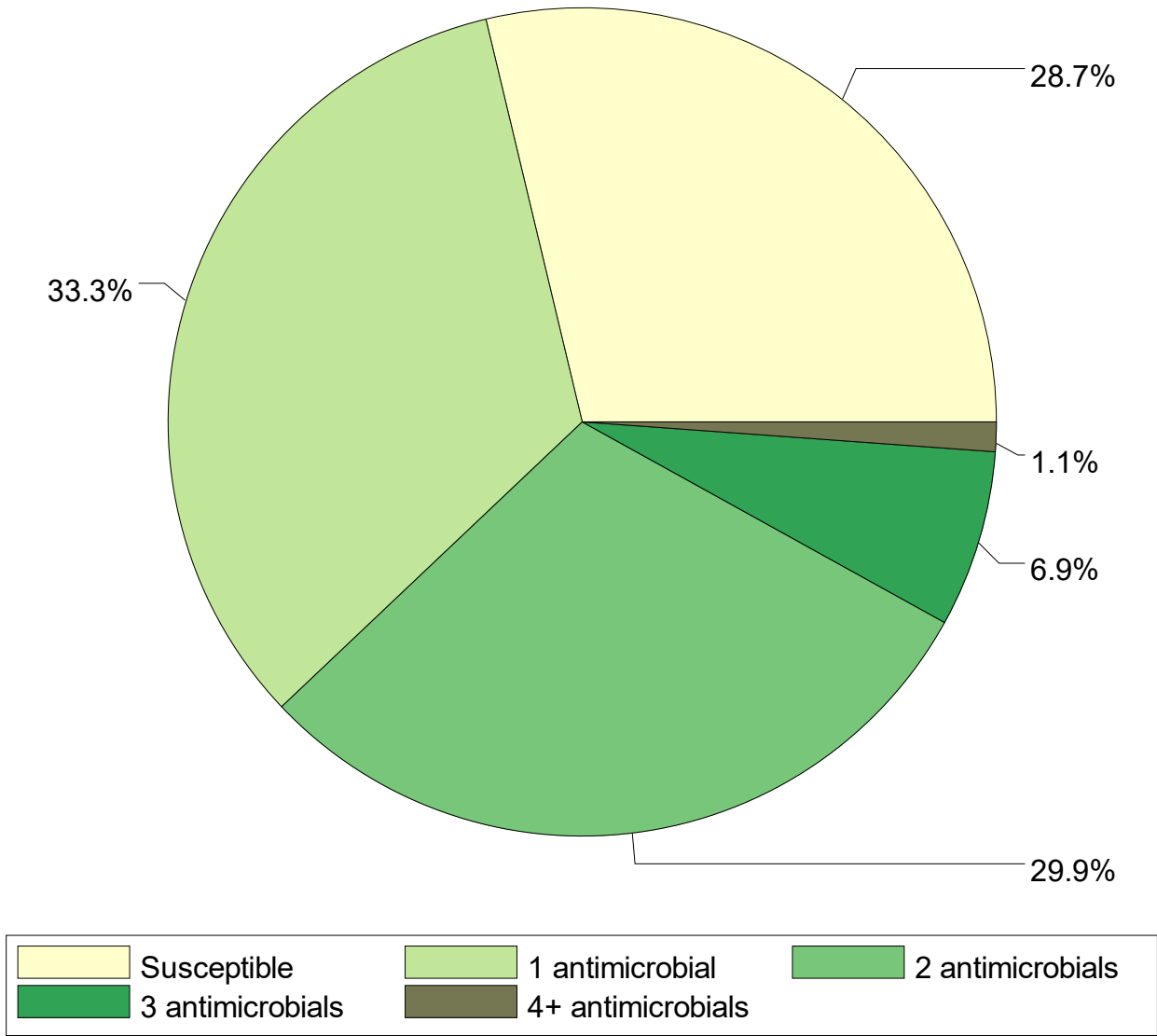
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	68	78.2
Gentamicin	3	3.4
Other	16	18.4

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	66	76.7
Doxycycline/Tetracycline	5	5.8
None/Other	15	17.4

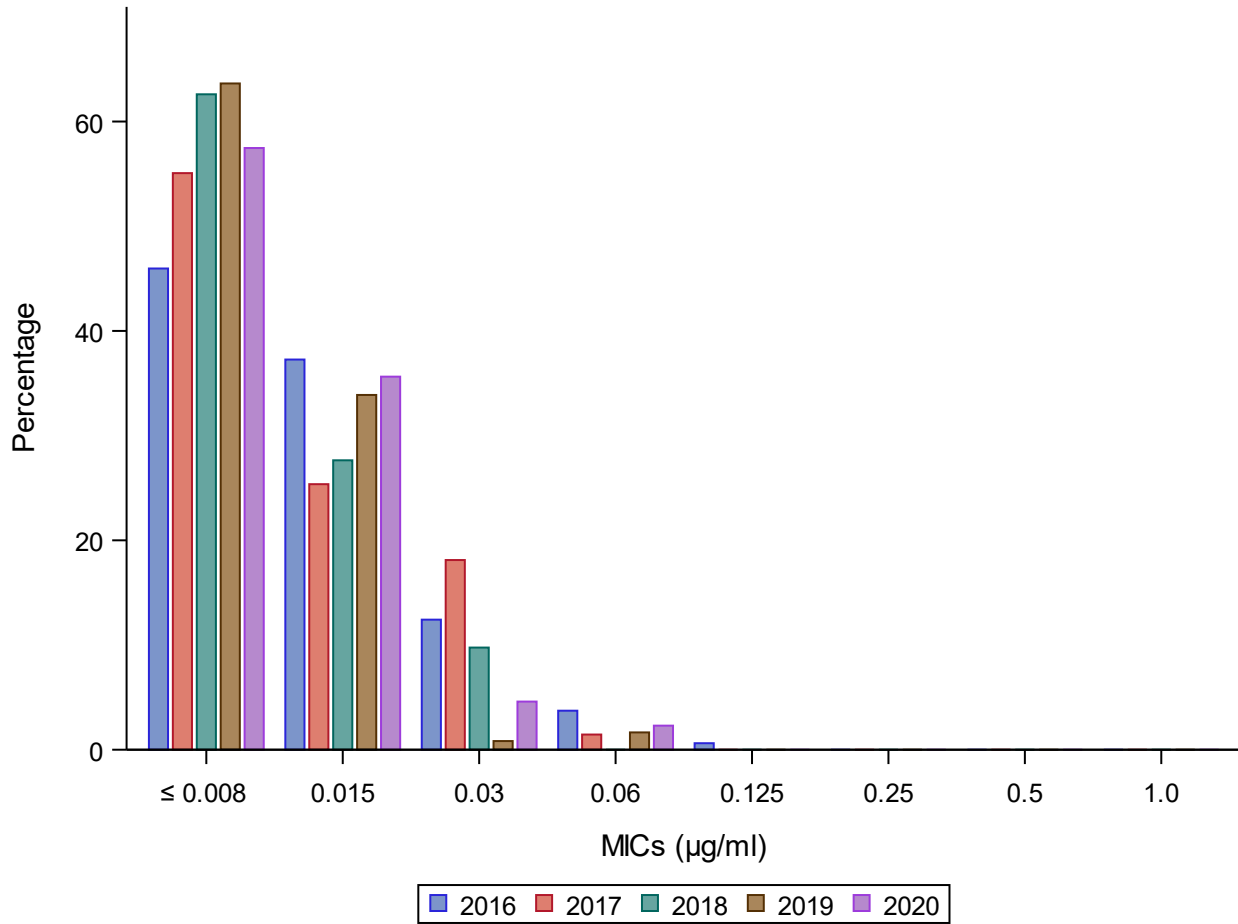
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	25	28.7
1 antimicrobial	29	33.3
2 antimicrobials	26	29.9
3 antimicrobials	6	6.9
4+ antimicrobials	1	1.1

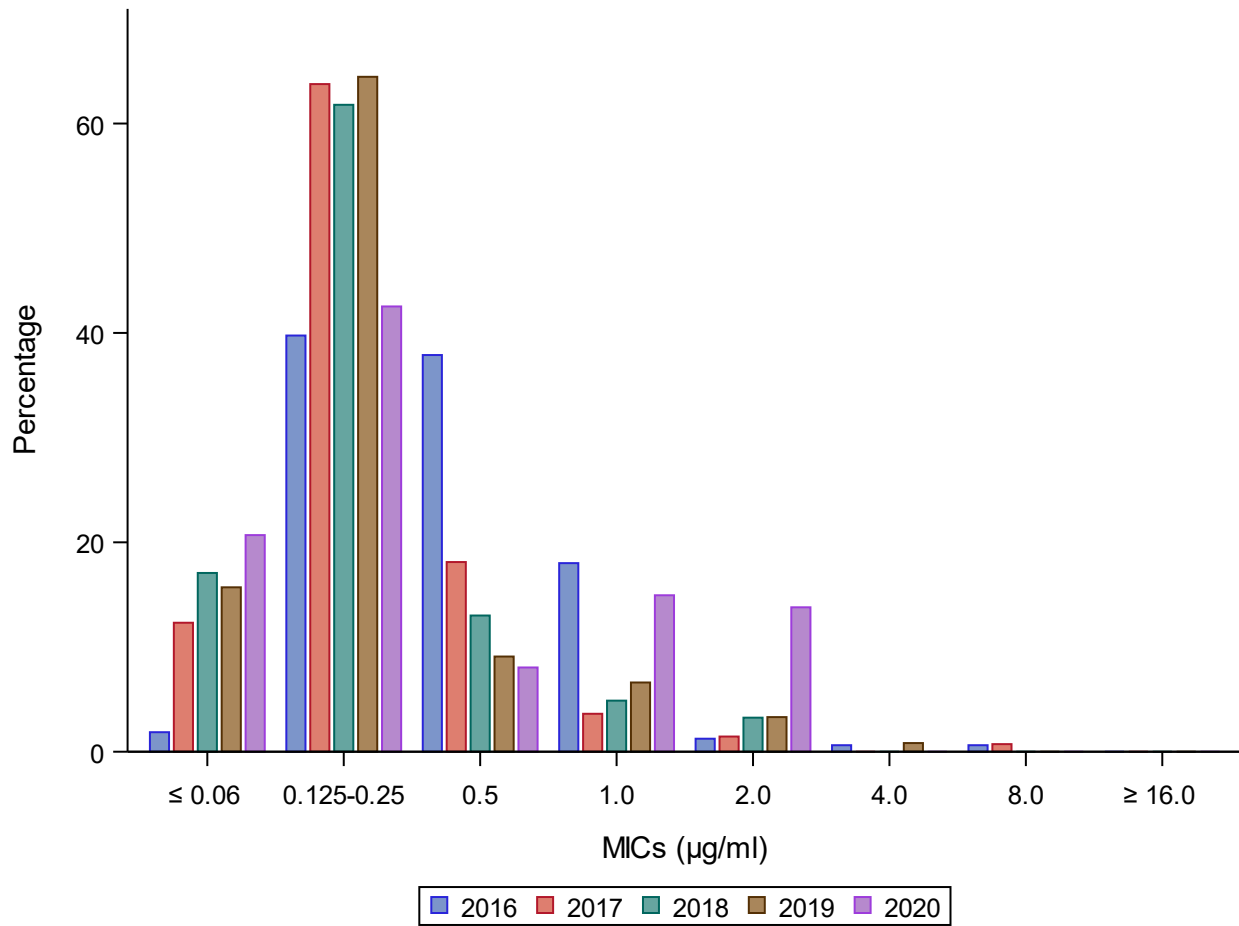
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2016-2020



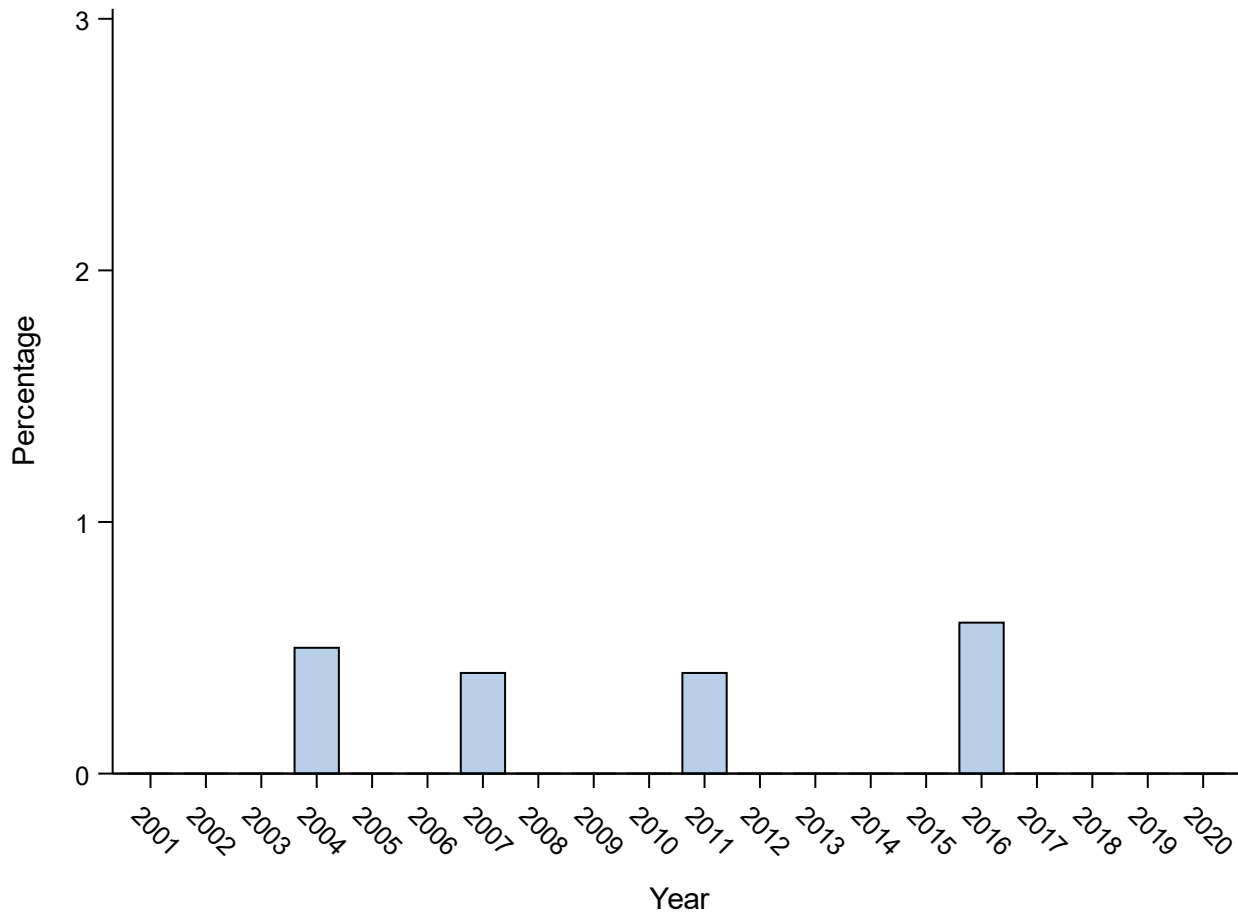
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	74 (46.0)	60 (37.3)	20 (12.4)	6 (3.7)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	161
2017	76 (55.1)	35 (25.4)	25 (18.1)	2 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	138
2018	77 (62.6)	34 (27.6)	12 (9.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	123
2019	77 (63.6)	41 (33.9)	1 (0.8)	2 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	121
2020	50 (57.5)	31 (35.6)	4 (4.6)	2 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	87

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2016-2020



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
2016	3 (1.9)	64 (39.8)	61 (37.9)	29 (18.0)	2 (1.2)	1 (0.6)	1 (0.6)	0 (0.0)	161
2017	17 (12.3)	88 (63.8)	25 (18.1)	5 (3.6)	2 (1.4)	0 (0.0)	1 (0.7)	0 (0.0)	138
2018	21 (17.1)	76 (61.8)	16 (13.0)	6 (4.9)	4 (3.3)	0 (0.0)	0 (0.0)	0 (0.0)	123
2019	19 (15.7)	78 (64.5)	11 (9.1)	8 (6.6)	4 (3.3)	1 (0.8)	0 (0.0)	0 (0.0)	121
2020	18 (20.7)	37 (42.5)	7 (8.0)	13 (14.9)	12 (13.8)	0 (0.0)	0 (0.0)	0 (0.0)	87

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2001-2020

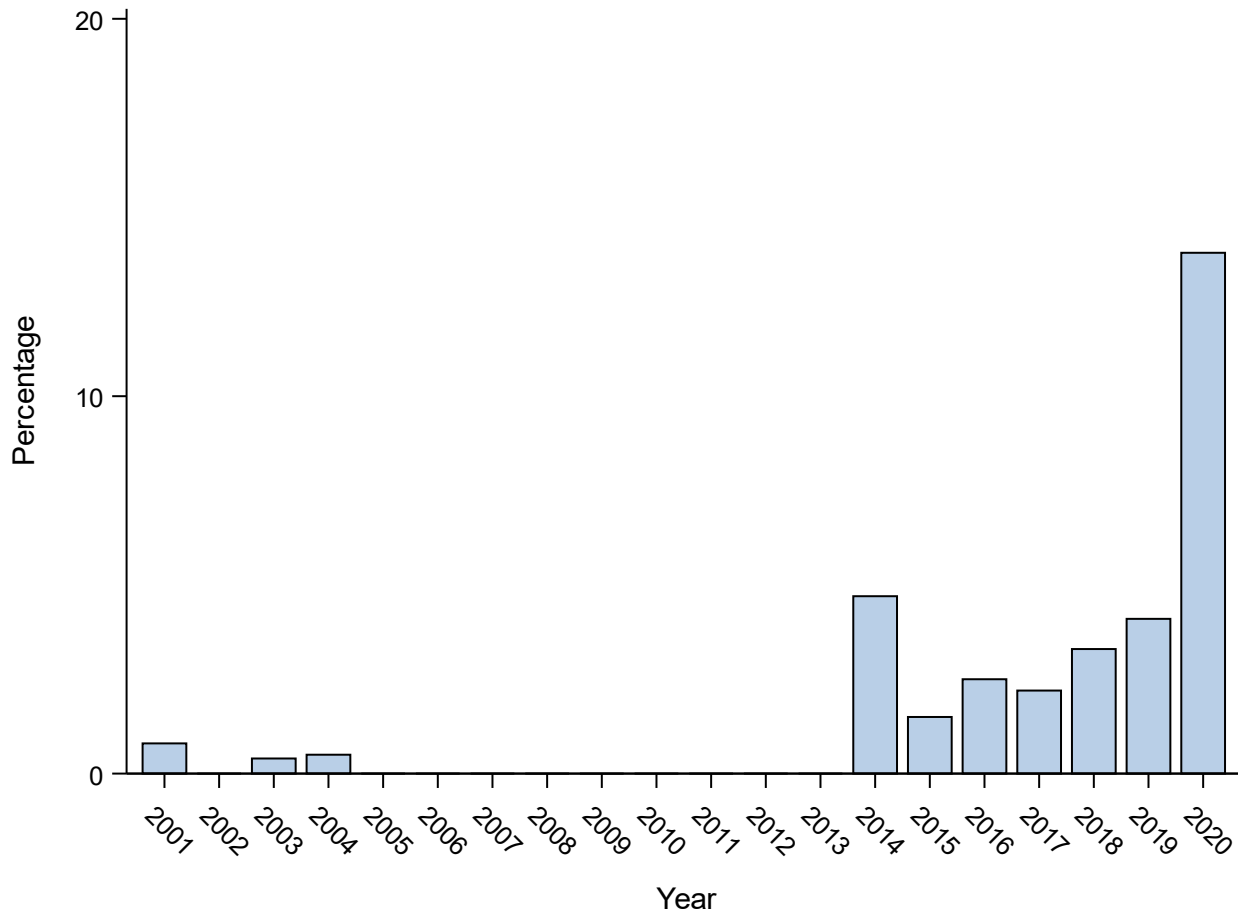


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2001-2020

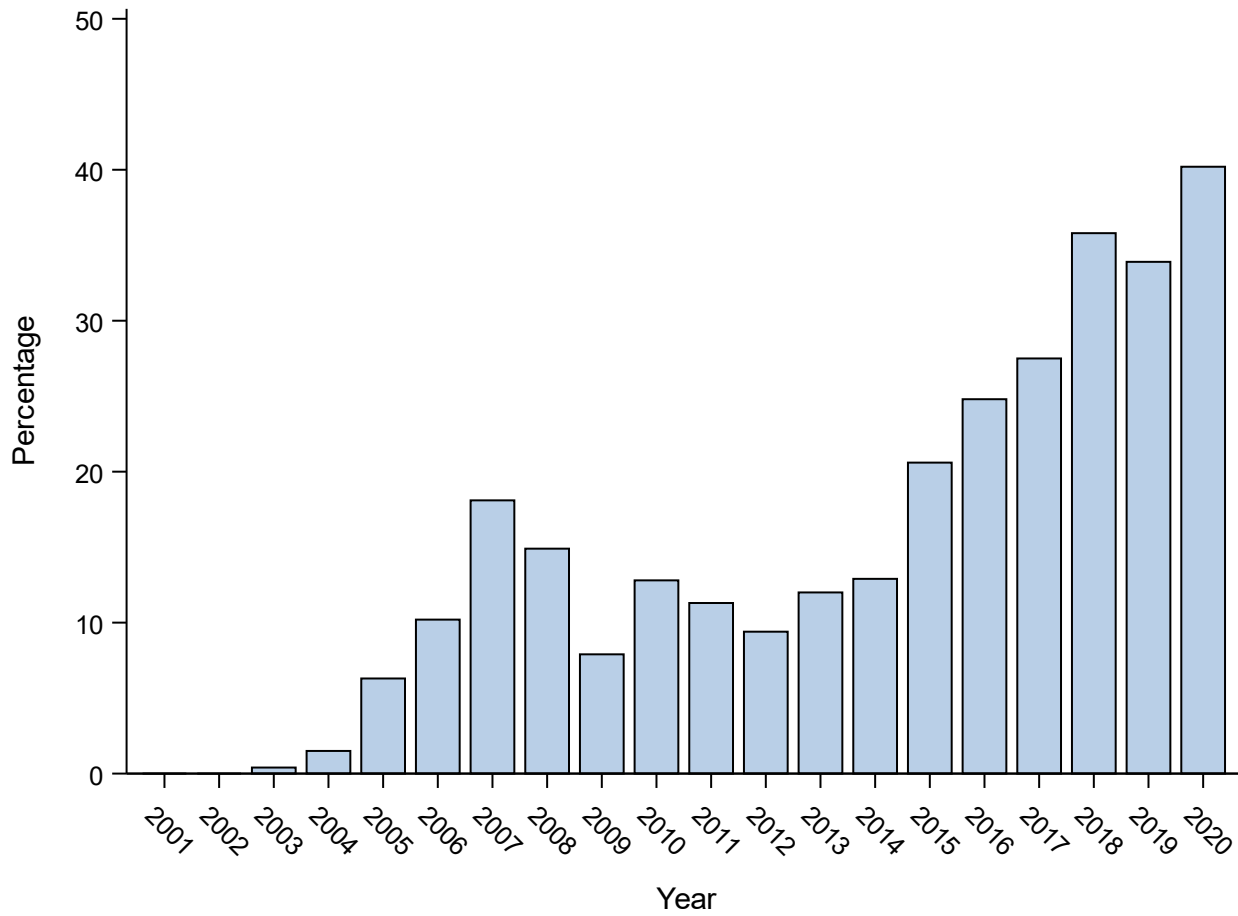


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.8)	0 (0.0)	1 (0.4)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	8 (4.7)	2 (1.5)	4 (2.5)	3 (2.2)	4 (3.3)	5 (4.1)	12 (13.8)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), New Orleans, Louisiana, 2001-2020

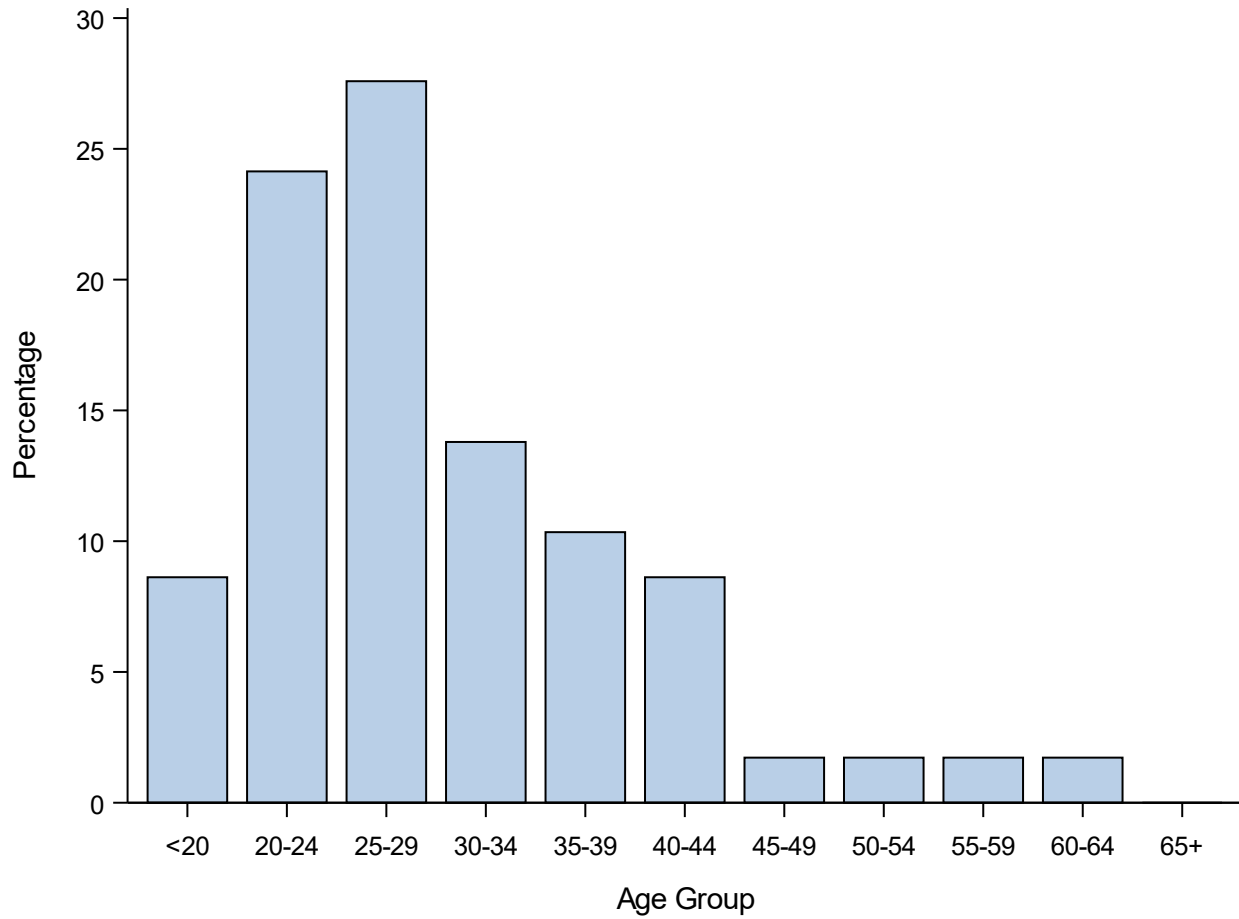


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.4)	3 (1.5)	6 (6.3)	5 (10.2)	45 (18.1)	26 (14.9)	19 (7.9)	31 (12.8)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
28 (11.3)	19 (9.4)	25 (12.0)	22 (12.9)	27 (20.6)	40 (24.8)	38 (27.5)	44 (35.8)	41 (33.9)	35 (40.2)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

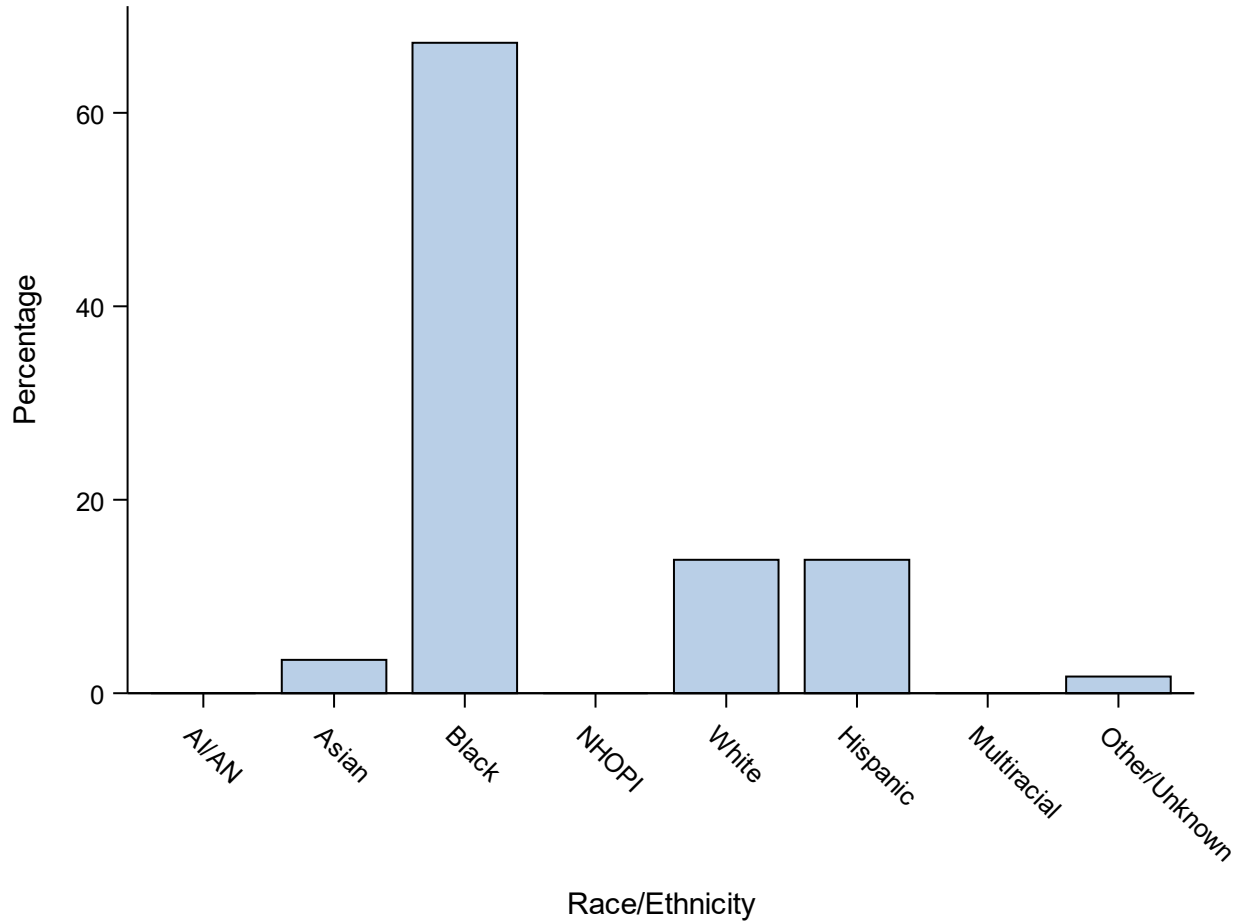
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
5 (8.6)	14 (24.1)	16 (27.6)	8 (13.8)	6 (10.3)	5 (8.6)	1 (1.7)	1 (1.7)	1 (1.7)	1 (1.7)	0 (0.0)	58

Note: Cases with unknown age were excluded.

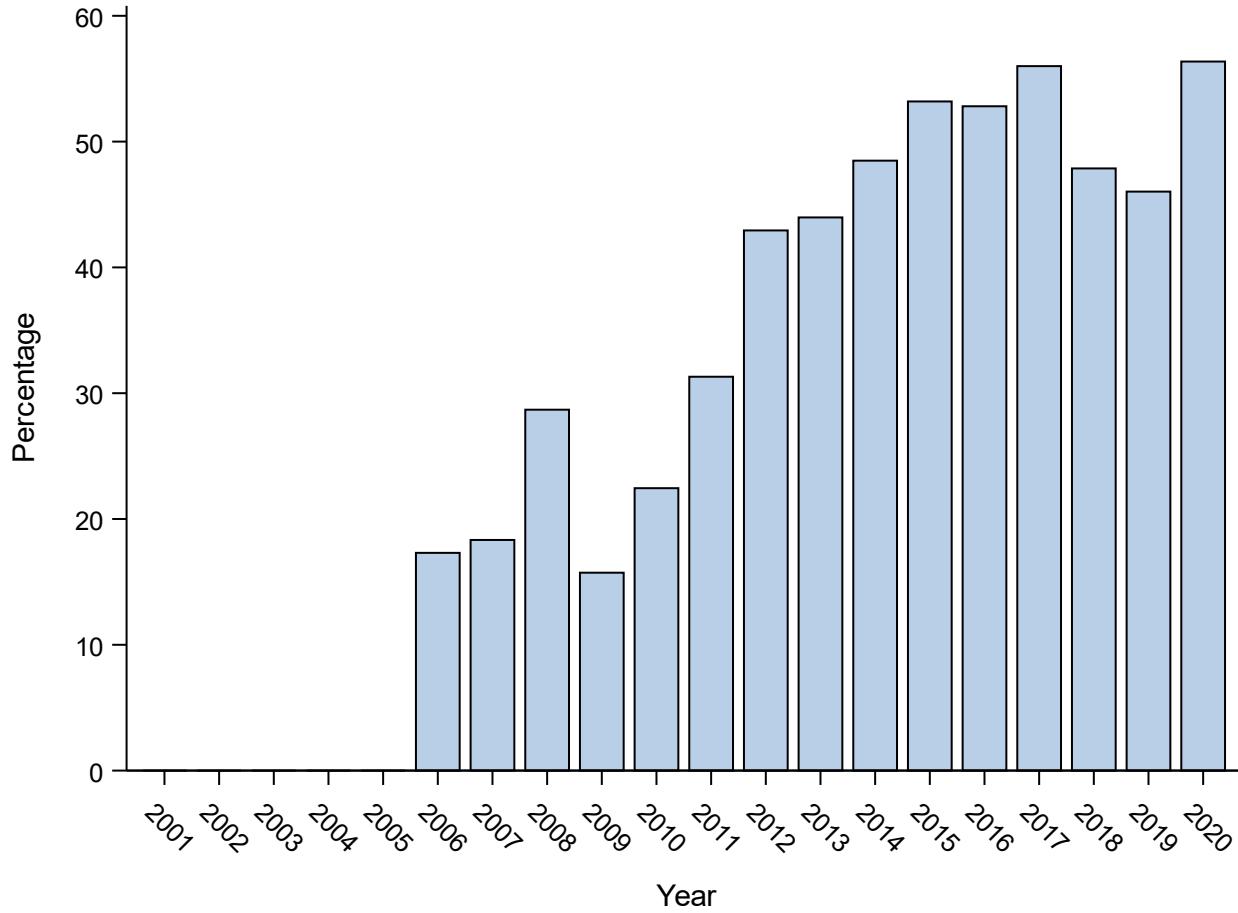
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	2 (3.4)	39 (67.2)	0 (0.0)	8 (13.8)	8 (13.8)	0 (0.0)	1 (1.7)	58

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2001-2020

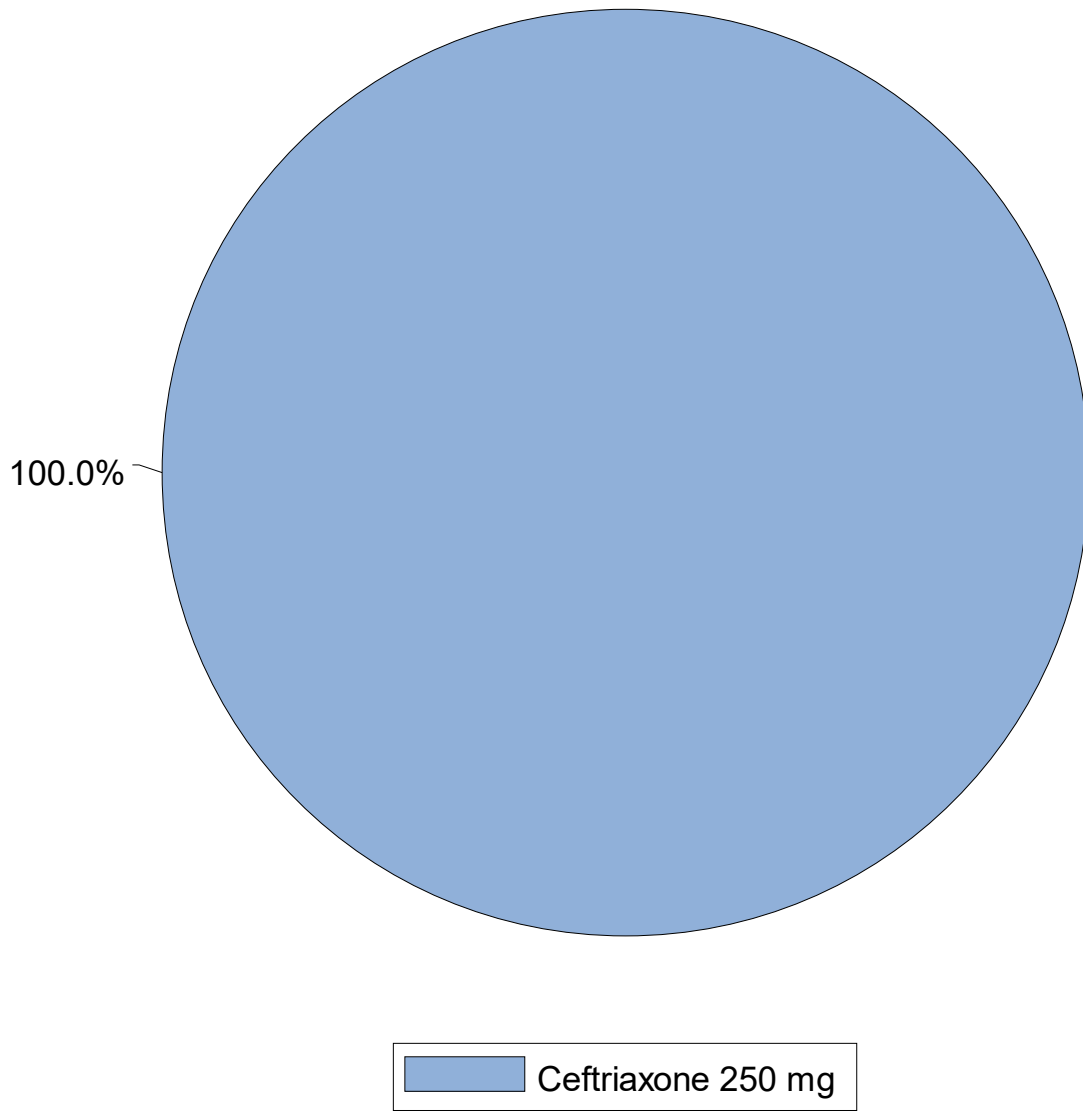


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (17.3)	33 (18.3)	35 (28.7)	28 (15.7)	44 (22.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
67 (31.3)	76 (42.9)	62 (44.0)	64 (48.5)	75 (53.2)	94 (52.8)	112 (56.0)	101 (47.9)	110 (46.0)	31 (56.4)

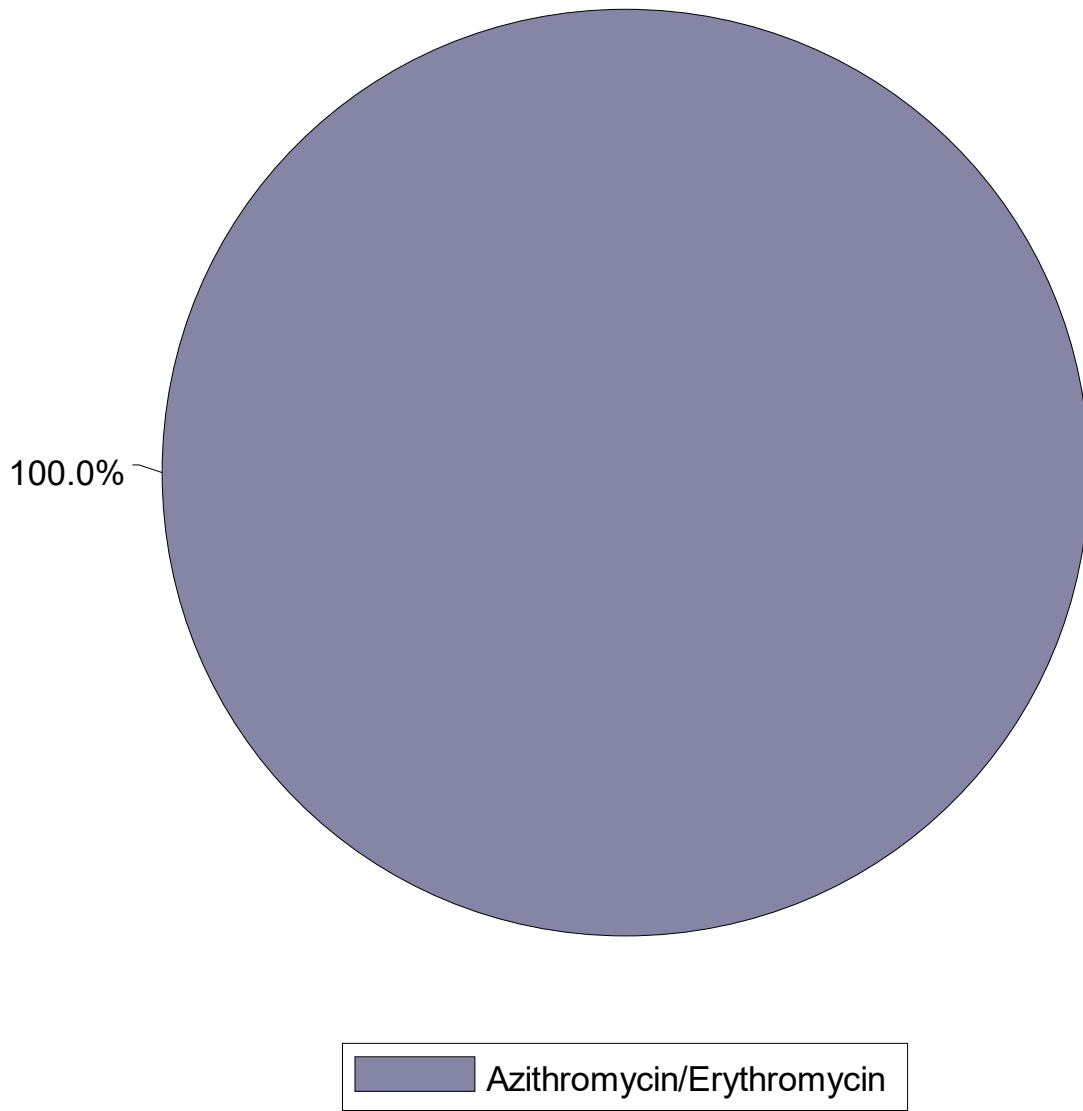
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2006-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2020



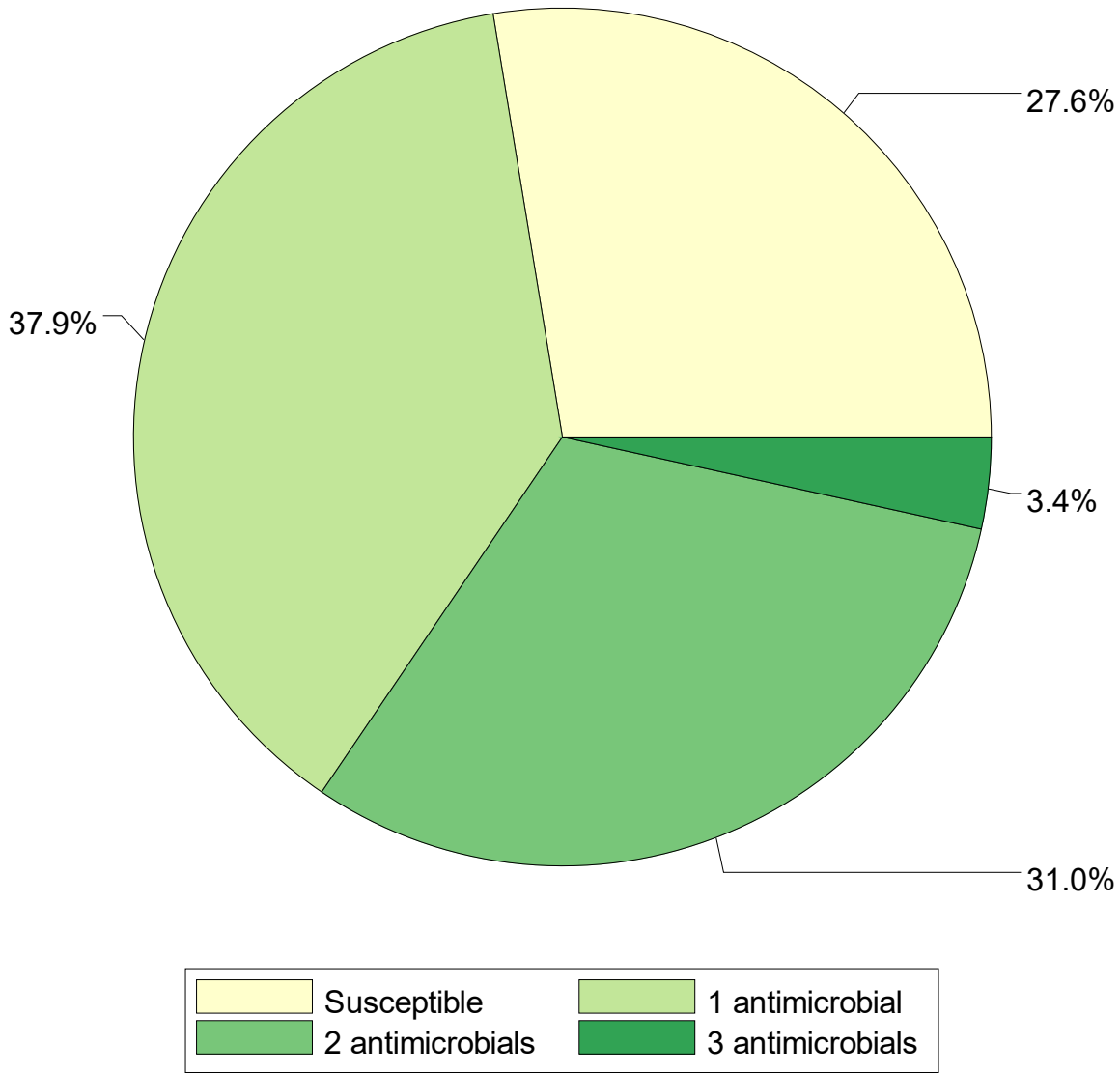
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	58	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	58	100.0

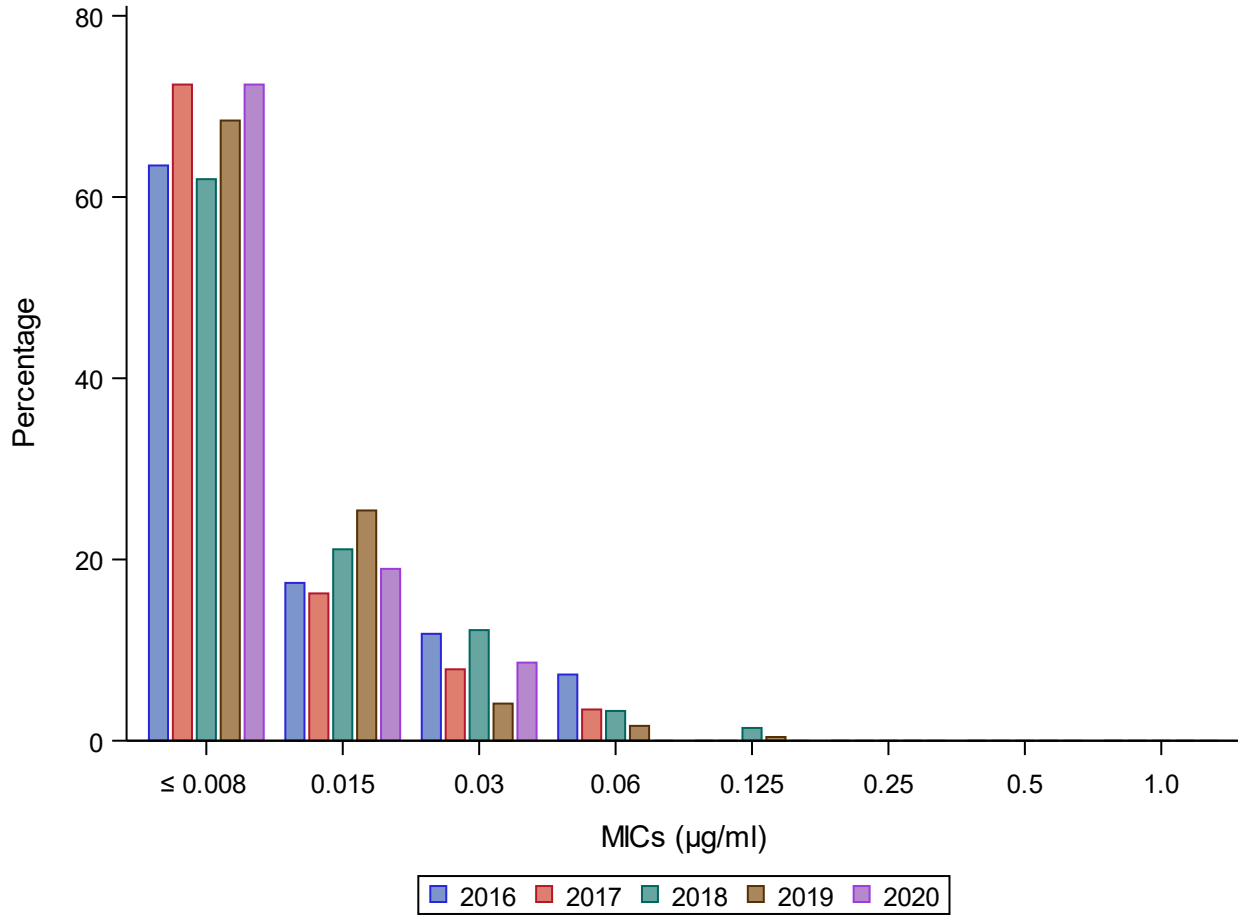
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	16	27.6
1 antimicrobial	22	37.9
2 antimicrobials	18	31.0
3 antimicrobials	2	3.4
4+ antimicrobials	0	0.0

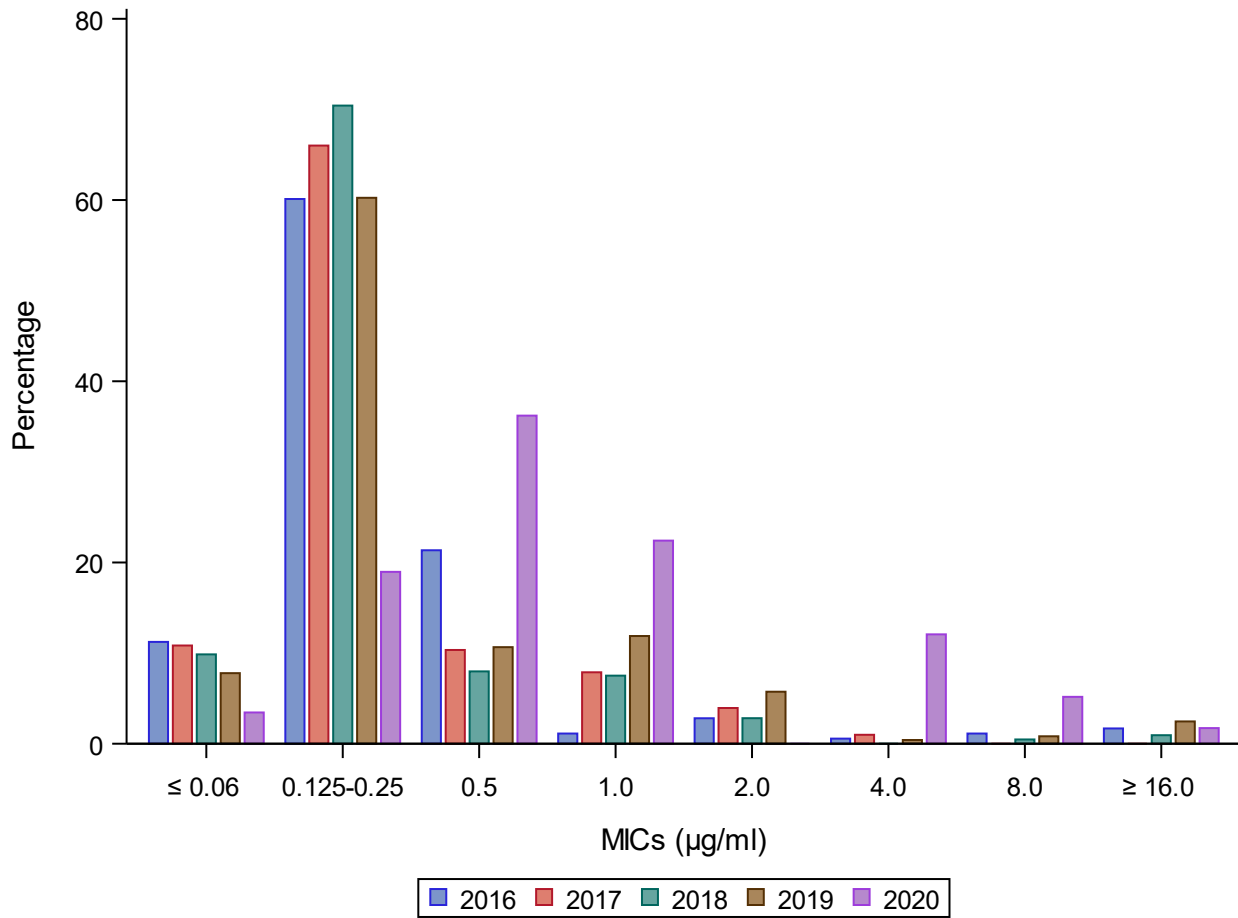
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 µg/mL; Cefixime: MICs ≥ 0.25 µg/mL; Azithromycin: MICs ≥ 2.0 µg/ml; Resistance = Tetracycline: MICs ≥ 2.0 µg/mL; Ciprofloxacin: MICs ≥ 1.0 µg/mL; Penicillin: MICs ≥ 2.0 µg/mL or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2016-2020



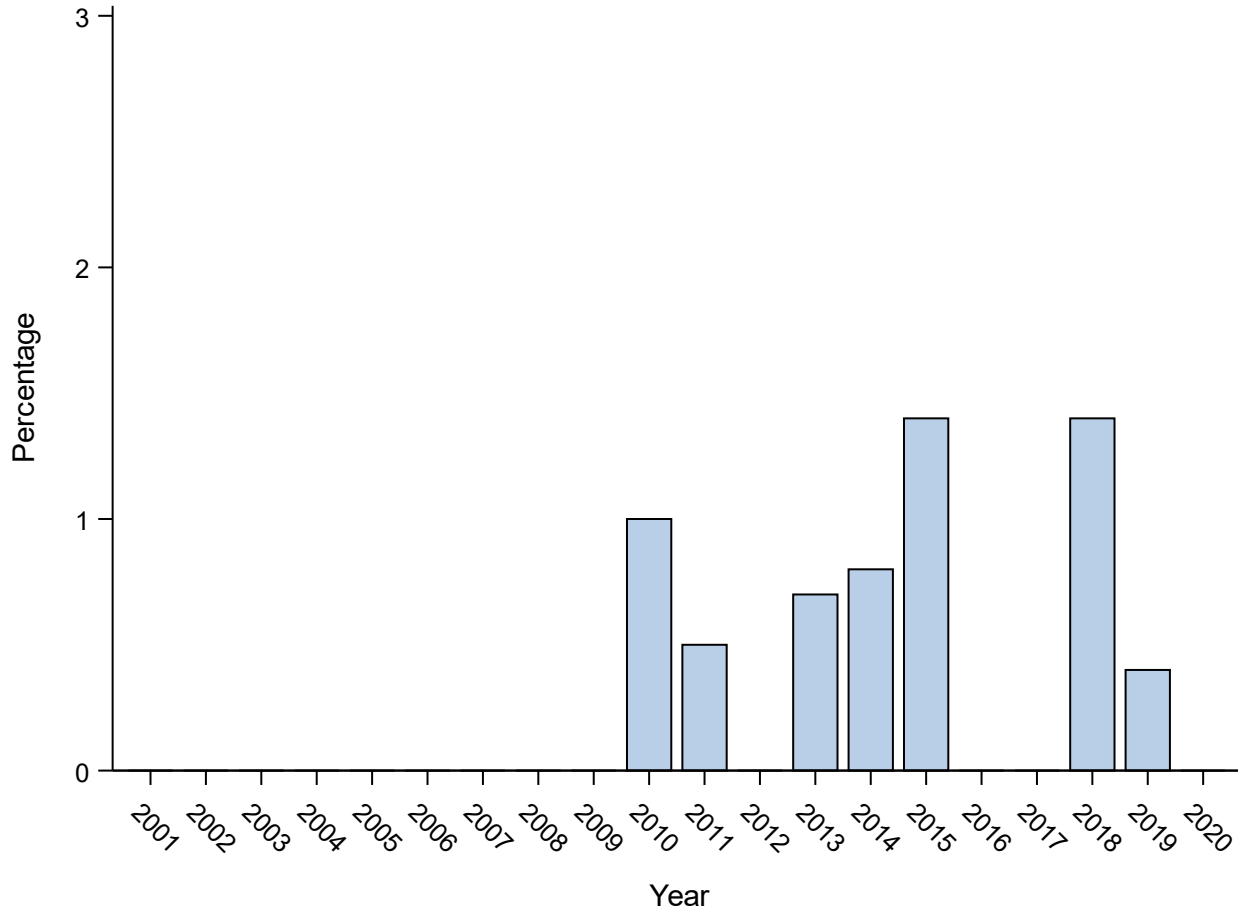
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	113 (63.5)	31 (17.4)	21 (11.8)	13 (7.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	178
2017	147 (72.4)	33 (16.3)	16 (7.9)	7 (3.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	203
2018	132 (62.0)	45 (21.1)	26 (12.2)	7 (3.3)	3 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	213
2019	167 (68.4)	62 (25.4)	10 (4.1)	4 (1.6)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	244
2020	42 (72.4)	11 (19.0)	5 (8.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	58

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2016-2020



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
2016	20 (11.2)	107 (60.1)	38 (21.3)	2 (1.1)	5 (2.8)	1 (0.6)	2 (1.1)	3 (1.7)	178
2017	22 (10.8)	134 (66.0)	21 (10.3)	16 (7.9)	8 (3.9)	2 (1.0)	0 (0.0)	0 (0.0)	203
2018	21 (9.9)	150 (70.4)	17 (8.0)	16 (7.5)	6 (2.8)	0 (0.0)	1 (0.5)	2 (0.9)	213
2019	19 (7.8)	147 (60.2)	26 (10.7)	29 (11.9)	14 (5.7)	1 (0.4)	2 (0.8)	6 (2.5)	244
2020	2 (3.4)	11 (19.0)	21 (36.2)	13 (22.4)	0 (0.0)	7 (12.1)	3 (5.2)	1 (1.7)	58

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2001-2020

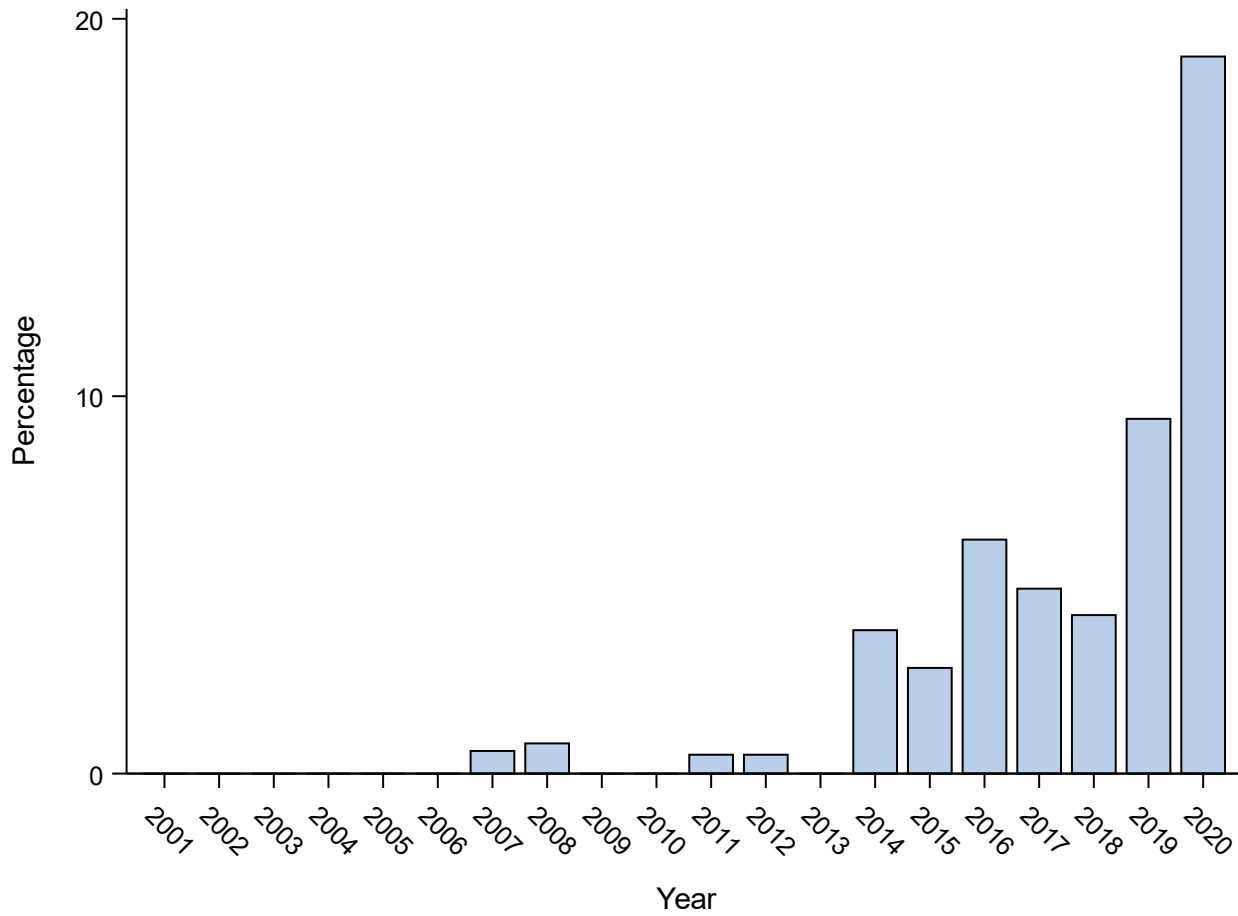


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	0 (0.0)	1 (0.7)	1 (0.8)	2 (1.4)	0 (0.0)	0 (0.0)	3 (1.4)	1 (0.4)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2006-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2001-2020

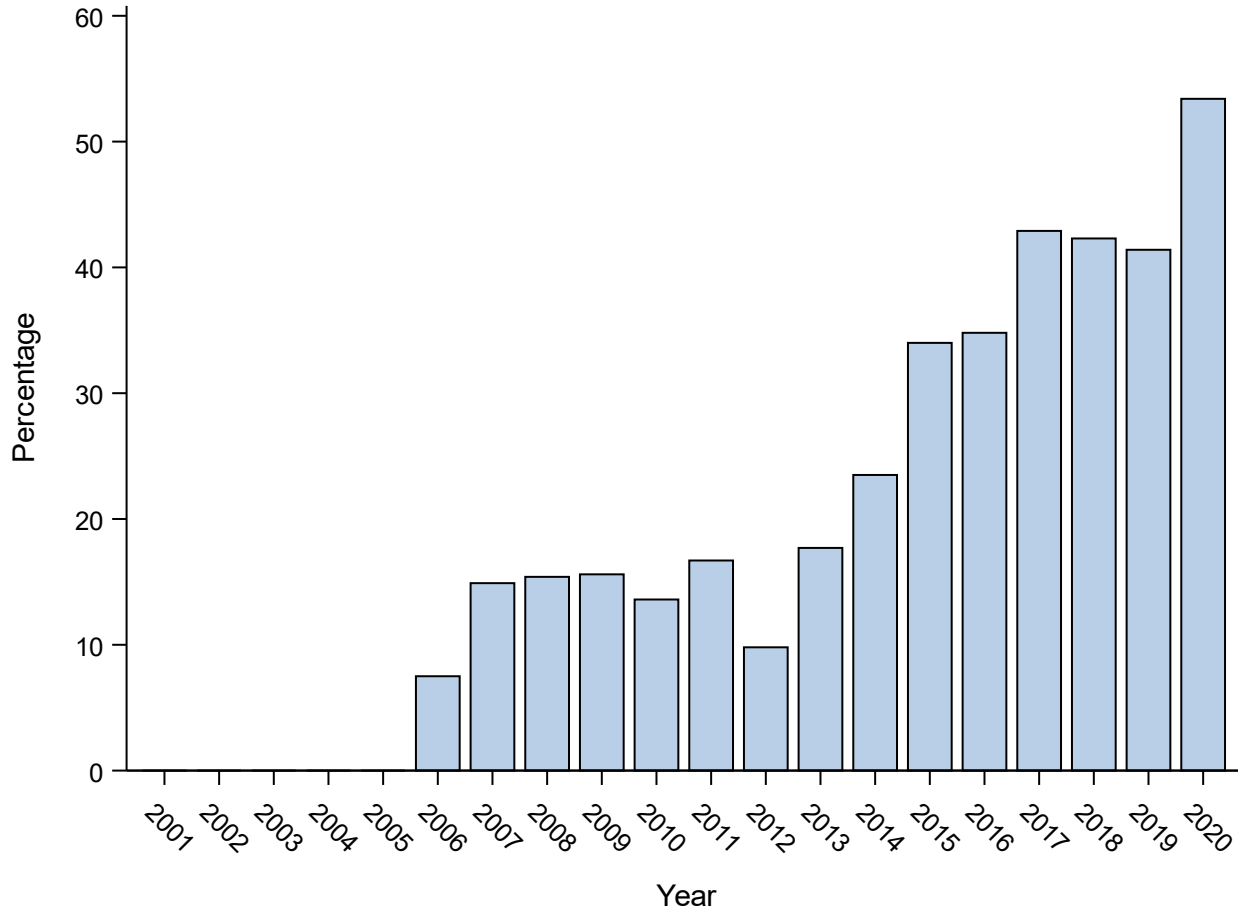


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	1 (0.8)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	1 (0.5)	0 (0.0)	5 (3.8)	4 (2.8)	11 (6.2)	10 (4.9)	9 (4.2)	23 (9.4)	11 (19.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2006-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), New York City, New York, 2001-2020

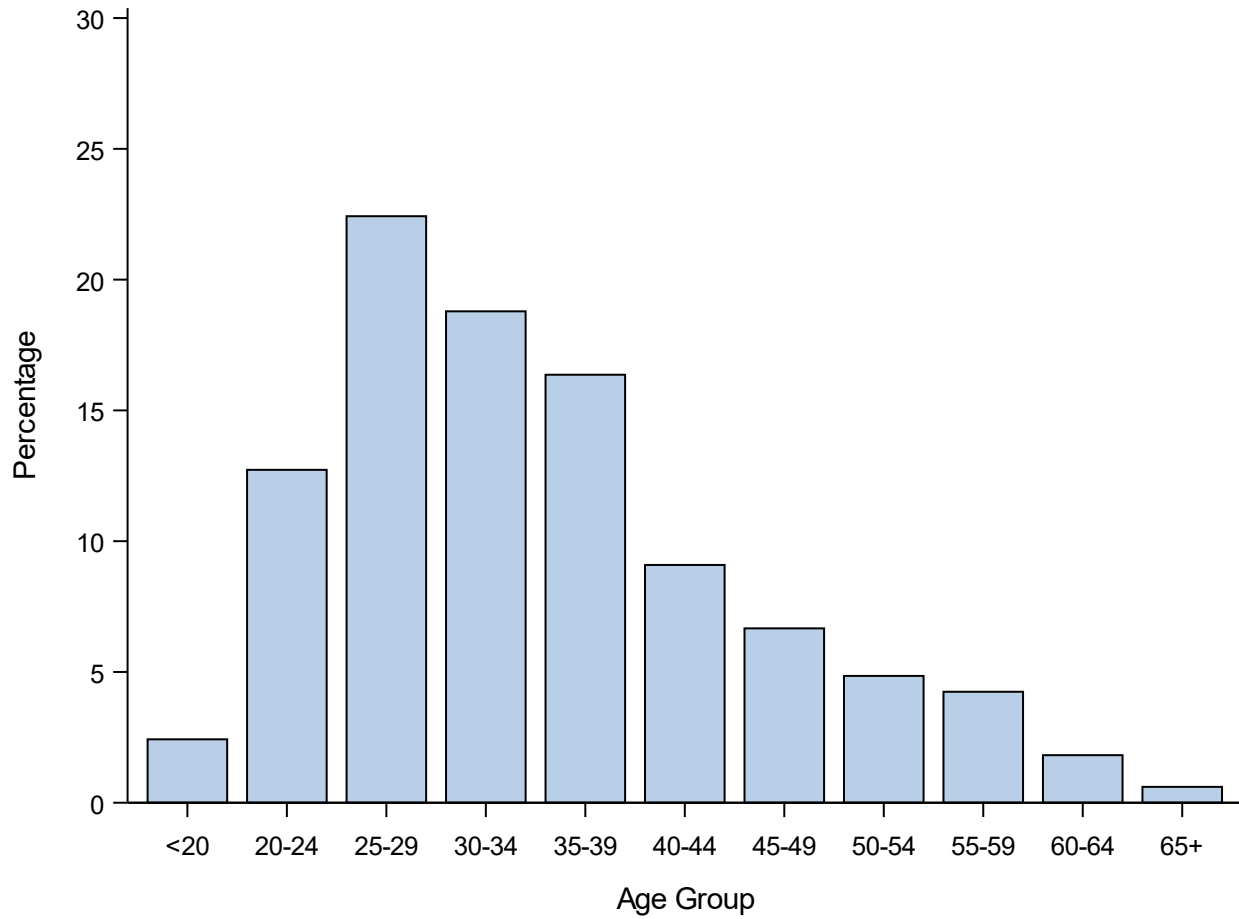


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (7.5)	27 (14.9)	19 (15.4)	28 (15.6)	27 (13.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
36 (16.7)	18 (9.8)	25 (17.7)	31 (23.5)	48 (34.0)	62 (34.8)	87 (42.9)	90 (42.3)	101 (41.4)	31 (53.4)

Note: Ciprofloxacin resistance MICs $\geq 1.0 \mu\text{g/ml}$. Site participated in GISP during 2006-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

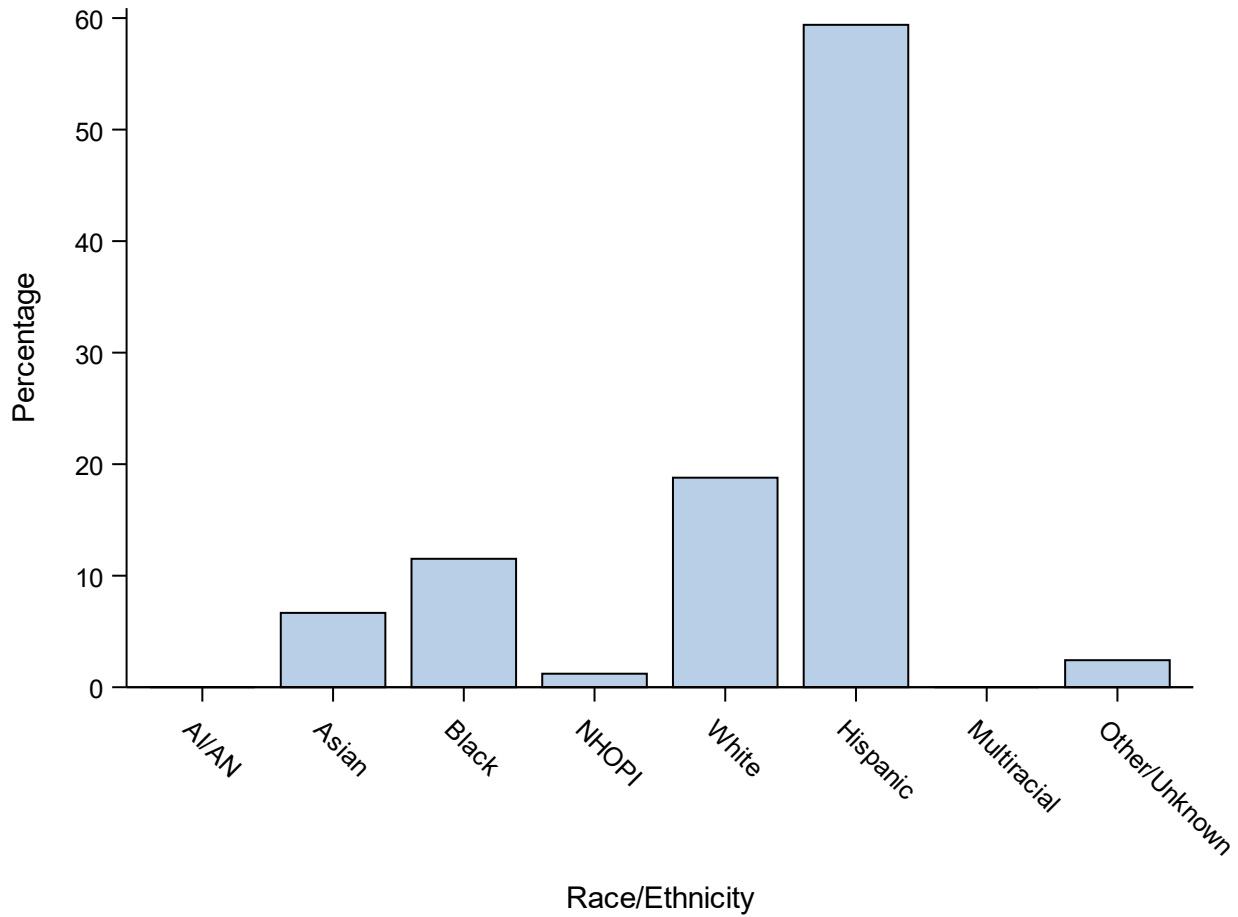
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
4 (2.4)	21 (12.7)	37 (22.4)	31 (18.8)	27 (16.4)	15 (9.1)	11 (6.7)	8 (4.8)	7 (4.2)	3 (1.8)	1 (0.6)	165

Note: Cases with unknown age were excluded.

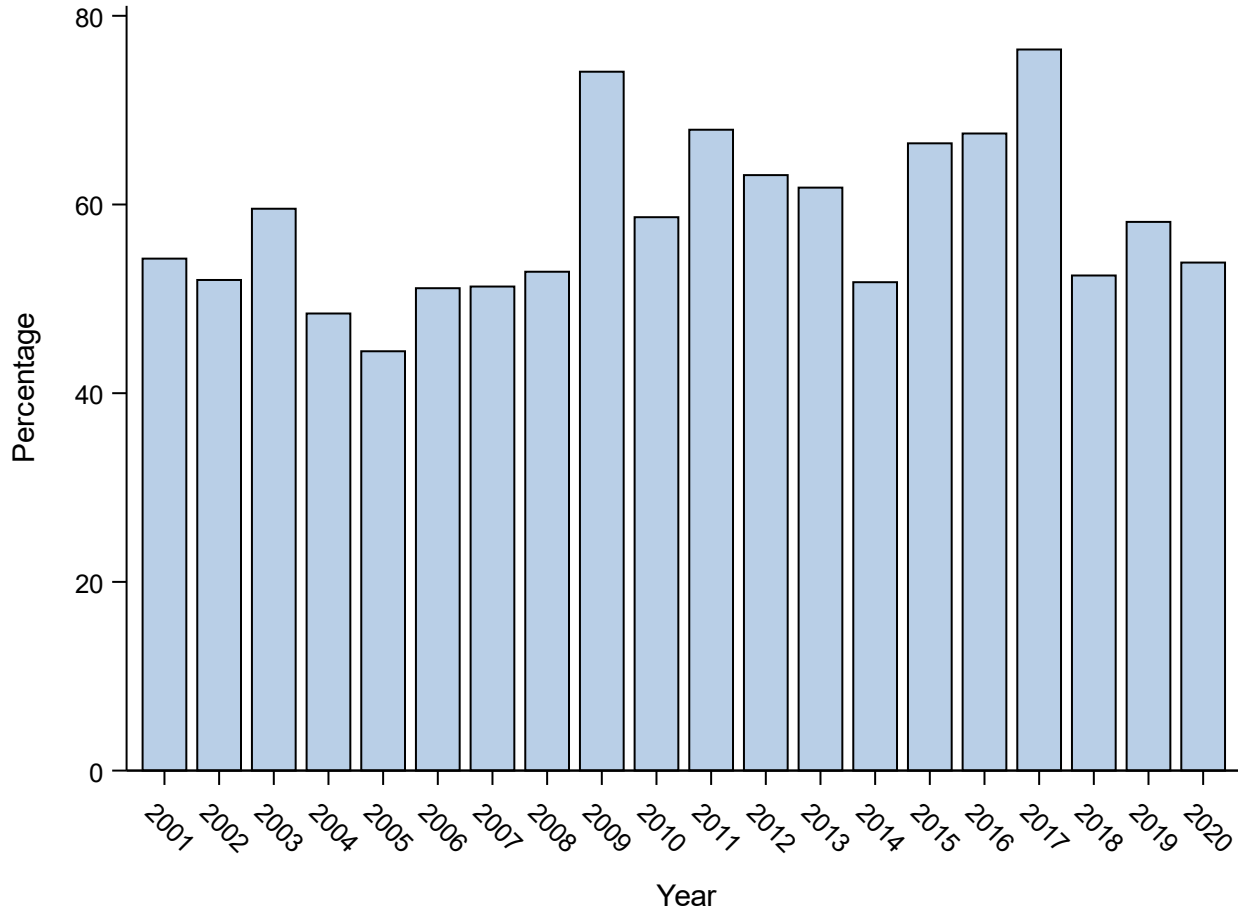
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	11 (6.7)	19 (11.5)	2 (1.2)	31 (18.8)	98 (59.4)	0 (0.0)	4 (2.4)	165

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2001-2020

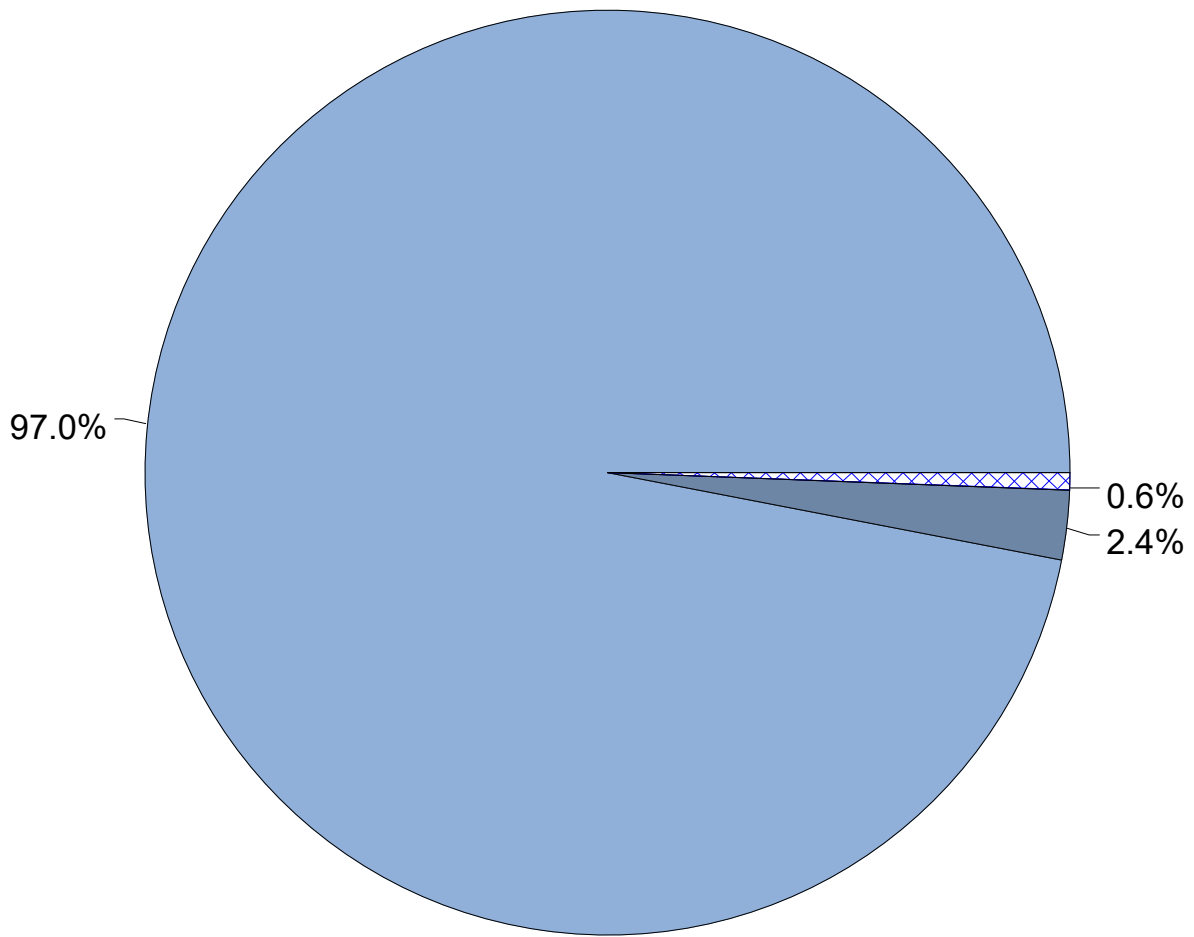


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
70 (54.3)	91 (52.0)	106 (59.6)	78 (48.4)	52 (44.4)	68 (51.1)	59 (51.3)	46 (52.9)	60 (74.1)	61 (58.7)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
72 (67.9)	77 (63.1)	76 (61.8)	88 (51.8)	121 (66.5)	131 (67.5)	107 (76.4)	53 (52.5)	82 (58.2)	84 (53.8)

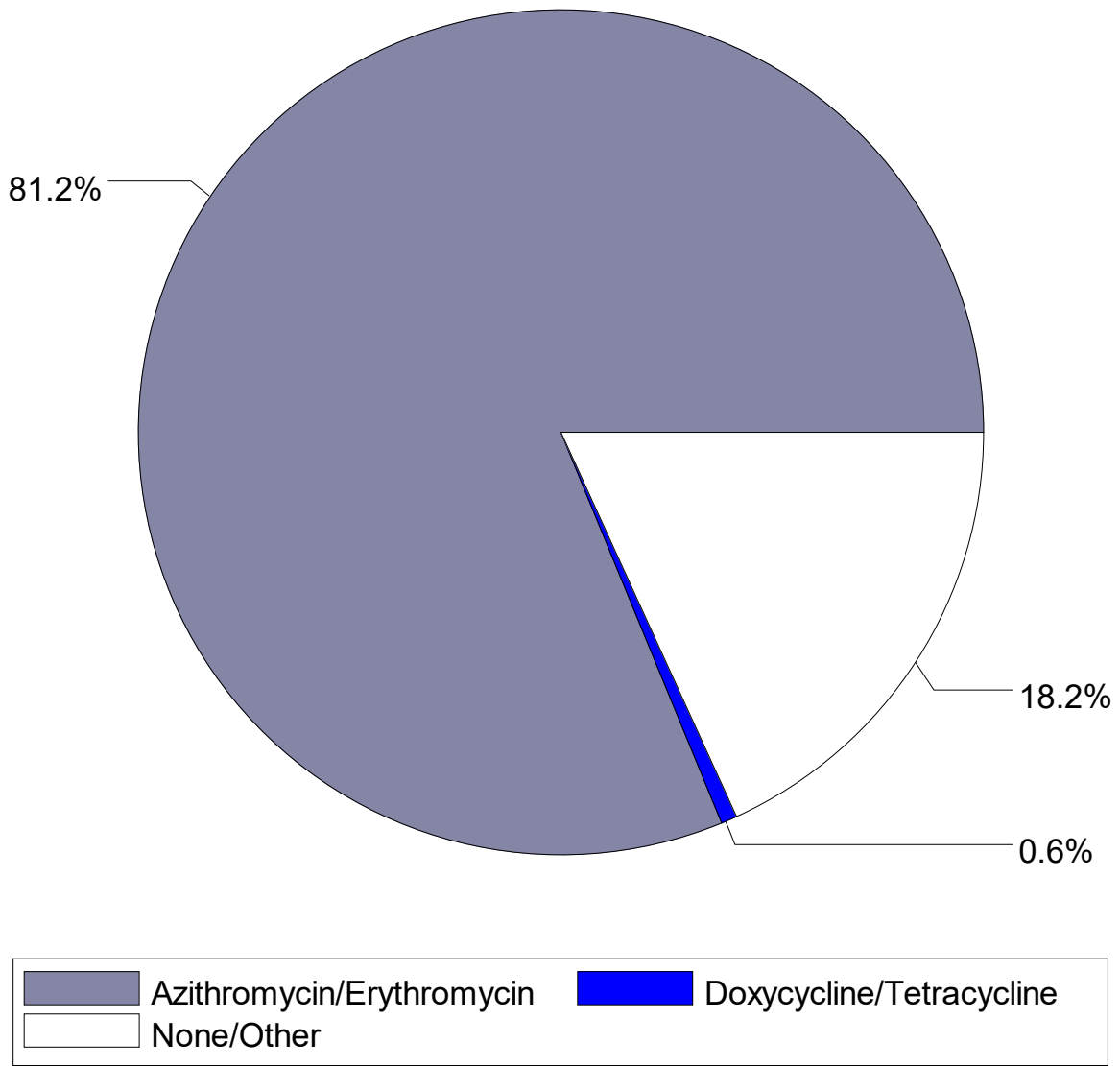
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2020



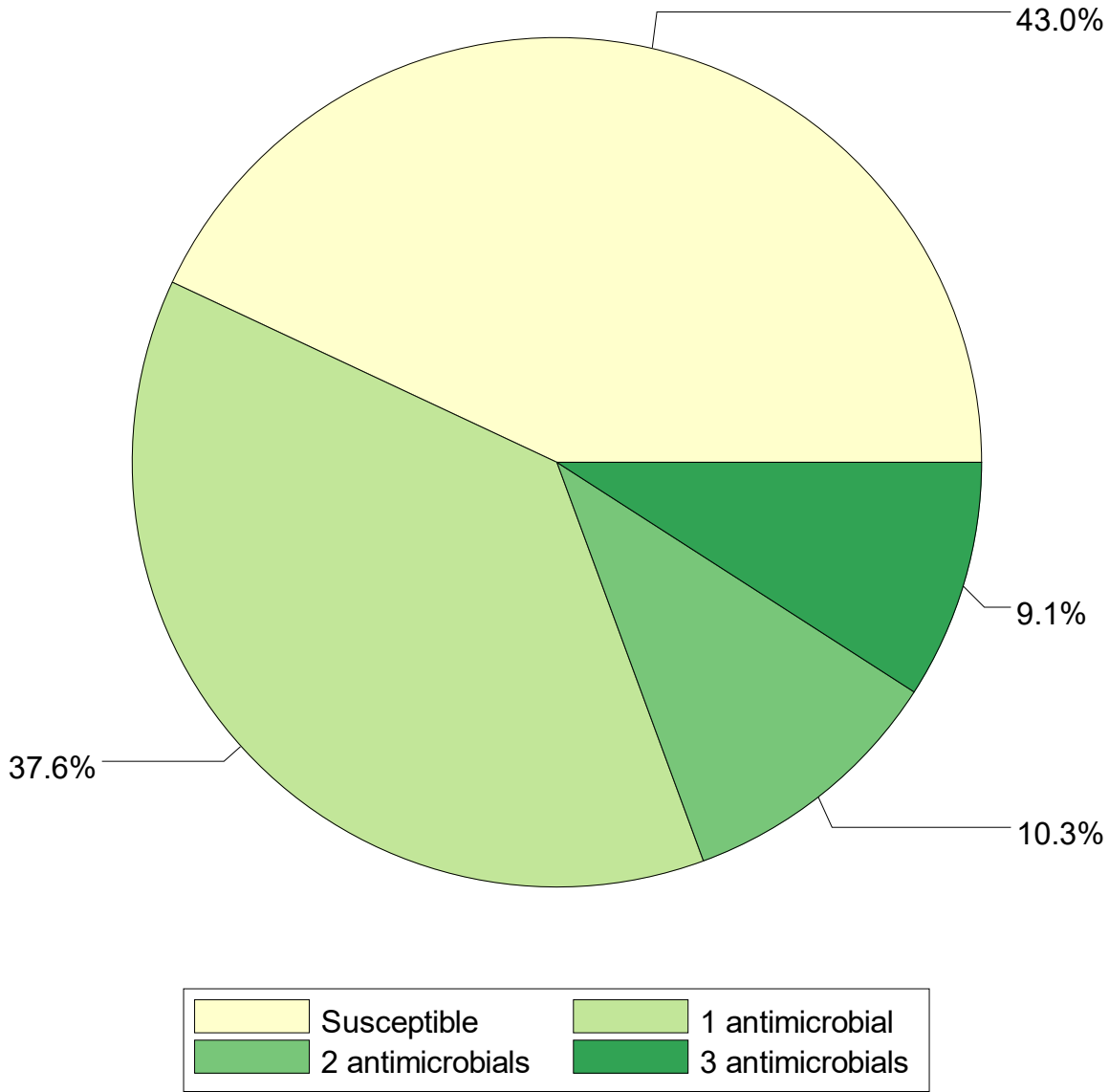
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	160	97.0
Gentamicin	4	2.4
Other	1	0.6

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	134	81.2
Doxycycline/Tetracycline	1	0.6
None/Other	30	18.2

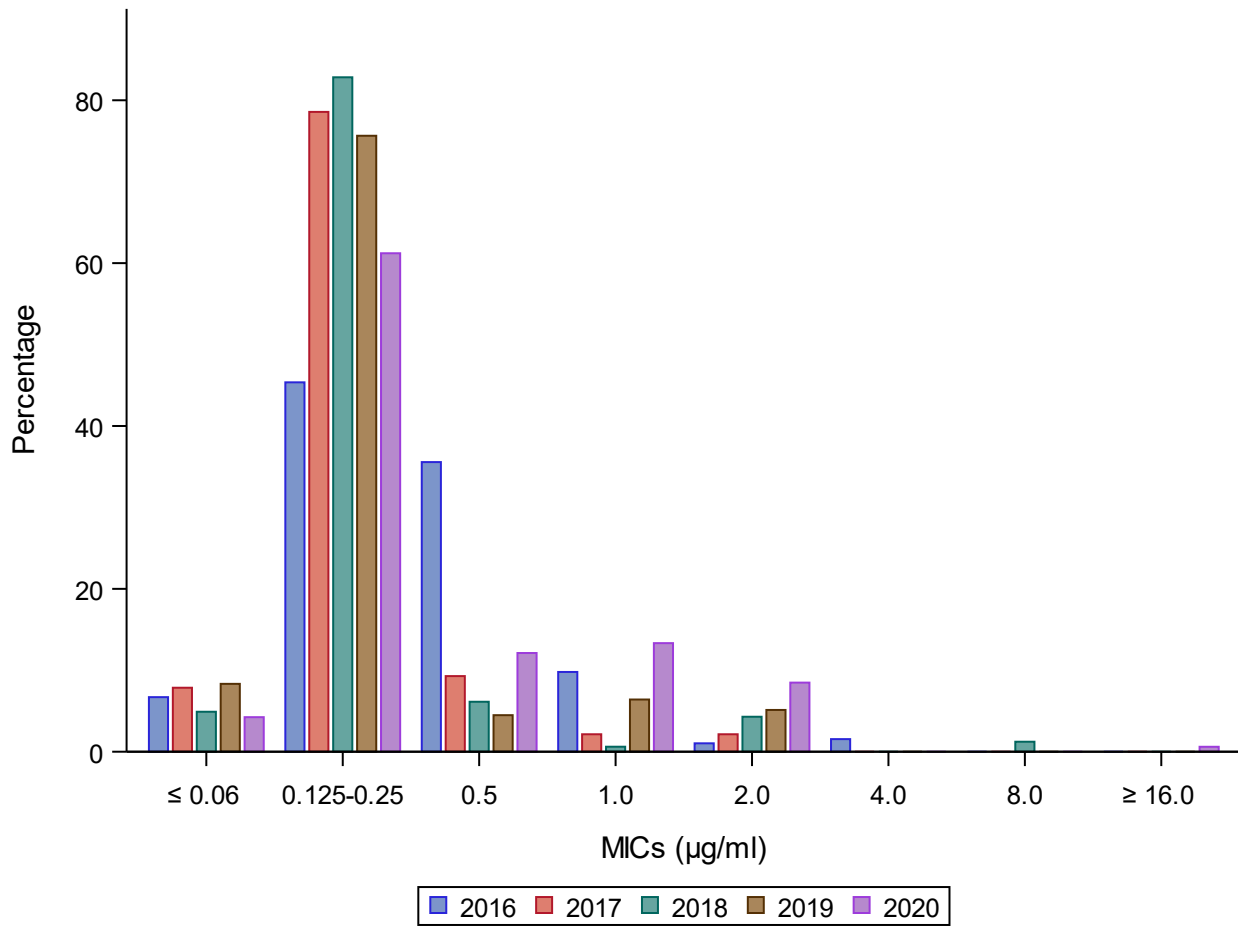
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	71	43.0
1 antimicrobial	62	37.6
2 antimicrobials	17	10.3
3 antimicrobials	15	9.1
4+ antimicrobials	0	0.0

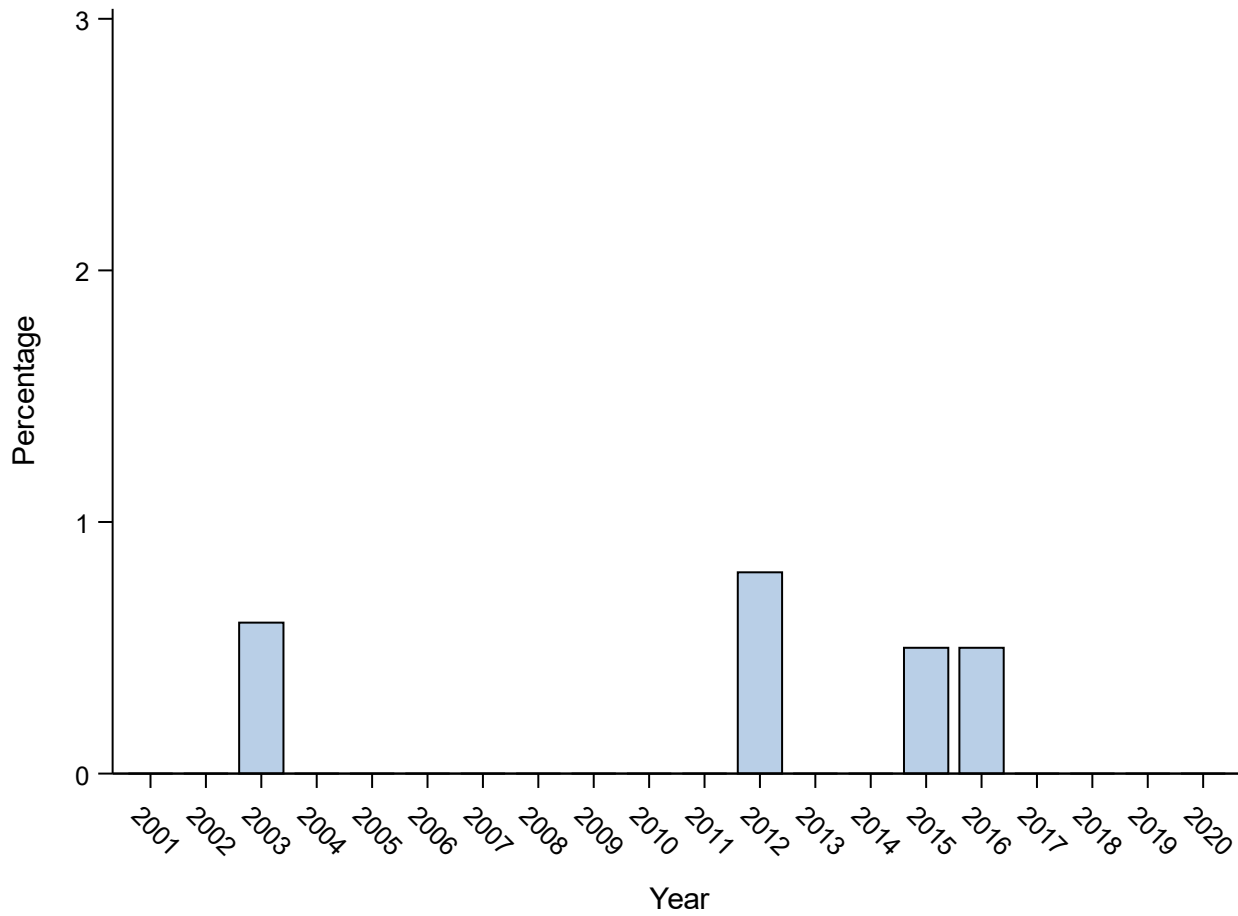
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2016-2020



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
2016	13 (6.7)	88 (45.4)	69 (35.6)	19 (9.8)	2 (1.0)	3 (1.5)	0 (0.0)	0 (0.0)	194
2017	11 (7.9)	110 (78.6)	13 (9.3)	3 (2.1)	3 (2.1)	0 (0.0)	0 (0.0)	0 (0.0)	140
2018	8 (4.9)	135 (82.8)	10 (6.1)	1 (0.6)	7 (4.3)	0 (0.0)	2 (1.2)	0 (0.0)	163
2019	13 (8.3)	118 (75.6)	7 (4.5)	10 (6.4)	8 (5.1)	0 (0.0)	0 (0.0)	0 (0.0)	156
2020	7 (4.2)	101 (61.2)	20 (12.1)	22 (13.3)	14 (8.5)	0 (0.0)	0 (0.0)	1 (0.6)	165

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2001-2020

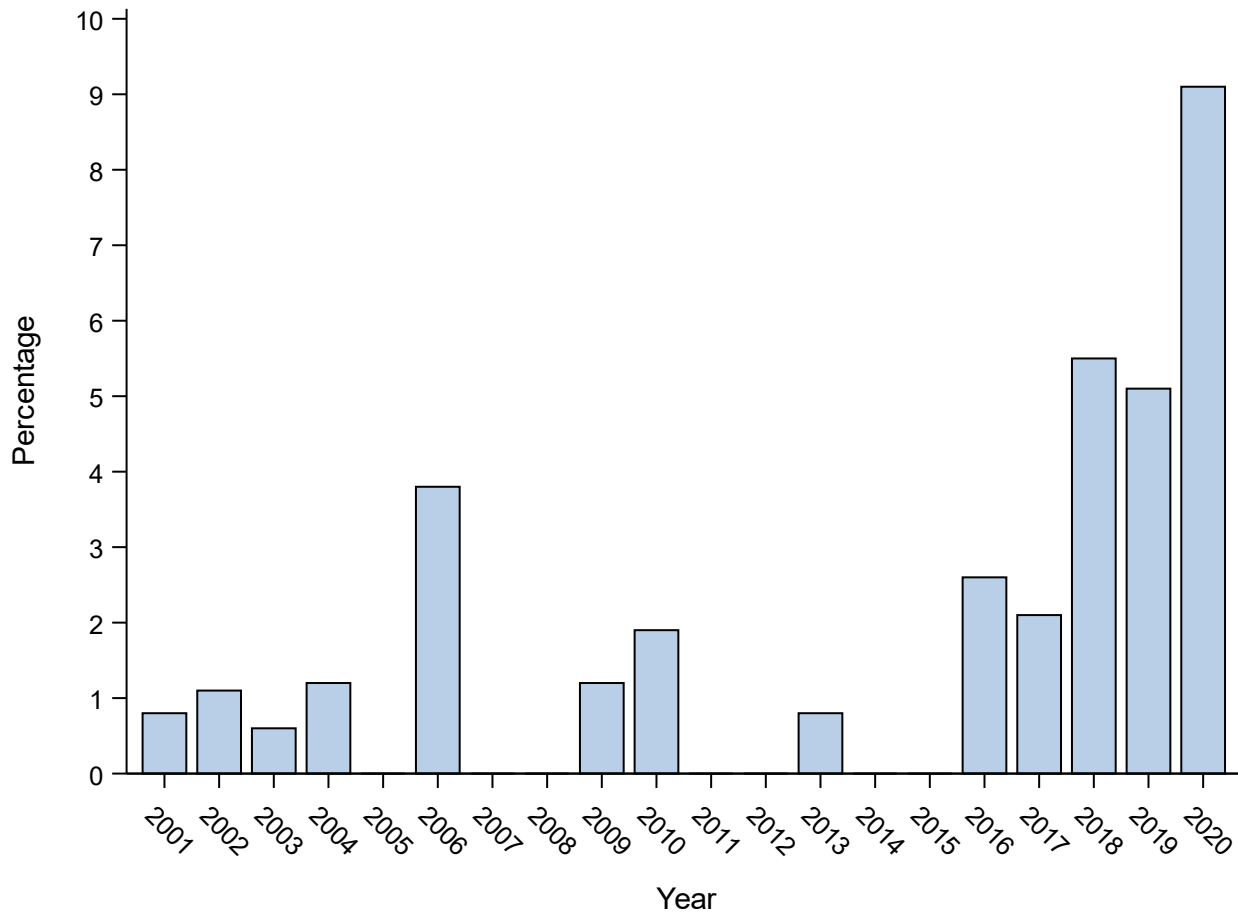


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	1 (0.5)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2001-2020

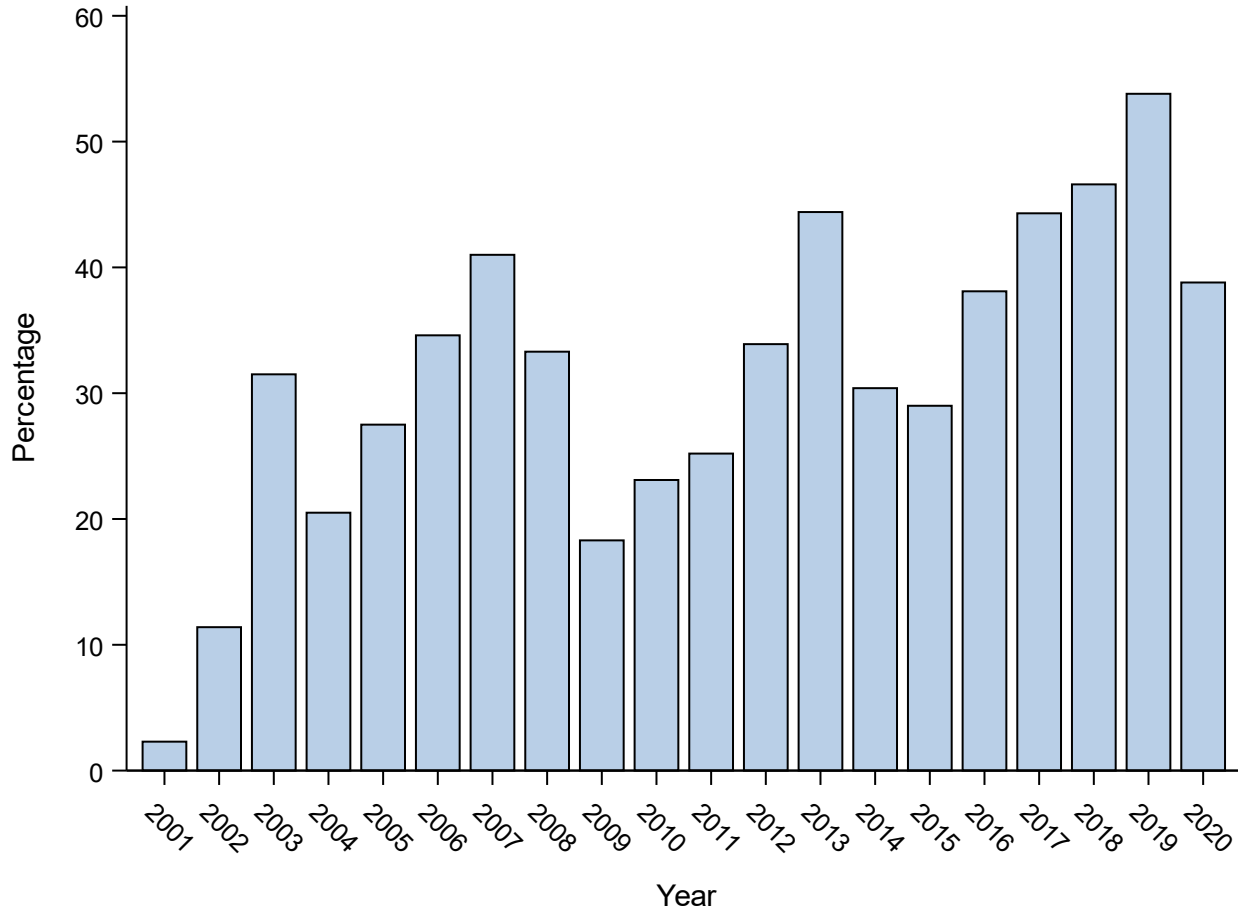


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.8)	2 (1.1)	1 (0.6)	2 (1.2)	0 (0.0)	5 (3.8)	0 (0.0)	0 (0.0)	1 (1.2)	2 (1.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	5 (2.6)	3 (2.1)	9 (5.5)	8 (5.1)	15 (9.1)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Orange County, California, 2001-2020

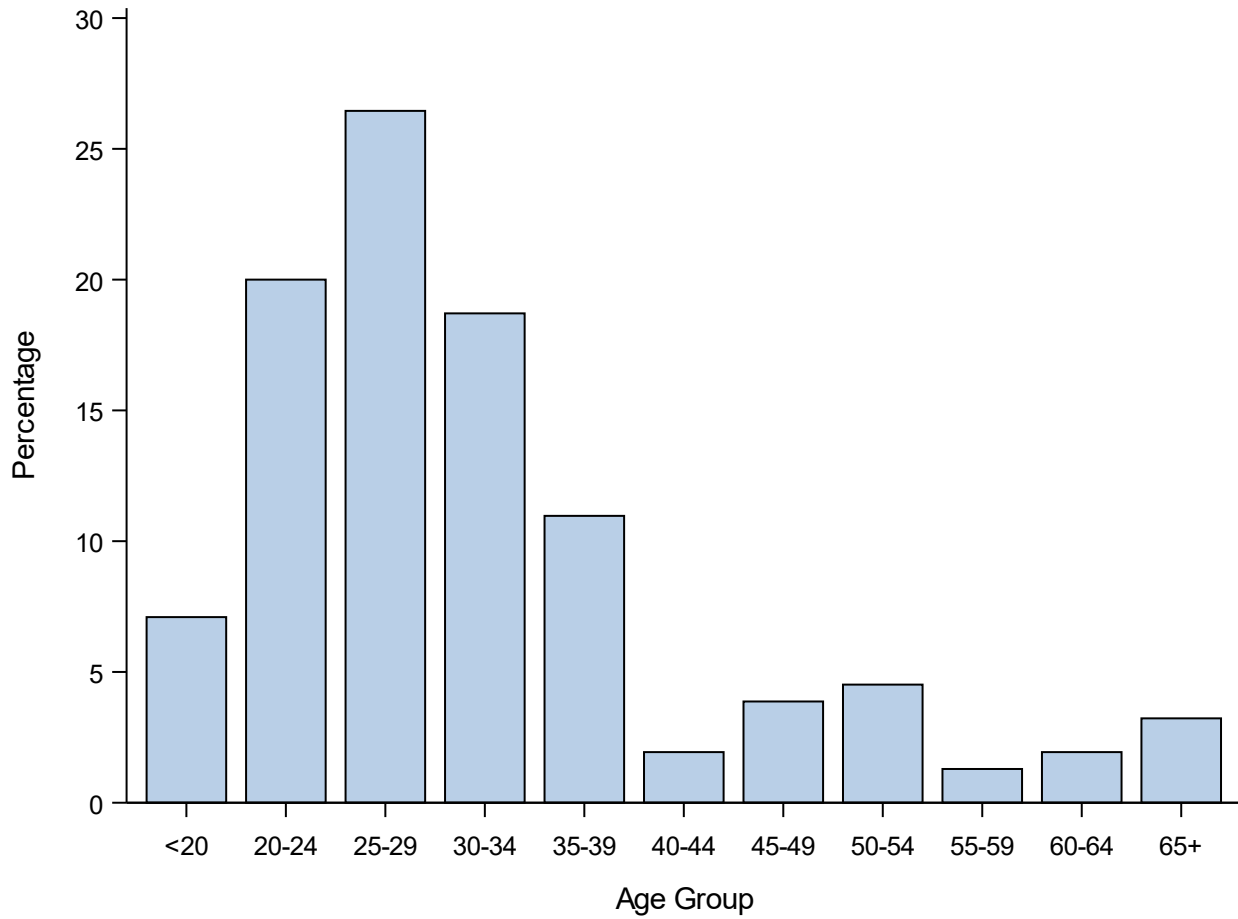


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
3 (2.3)	20 (11.4)	56 (31.5)	33 (20.5)	33 (27.5)	46 (34.6)	48 (41.0)	29 (33.3)	15 (18.3)	24 (23.1)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
27 (25.2)	42 (33.9)	55 (44.4)	52 (30.4)	53 (29.0)	74 (38.1)	62 (44.3)	76 (46.6)	84 (53.8)	64 (38.8)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

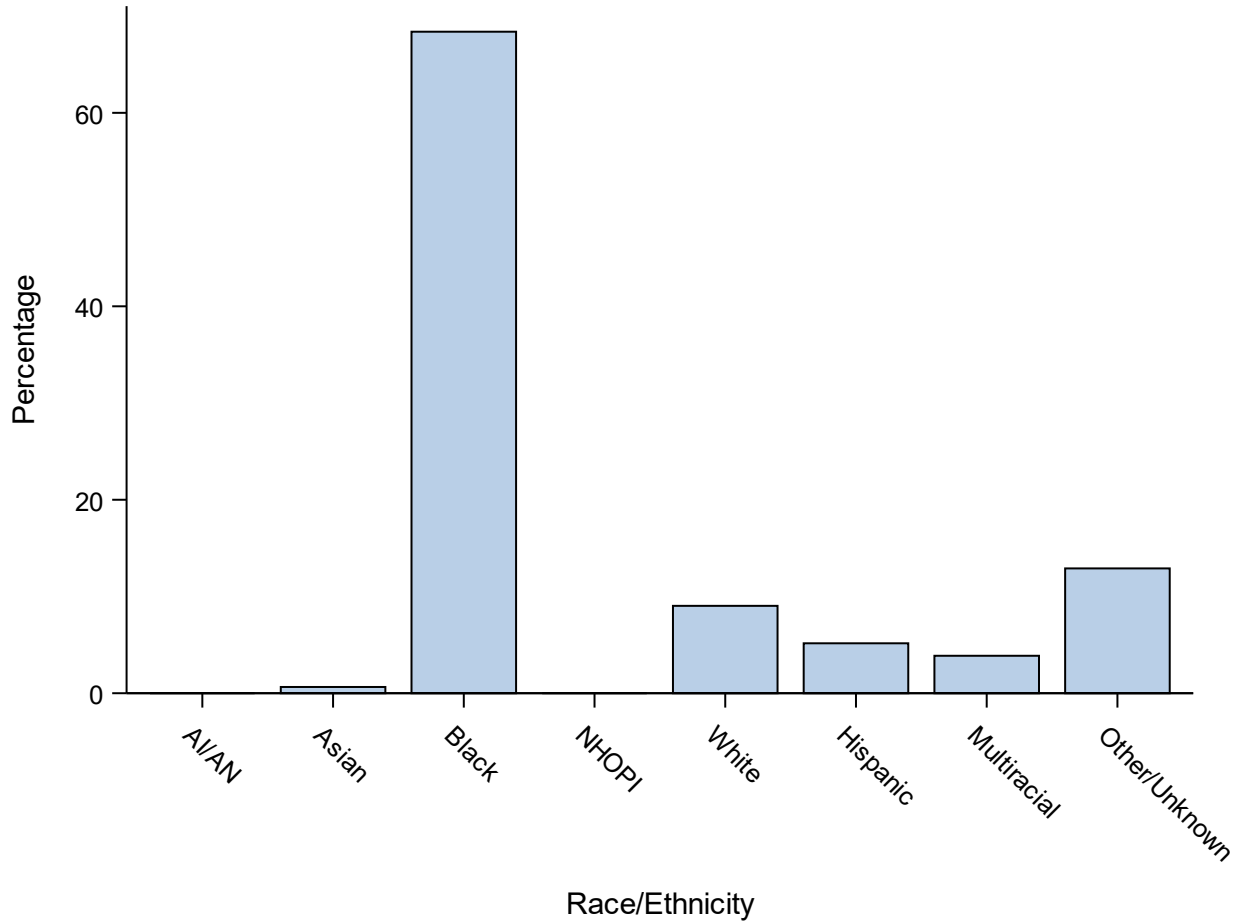
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
11 (7.1)	31 (20.0)	41 (26.5)	29 (18.7)	17 (11.0)	3 (1.9)	6 (3.9)	7 (4.5)	2 (1.3)	3 (1.9)	5 (3.2)	155

Note: Cases with unknown age were excluded.

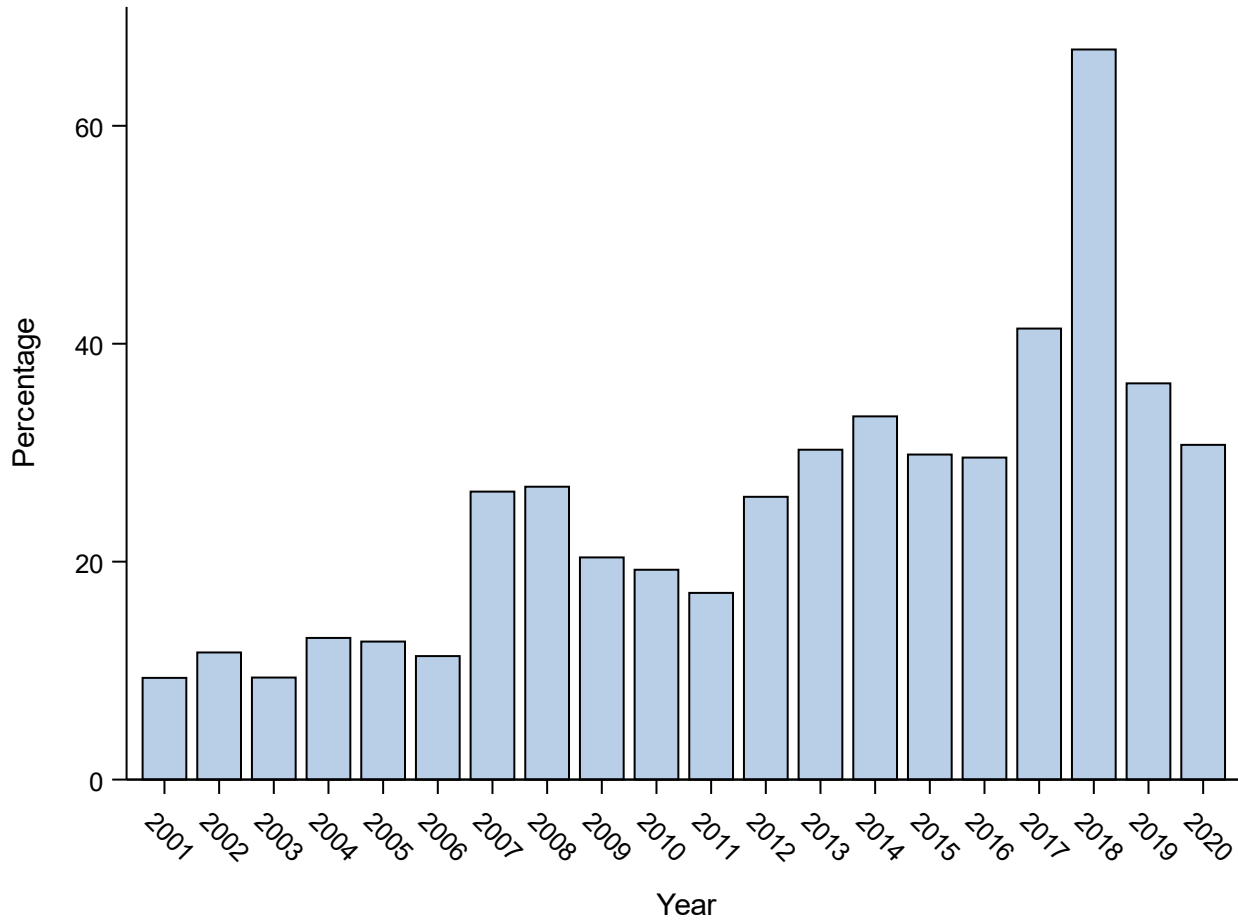
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	1 (0.6)	106 (68.4)	0 (0.0)	14 (9.0)	8 (5.2)	6 (3.9)	20 (12.9)	155

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2001-2020

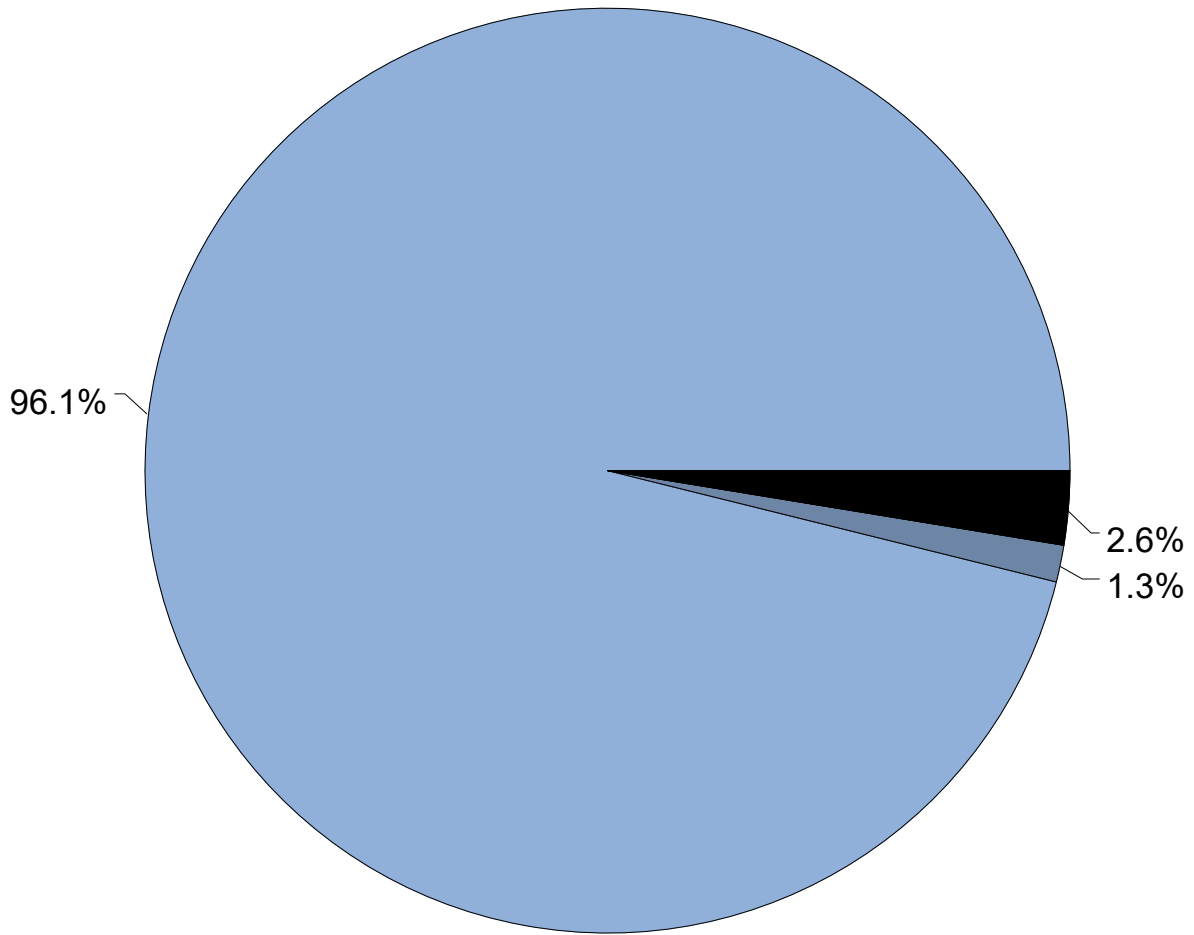


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
28 (9.3)	35 (11.7)	28 (9.4)	39 (13.0)	38 (12.7)	34 (11.3)	74 (26.4)	68 (26.9)	42 (20.4)	57 (19.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
49 (17.1)	75 (26.0)	89 (30.3)	99 (33.3)	88 (29.8)	86 (29.6)	113 (41.4)	199 (67.0)	108 (36.4)	47 (30.7)

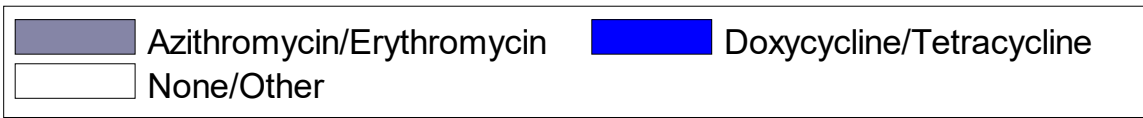
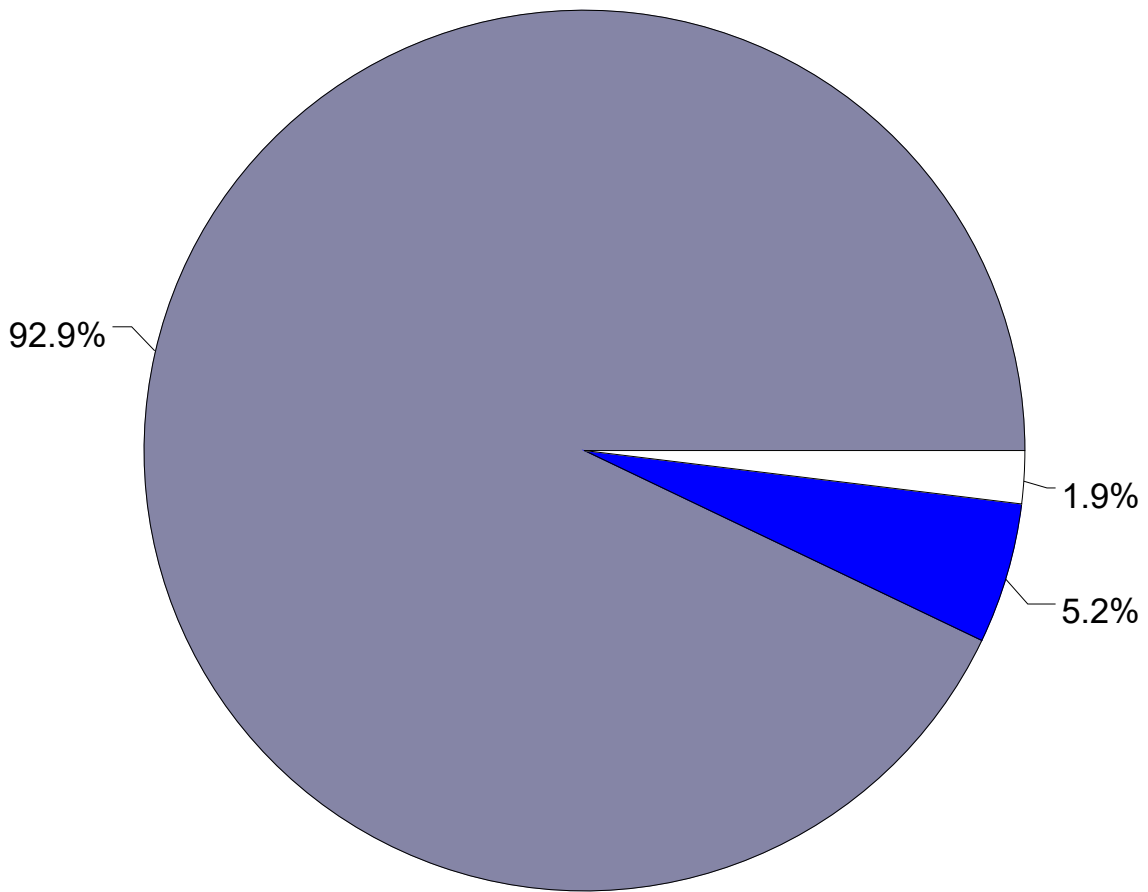
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2020



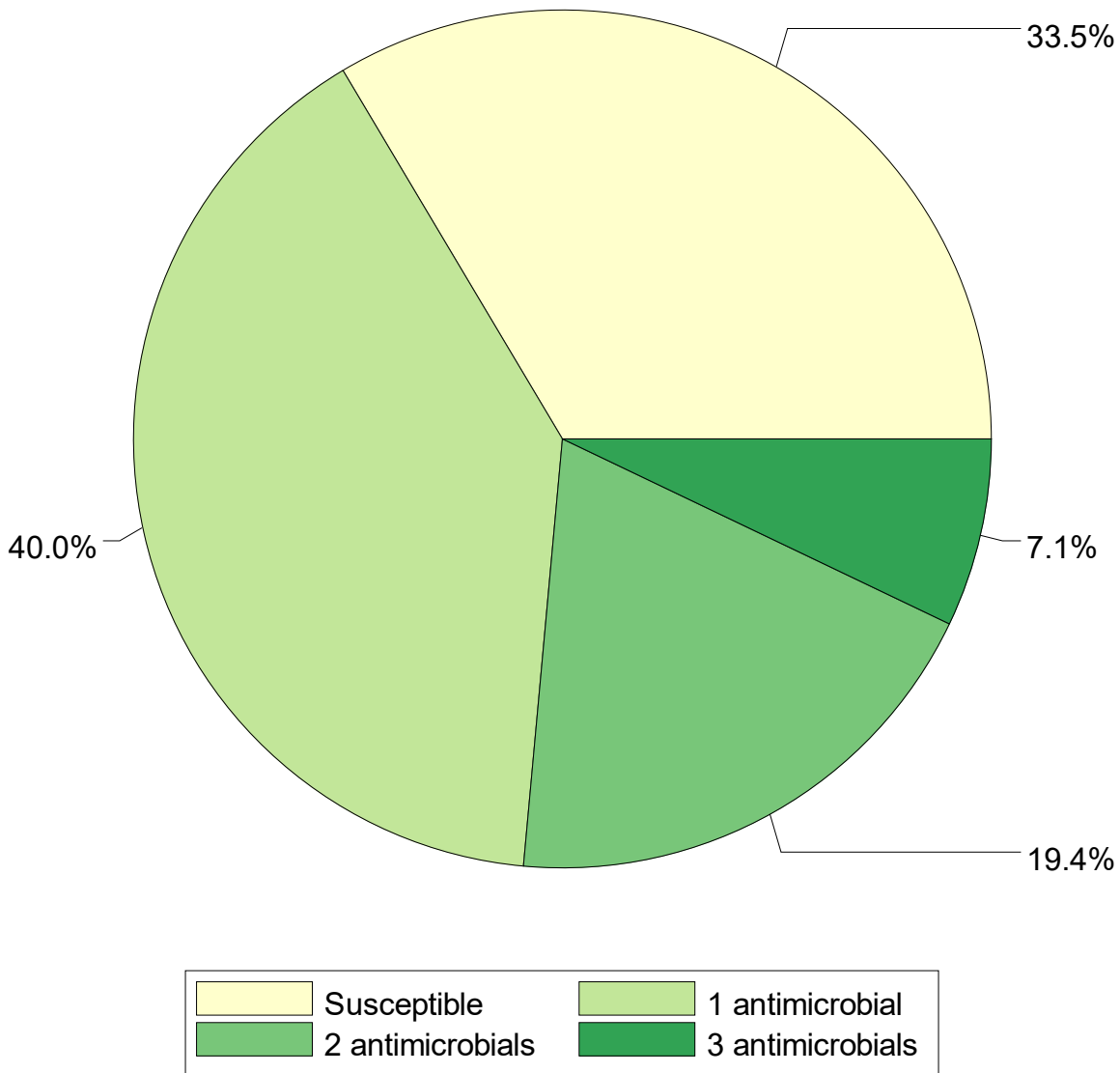
Primary Treatment	Count	Percentage
None	4	2.6
Ceftriaxone 250 mg	149	96.1
Gentamicin	2	1.3

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	144	92.9
Doxycycline/Tetracycline	8	5.2
None/Other	3	1.9

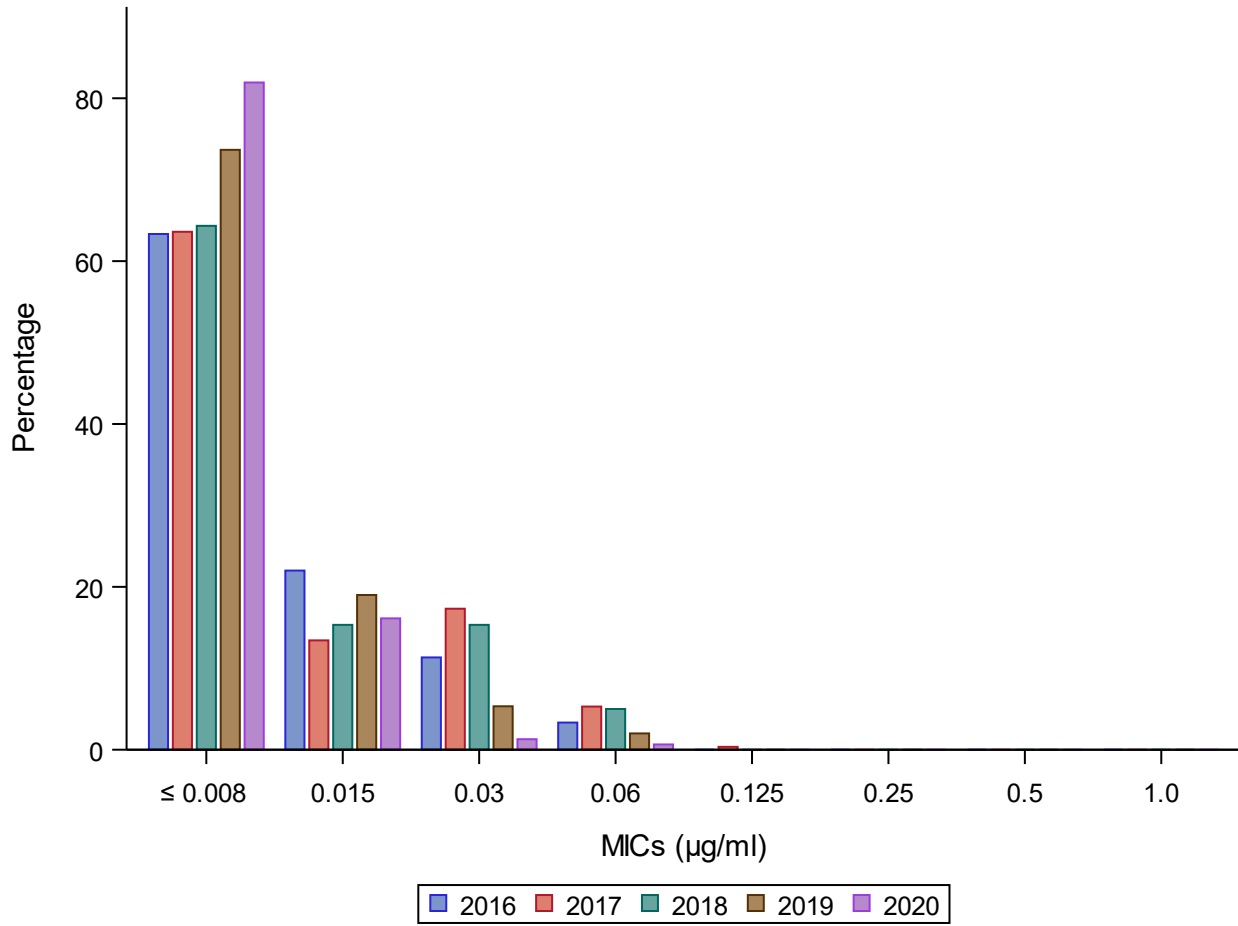
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	52	33.5
1 antimicrobial	62	40.0
2 antimicrobials	30	19.4
3 antimicrobials	11	7.1
4+ antimicrobials	0	0.0

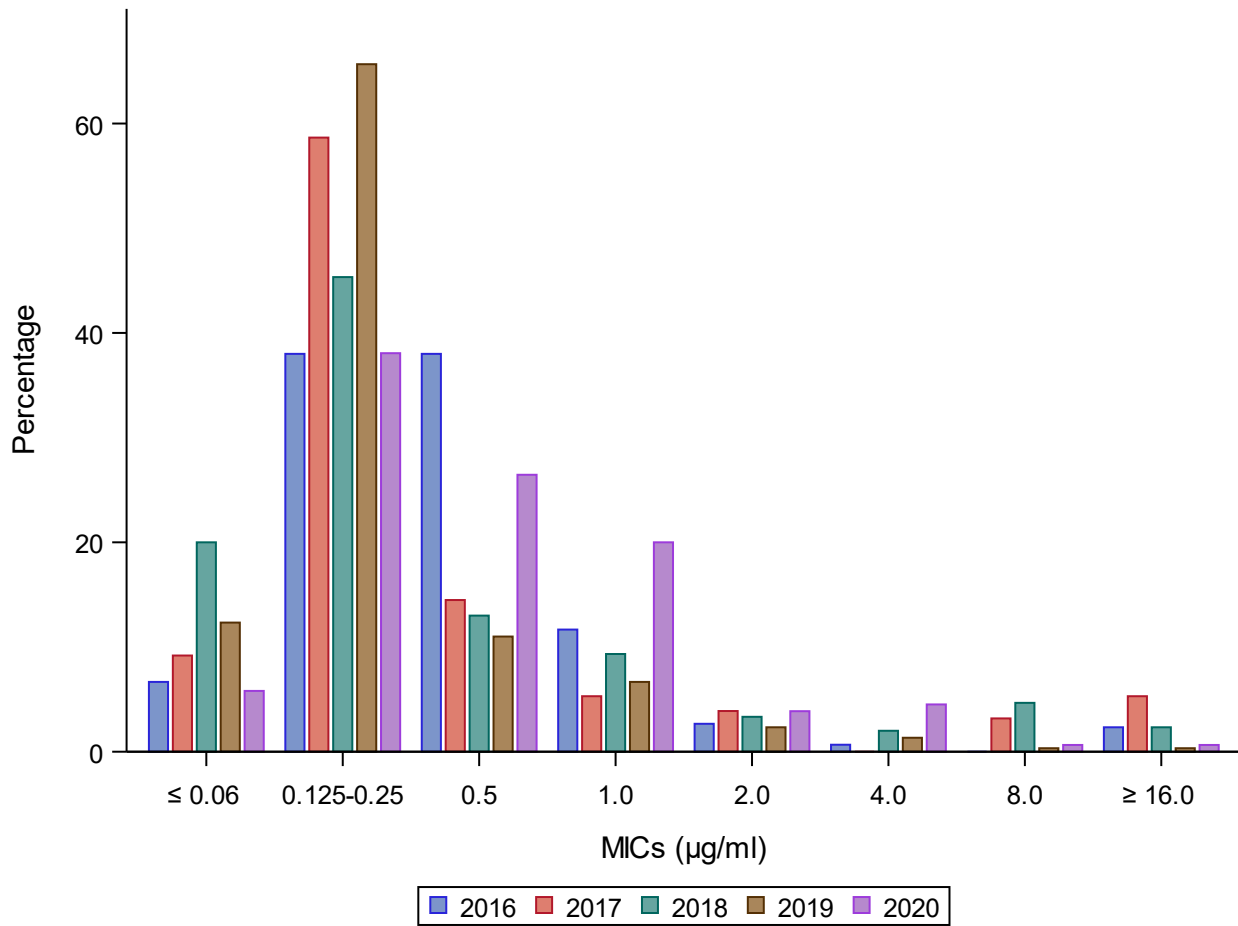
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2016-2020



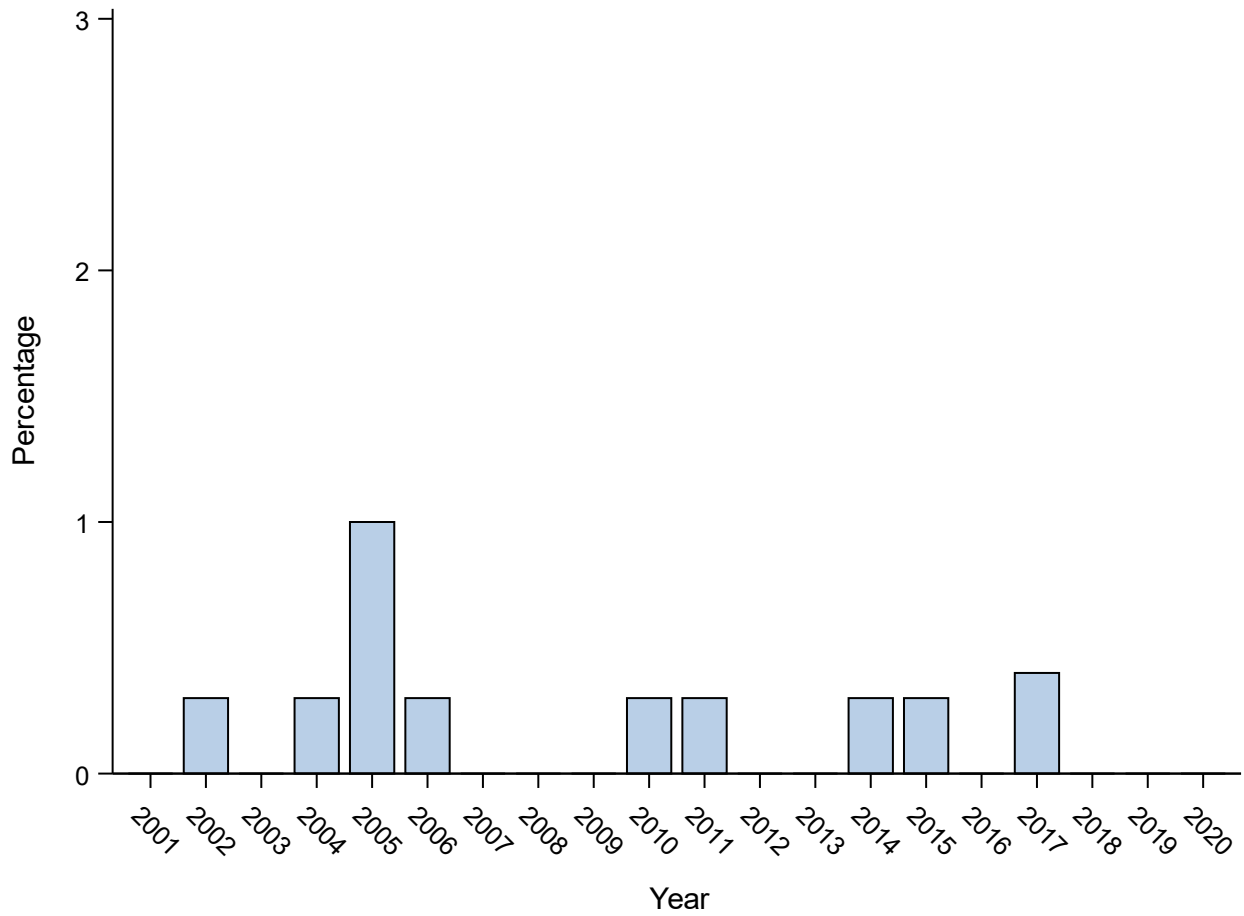
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	190 (63.3)	66 (22.0)	34 (11.3)	10 (3.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	180 (63.6)	38 (13.4)	49 (17.3)	15 (5.3)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	283
2018	193 (64.3)	46 (15.3)	46 (15.3)	15 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2019	221 (73.7)	57 (19.0)	16 (5.3)	6 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2020	127 (81.9)	25 (16.1)	2 (1.3)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	155

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2016-2020



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
2016	20 (6.7)	114 (38.0)	114 (38.0)	35 (11.7)	8 (2.7)	2 (0.7)	0 (0.0)	7 (2.3)	300
2017	26 (9.2)	166 (58.7)	41 (14.5)	15 (5.3)	11 (3.9)	0 (0.0)	9 (3.2)	15 (5.3)	283
2018	60 (20.0)	136 (45.3)	39 (13.0)	28 (9.3)	10 (3.3)	6 (2.0)	14 (4.7)	7 (2.3)	300
2019	37 (12.3)	197 (65.7)	33 (11.0)	20 (6.7)	7 (2.3)	4 (1.3)	1 (0.3)	1 (0.3)	300
2020	9 (5.8)	59 (38.1)	41 (26.5)	31 (20.0)	6 (3.9)	7 (4.5)	1 (0.6)	1 (0.6)	155

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2001-2020

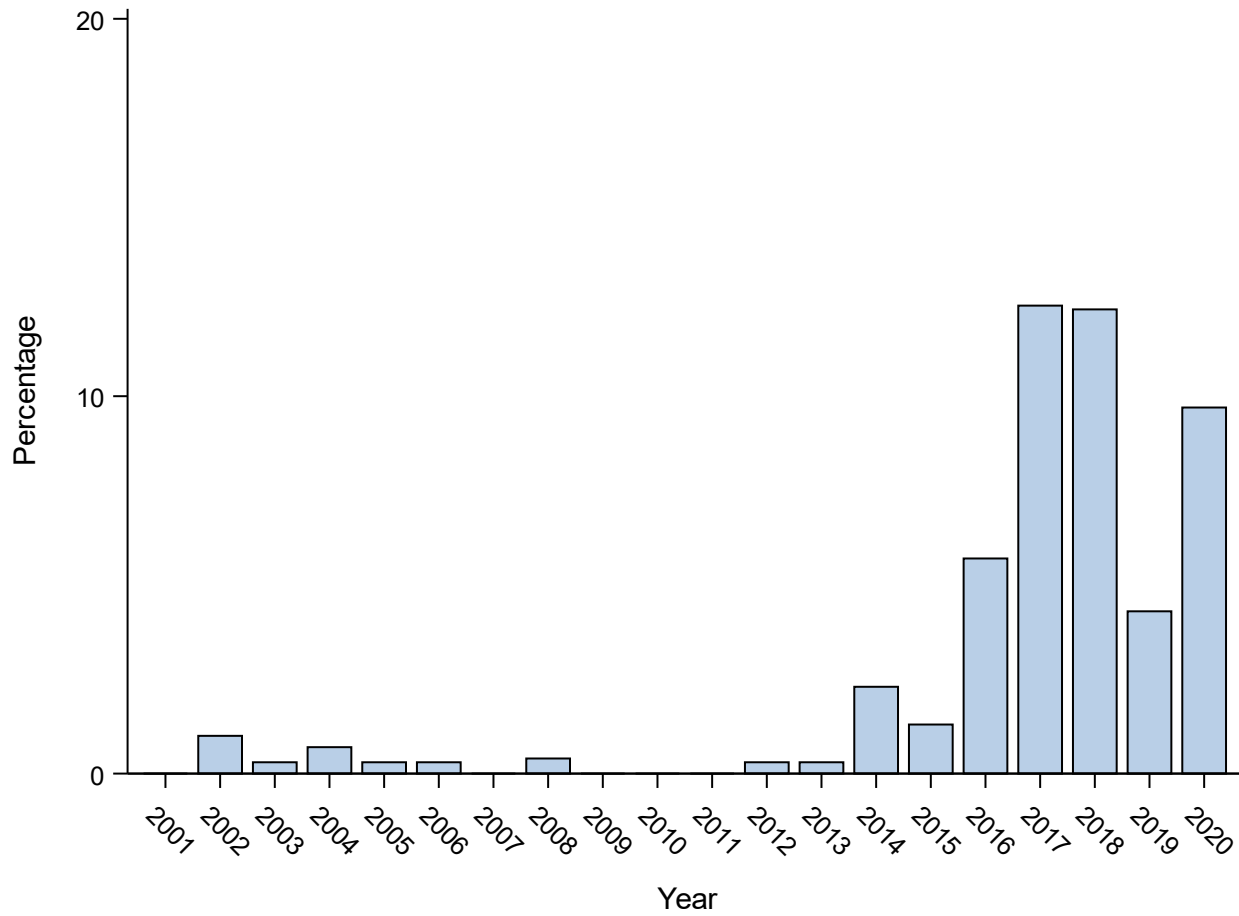


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.3)	0 (0.0)	1 (0.3)	3 (1.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	1 (0.3)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2001-2020

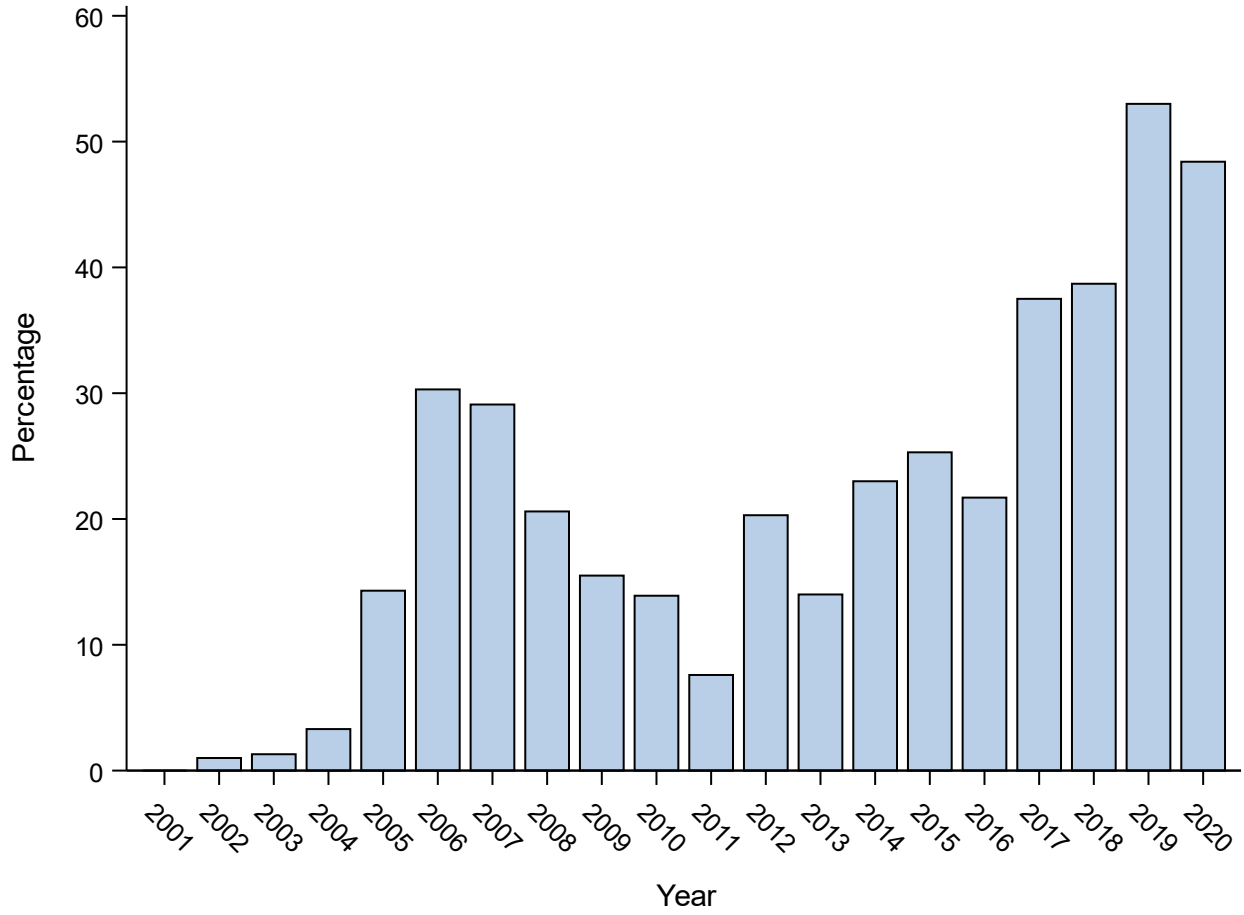


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	3 (1.0)	1 (0.3)	2 (0.7)	1 (0.3)	1 (0.3)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.3)	1 (0.3)	7 (2.3)	4 (1.3)	17 (5.7)	35 (12.4)	37 (12.3)	13 (4.3)	15 (9.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Philadelphia, Pennsylvania, 2001-2020

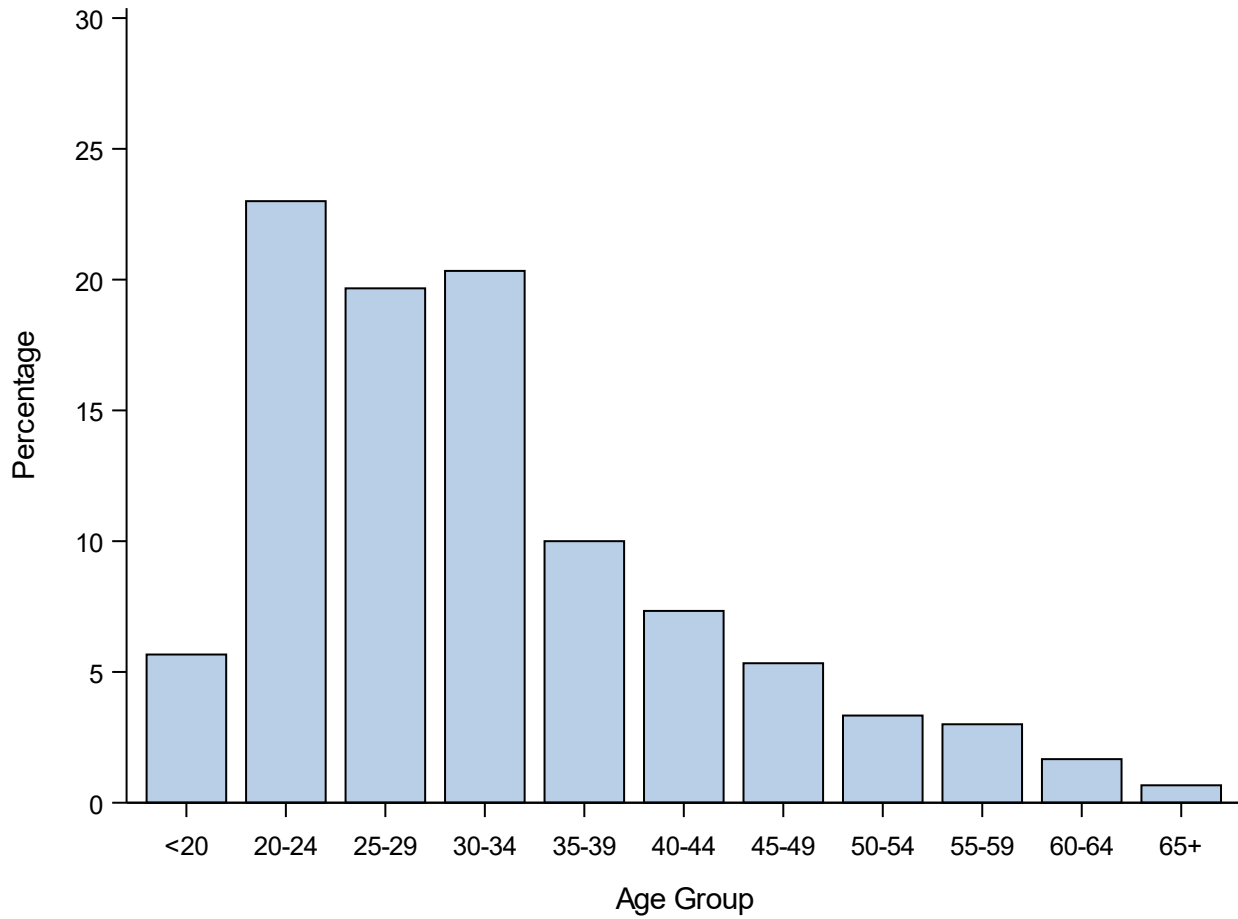


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	3 (1.0)	4 (1.3)	10 (3.3)	43 (14.3)	91 (30.3)	82 (29.1)	52 (20.6)	32 (15.5)	41 (13.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
22 (7.6)	61 (20.3)	42 (14.0)	69 (23.0)	76 (25.3)	65 (21.7)	106 (37.5)	116 (38.7)	159 (53.0)	75 (48.4)

Note: Ciprofloxacin resistance MICs $\geq 1.0 \mu\text{g/ml}$.

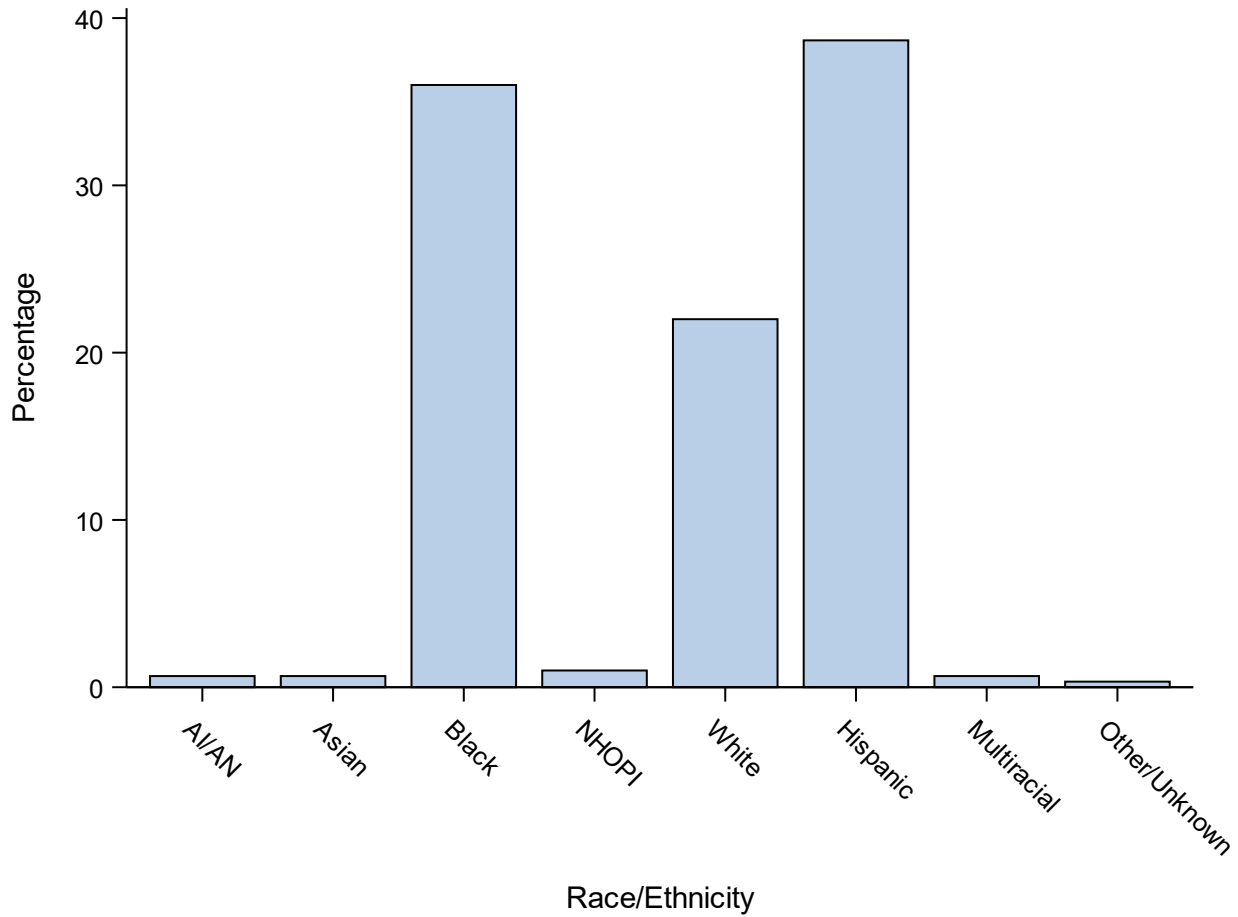
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
17 (5.7)	69 (23.0)	59 (19.7)	61 (20.3)	30 (10.0)	22 (7.3)	16 (5.3)	10 (3.3)	9 (3.0)	5 (1.7)	2 (0.7)	300

Note: Cases with unknown age were excluded.

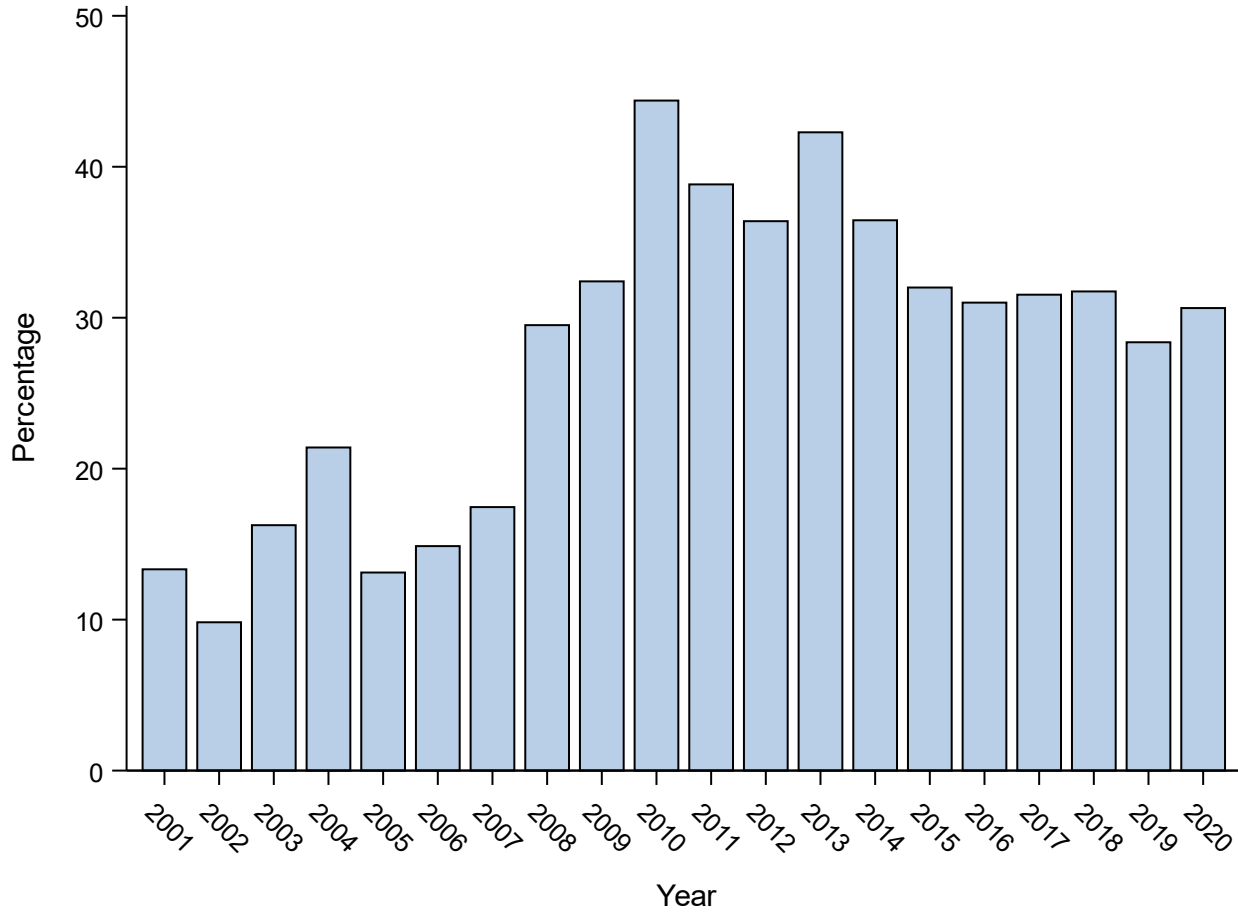
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
2 (0.7)	2 (0.7)	108 (36.0)	3 (1.0)	66 (22.0)	116 (38.7)	2 (0.7)	1 (0.3)	300

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2001-2020

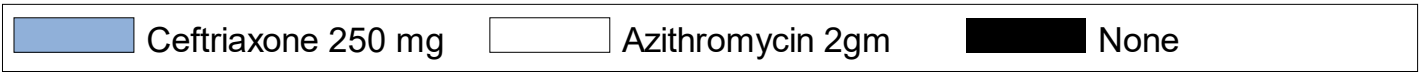
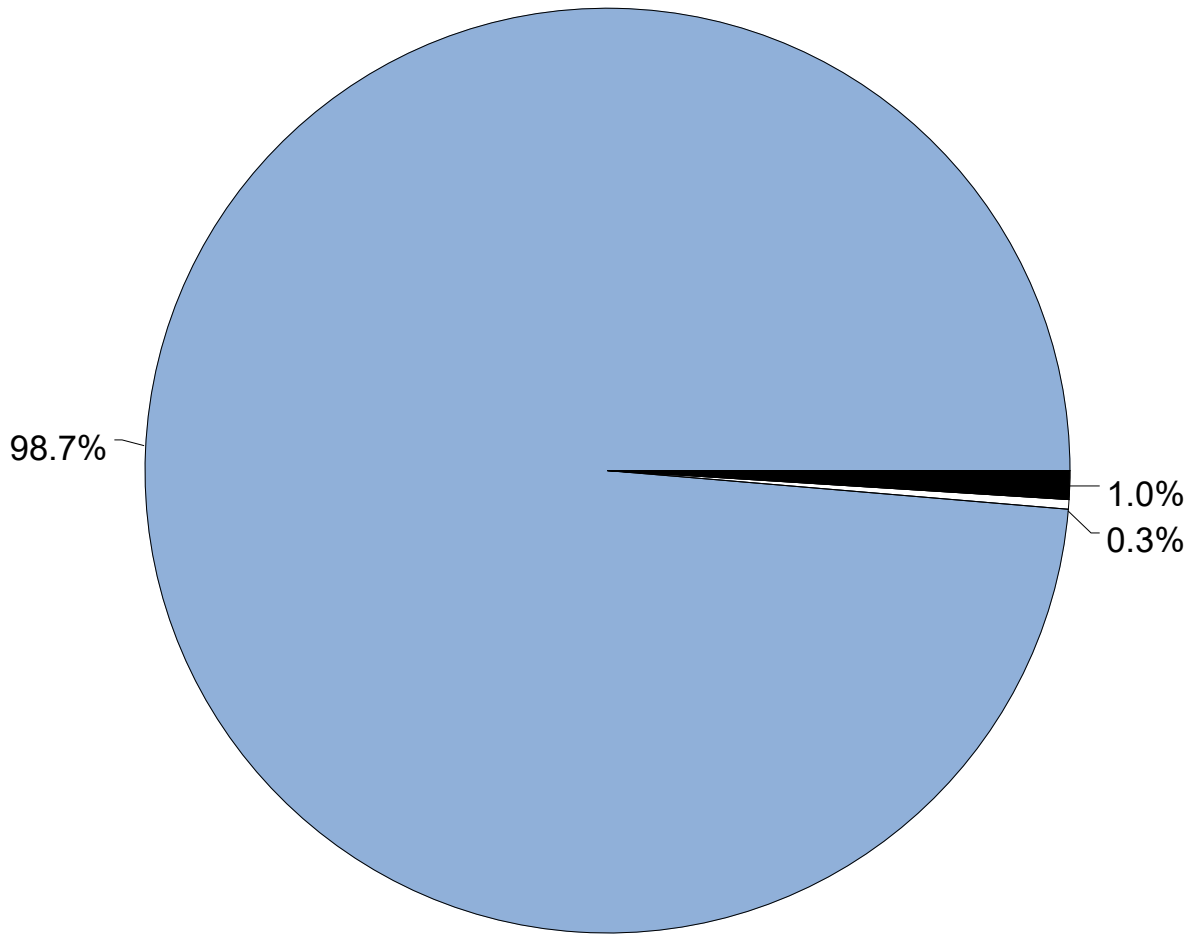


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
38 (13.3)	28 (9.8)	33 (16.3)	61 (21.4)	37 (13.1)	40 (14.9)	48 (17.5)	72 (29.5)	70 (32.4)	83 (44.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
113 (38.8)	107 (36.4)	126 (42.3)	109 (36.5)	96 (32.0)	93 (31.0)	93 (31.5)	93 (31.7)	82 (28.4)	91 (30.6)

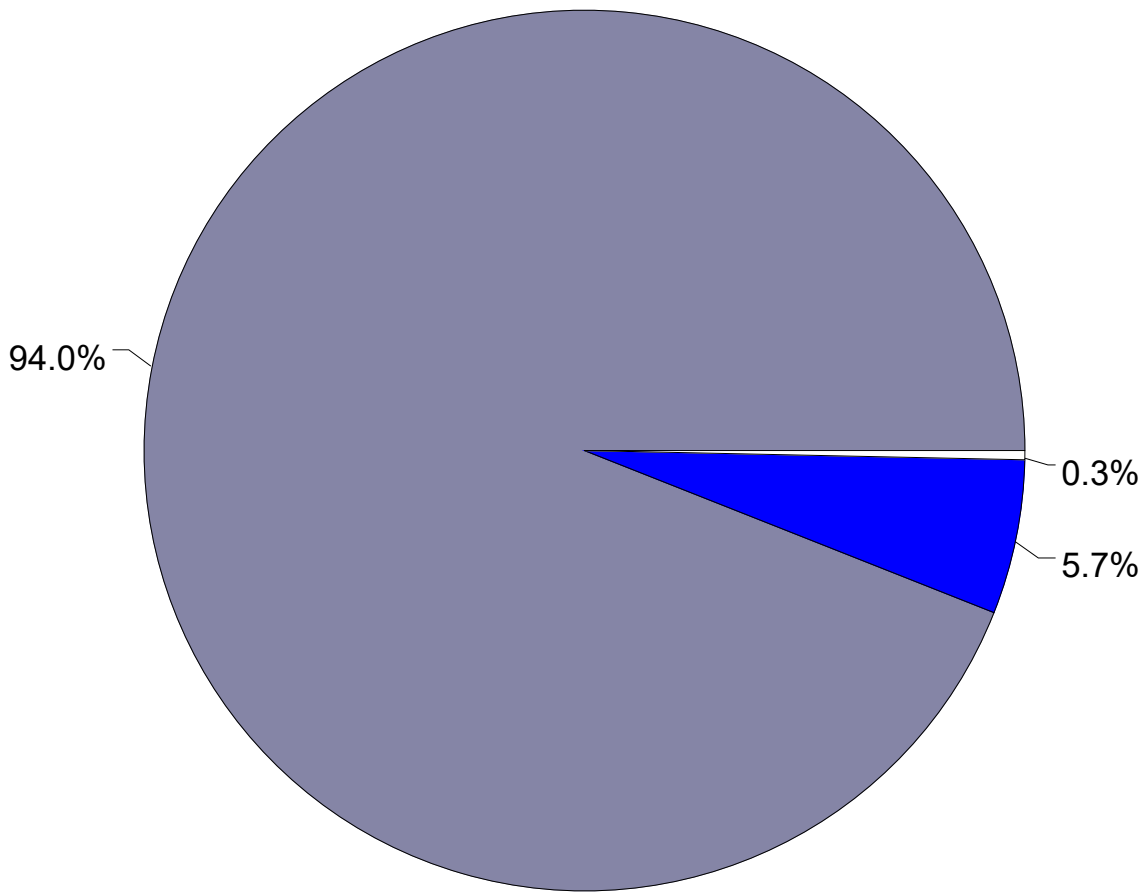
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.




Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2020



Primary Treatment	Count	Percentage
None	3	1.0
Ceftriaxone 250 mg	296	98.7
Azithromycin 2gm	1	0.3

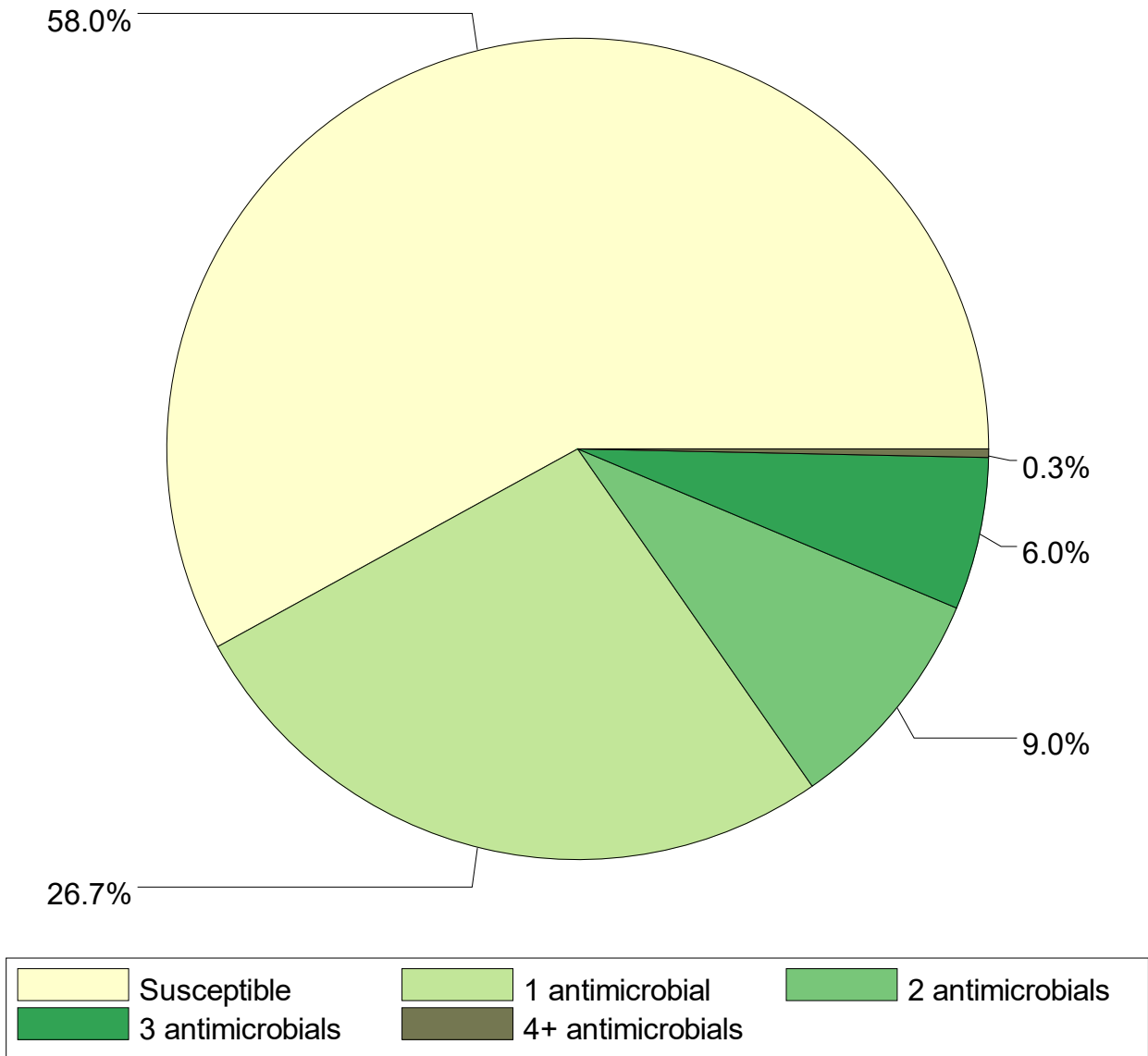
Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2020



	Azithromycin/Erythromycin		Doxycycline/Tetracycline
	None/Other		

Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	282	94.0
Doxycycline/Tetracycline	17	5.7
None/Other	1	0.3

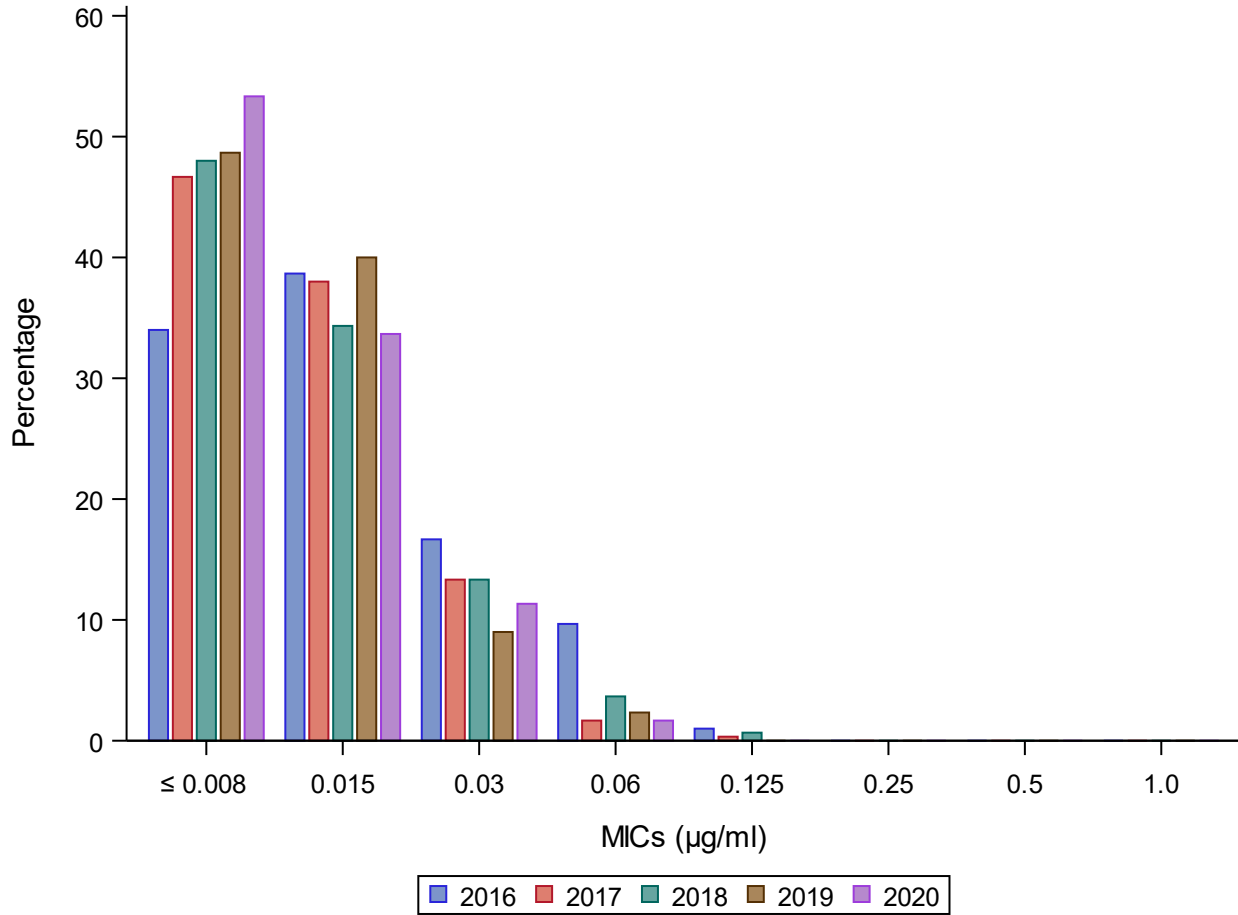
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	174	58.0
1 antimicrobial	80	26.7
2 antimicrobials	27	9.0
3 antimicrobials	18	6.0
4+ antimicrobials	1	0.3

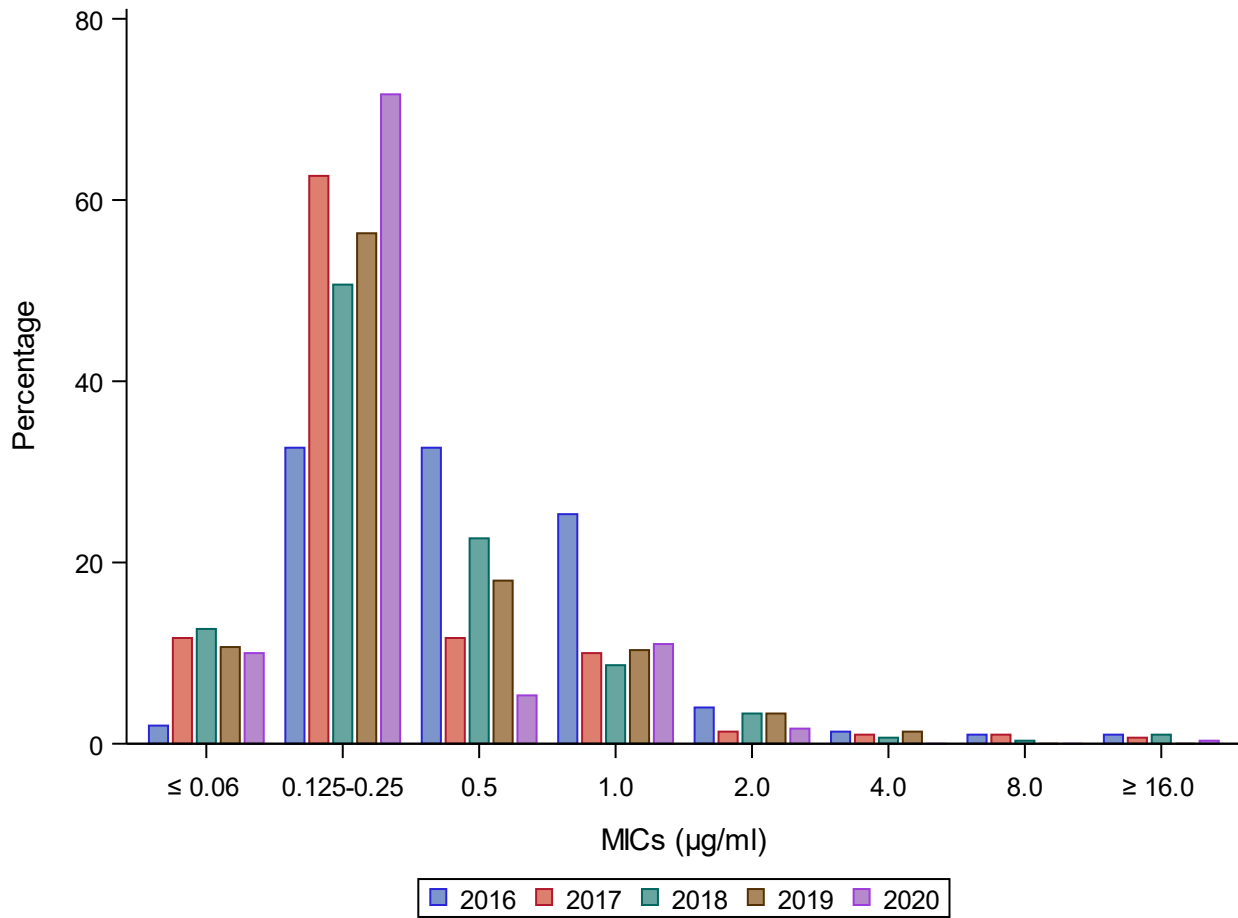
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2016-2020



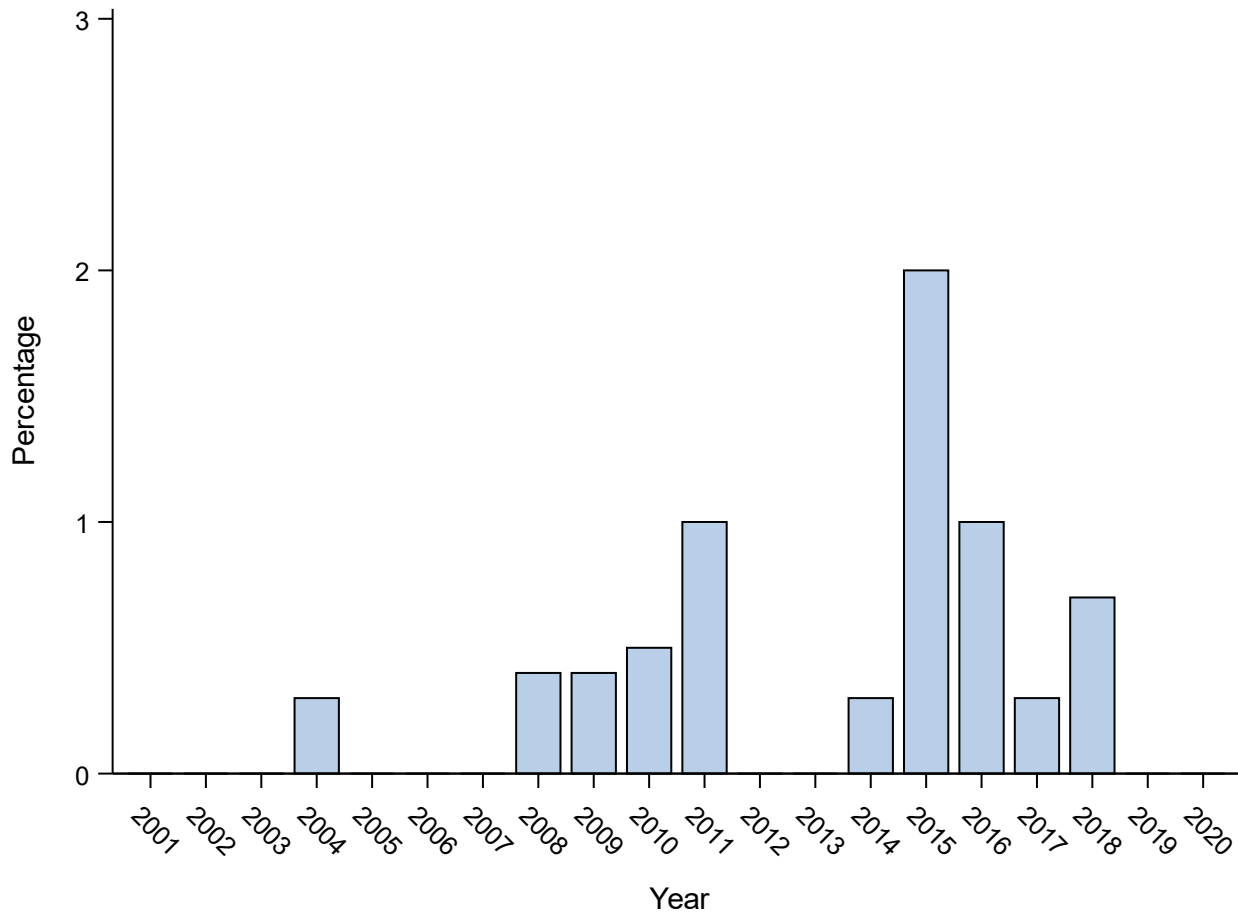
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	102 (34.0)	116 (38.7)	50 (16.7)	29 (9.7)	3 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	140 (46.7)	114 (38.0)	40 (13.3)	5 (1.7)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	144 (48.0)	103 (34.3)	40 (13.3)	11 (3.7)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	300
2019	146 (48.7)	120 (40.0)	27 (9.0)	7 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2020	160 (53.3)	101 (33.7)	34 (11.3)	5 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2016-2020



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
2016	6 (2.0)	98 (32.7)	98 (32.7)	76 (25.3)	12 (4.0)	4 (1.3)	3 (1.0)	3 (1.0)	300
2017	35 (11.7)	188 (62.7)	35 (11.7)	30 (10.0)	4 (1.3)	3 (1.0)	3 (1.0)	2 (0.7)	300
2018	38 (12.7)	152 (50.7)	68 (22.7)	26 (8.7)	10 (3.3)	2 (0.7)	1 (0.3)	3 (1.0)	300
2019	32 (10.7)	169 (56.3)	54 (18.0)	31 (10.3)	10 (3.3)	4 (1.3)	0 (0.0)	0 (0.0)	300
2020	30 (10.0)	215 (71.7)	16 (5.3)	33 (11.0)	5 (1.7)	0 (0.0)	0 (0.0)	1 (0.3)	300

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2001-2020

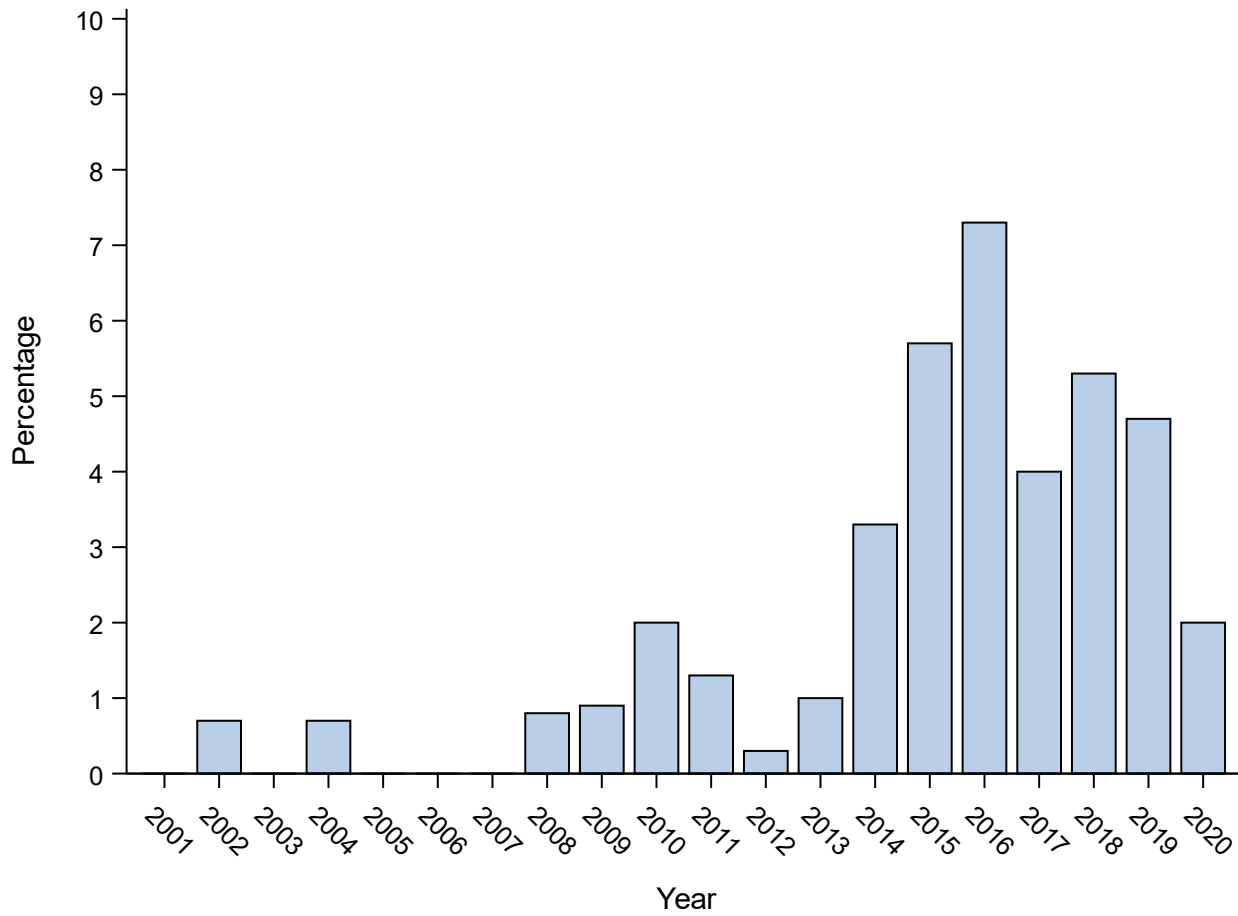


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	1 (0.4)	1 (0.5)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
3 (1.0)	0 (0.0)	0 (0.0)	1 (0.3)	6 (2.0)	3 (1.0)	1 (0.3)	2 (0.7)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2001-2020

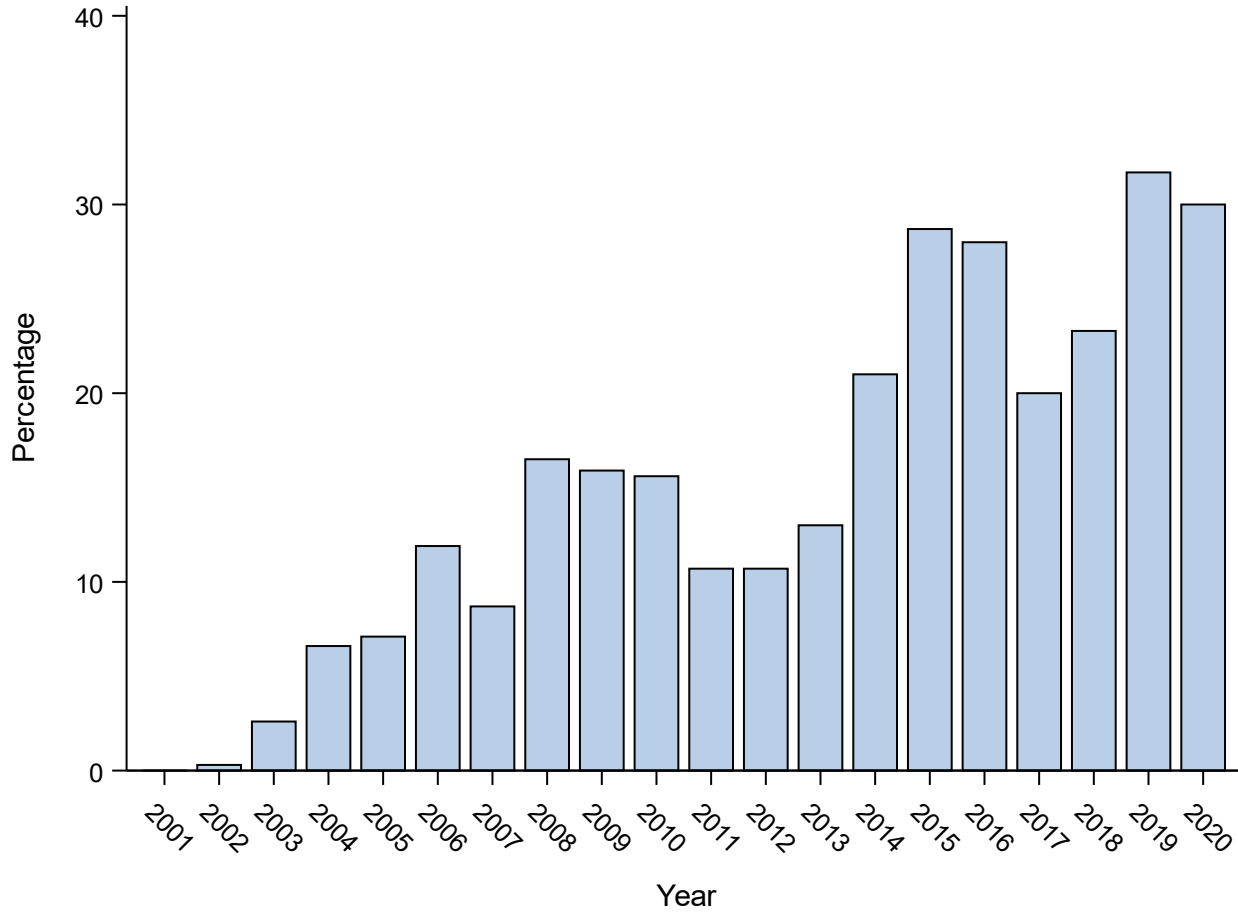


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	2 (0.7)	0 (0.0)	2 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.8)	2 (0.9)	4 (2.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
4 (1.3)	1 (0.3)	3 (1.0)	10 (3.3)	17 (5.7)	22 (7.3)	12 (4.0)	16 (5.3)	14 (4.7)	6 (2.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Phoenix, Arizona, 2001-2020

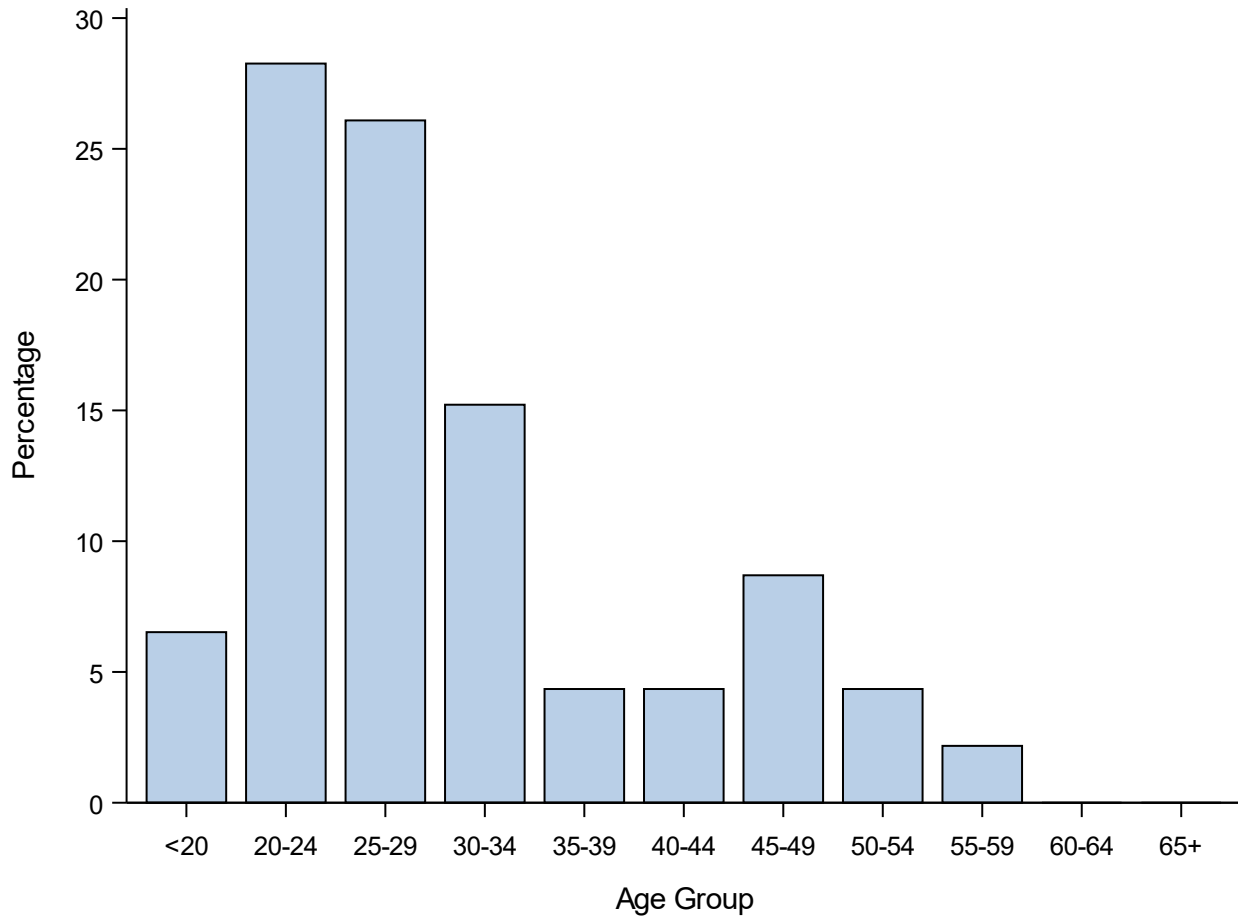


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.3)	6 (2.6)	19 (6.6)	20 (7.1)	32 (11.9)	24 (8.7)	41 (16.5)	36 (15.9)	31 (15.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
32 (10.7)	32 (10.7)	39 (13.0)	63 (21.0)	86 (28.7)	84 (28.0)	60 (20.0)	70 (23.3)	95 (31.7)	90 (30.0)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

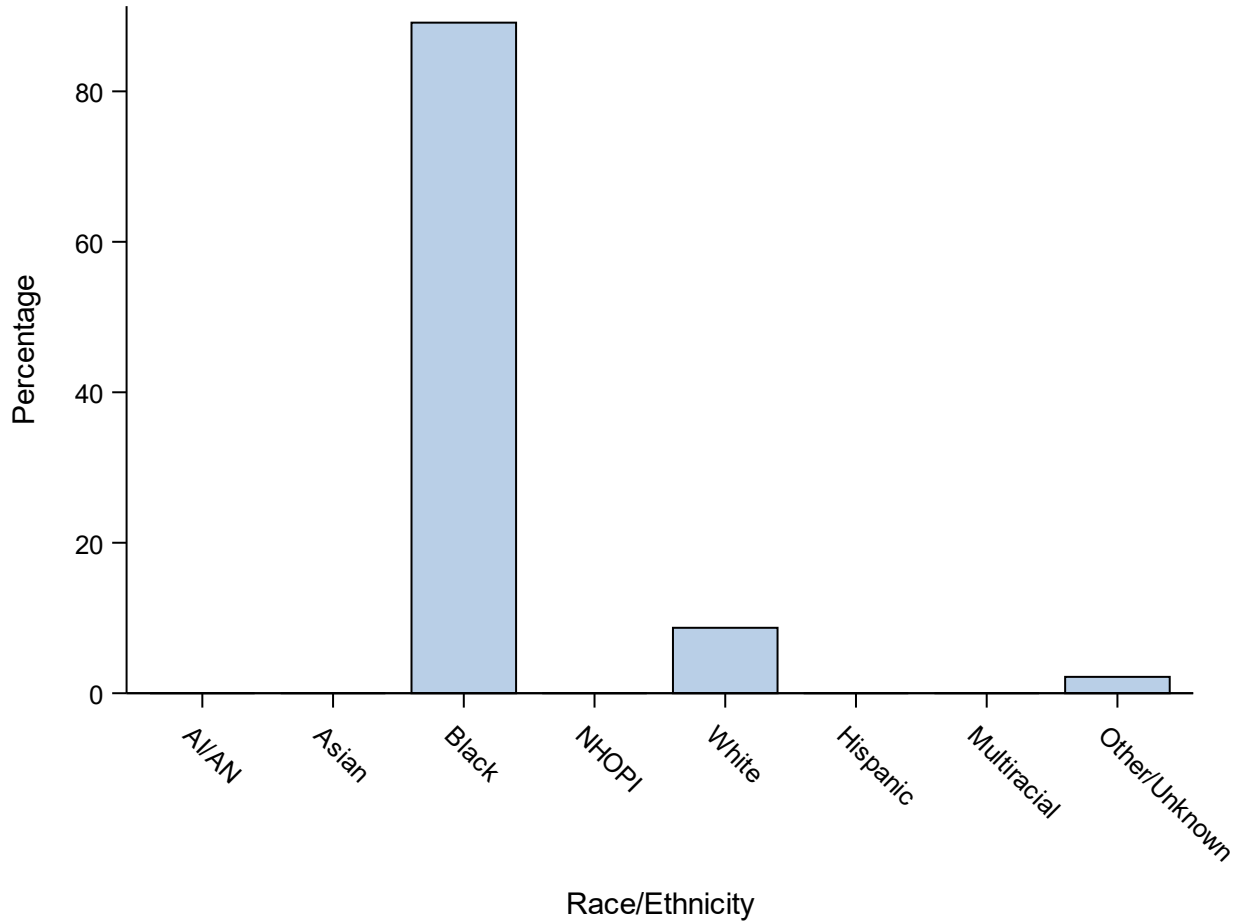
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
3 (6.5)	13 (28.3)	12 (26.1)	7 (15.2)	2 (4.3)	2 (4.3)	4 (8.7)	2 (4.3)	1 (2.2)	0 (0.0)	0 (0.0)	46

Note: Cases with unknown age were excluded.

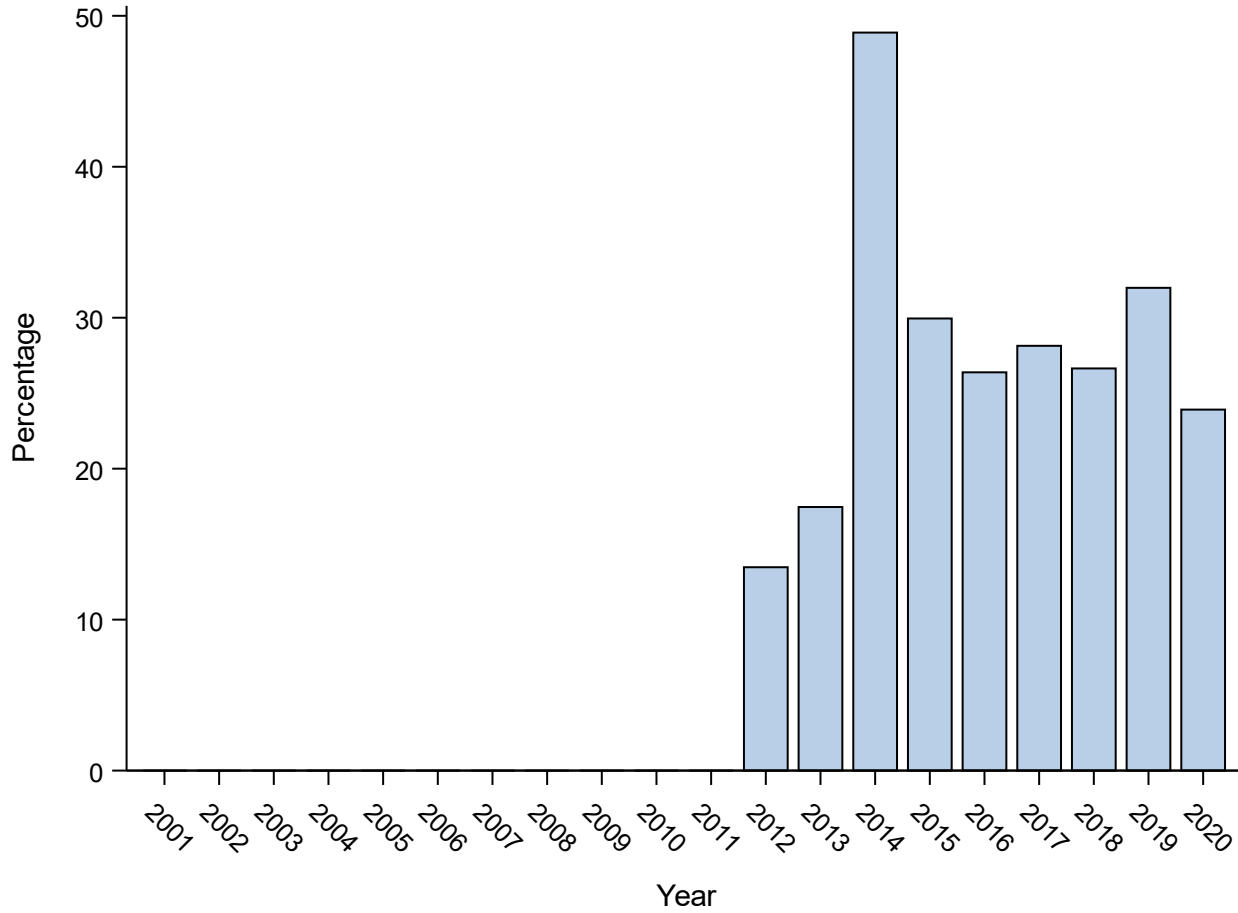
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	41 (89.1)	0 (0.0)	4 (8.7)	0 (0.0)	0 (0.0)	1 (2.2)	46

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2001-2020

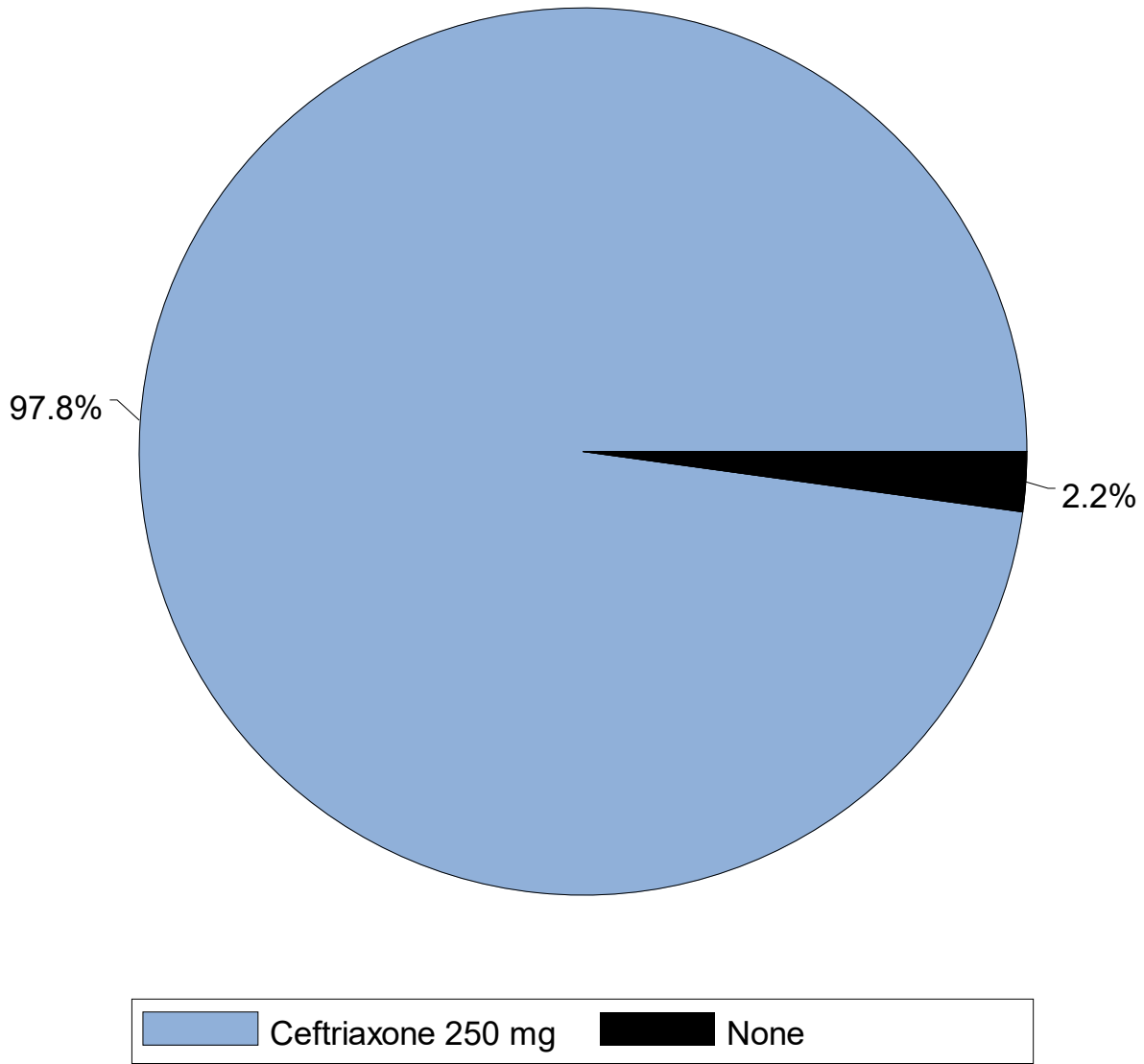


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	26 (13.5)	33 (17.5)	66 (48.9)	59 (29.9)	62 (26.4)	65 (28.1)	65 (26.6)	63 (32.0)	11 (23.9)

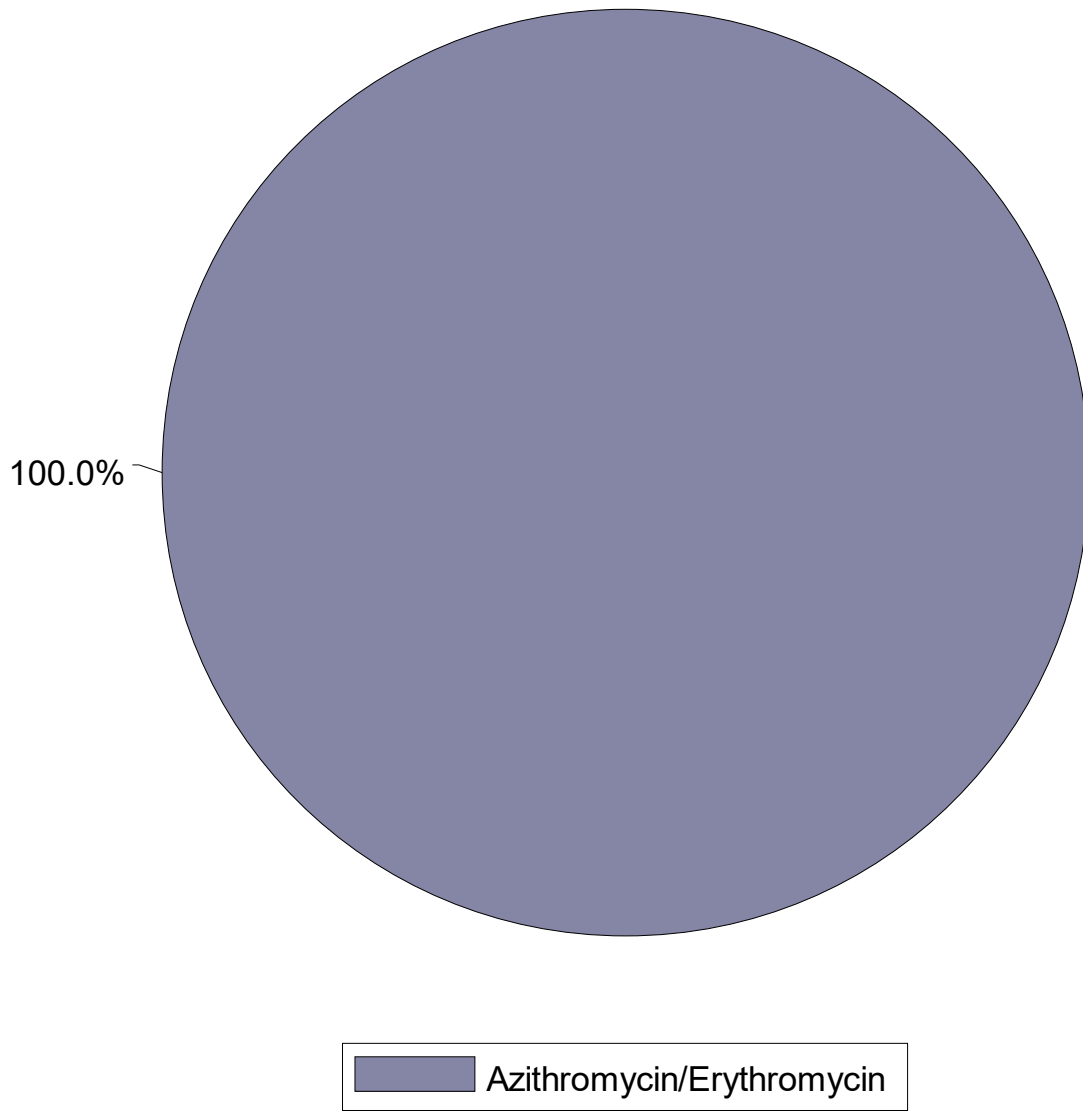
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2020



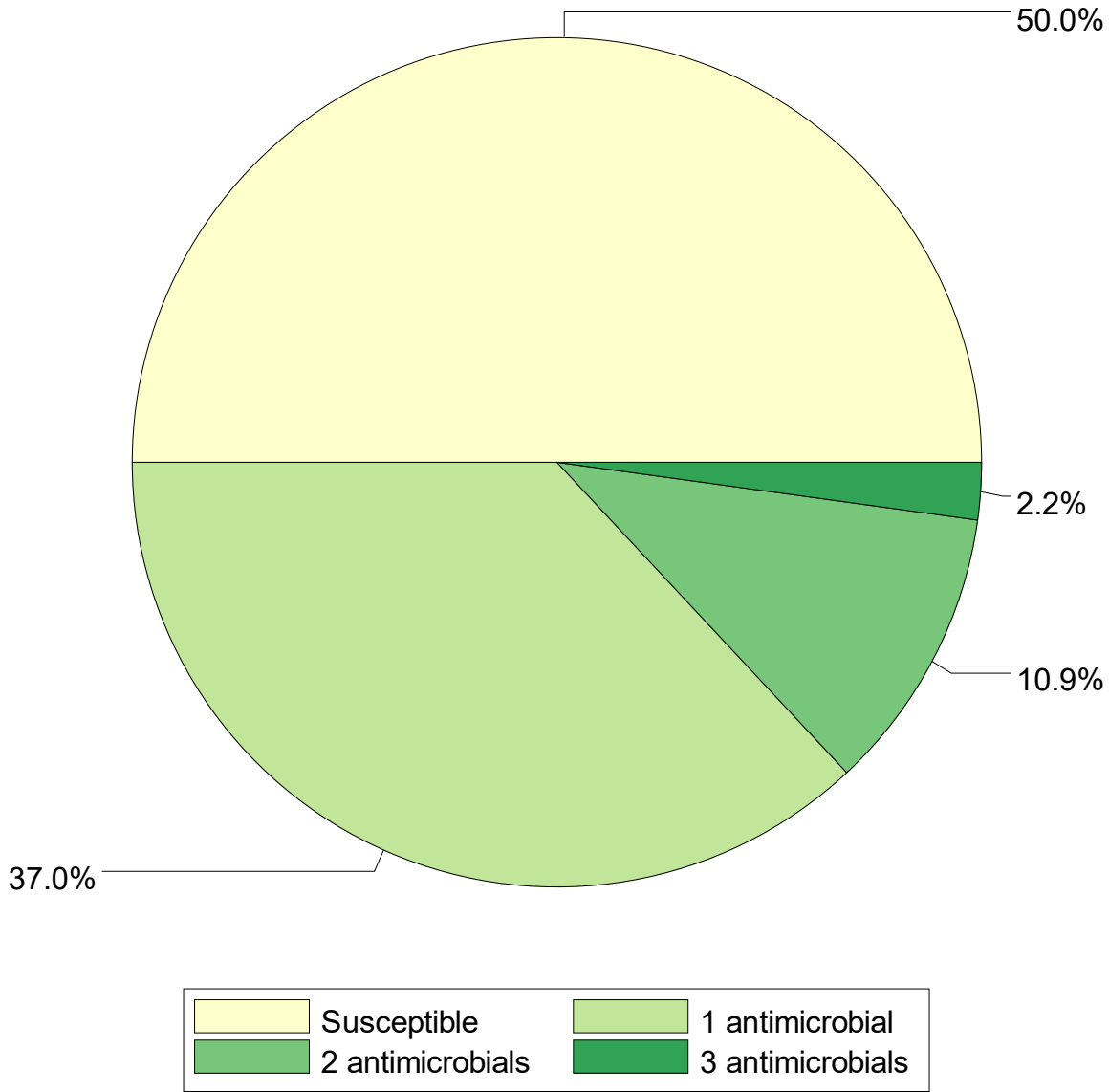
Primary Treatment	Count	Percentage
None	1	2.2
Ceftriaxone 250 mg	45	97.8

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	46	100.0

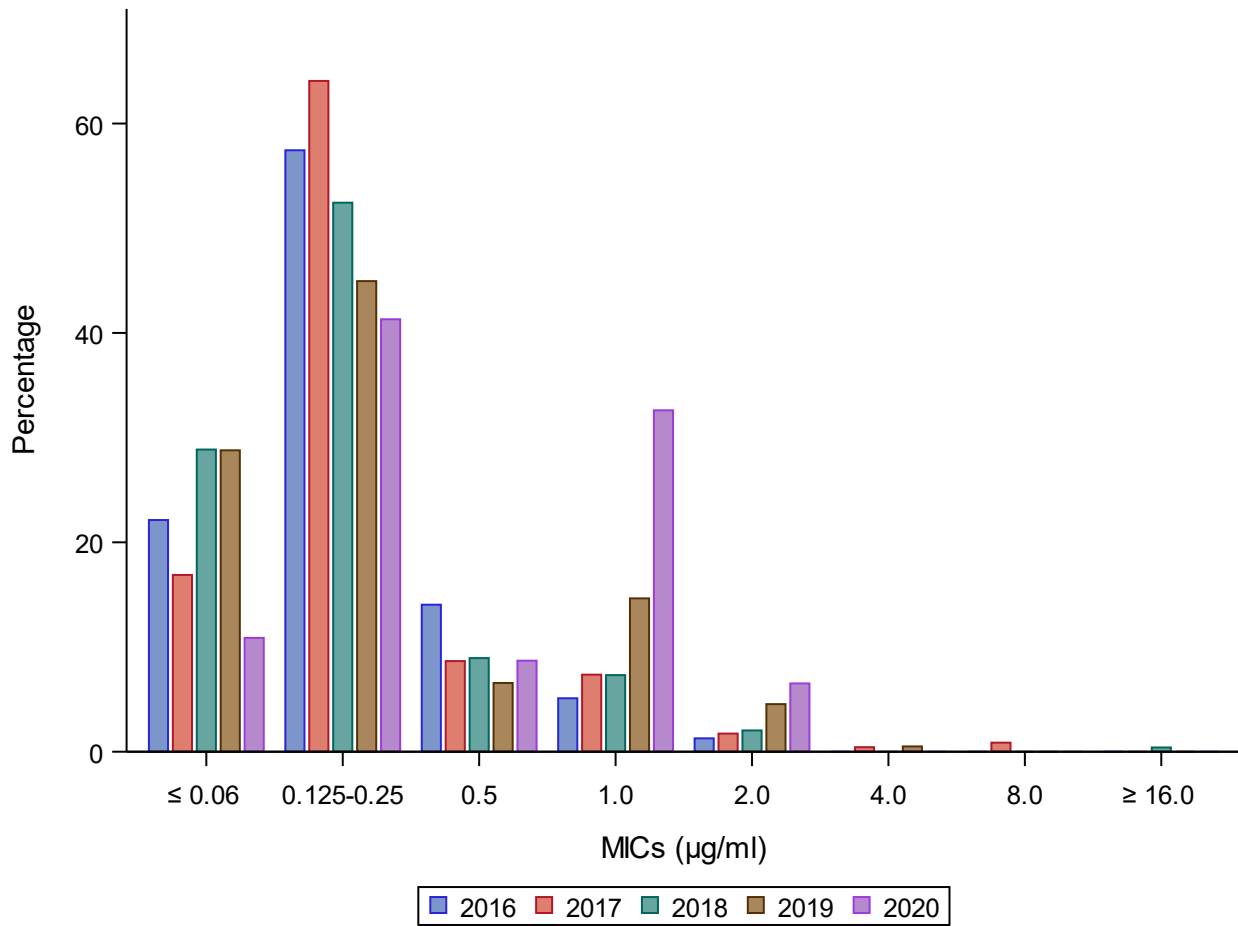
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	23	50.0
1 antimicrobial	17	37.0
2 antimicrobials	5	10.9
3 antimicrobials	1	2.2
4+ antimicrobials	0	0.0

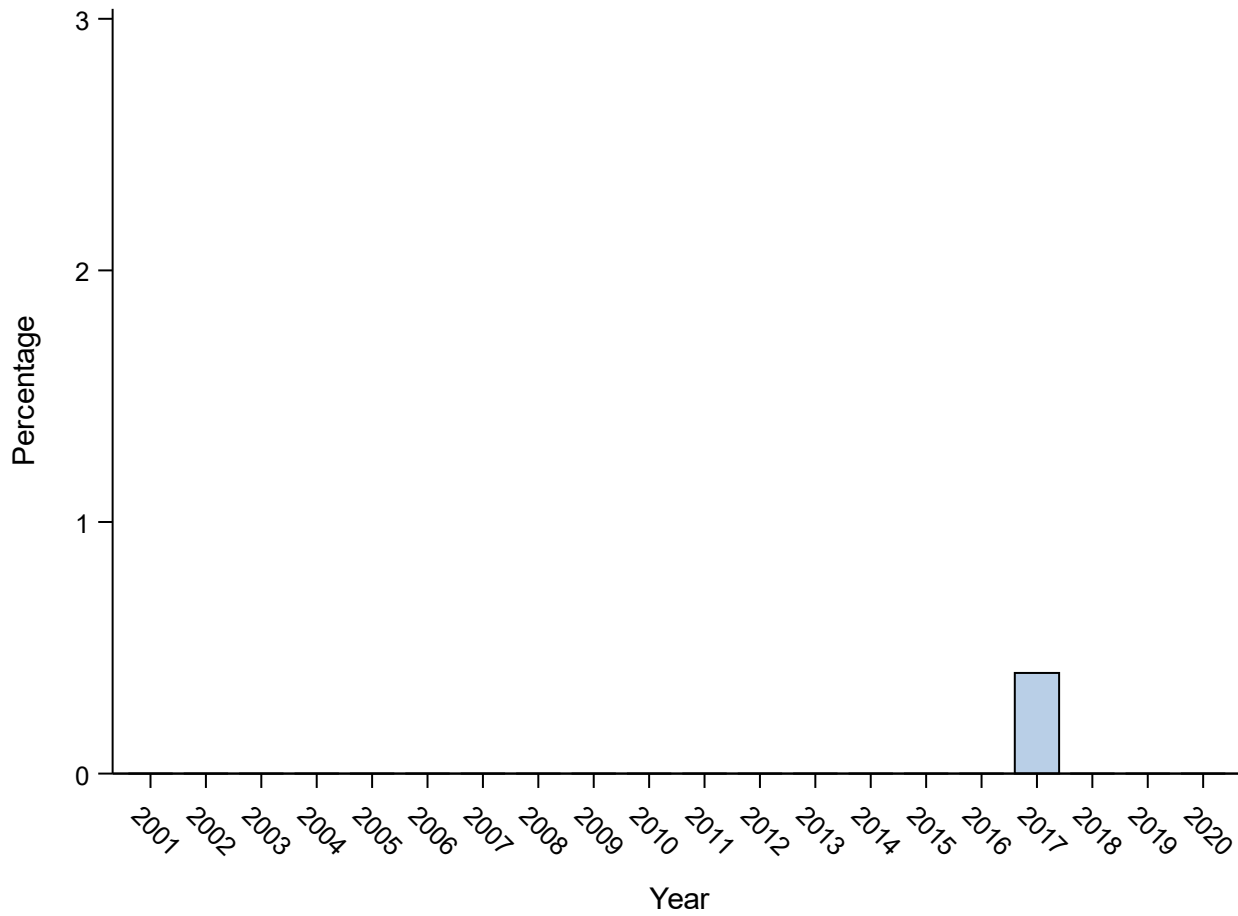
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2016-2020



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
2016	52 (22.1)	135 (57.4)	33 (14.0)	12 (5.1)	3 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	235
2017	39 (16.9)	148 (64.1)	20 (8.7)	17 (7.4)	4 (1.7)	1 (0.4)	2 (0.9)	0 (0.0)	231
2018	71 (28.9)	129 (52.4)	22 (8.9)	18 (7.3)	5 (2.0)	0 (0.0)	0 (0.0)	1 (0.4)	246
2019	57 (28.8)	89 (44.9)	13 (6.6)	29 (14.6)	9 (4.5)	1 (0.5)	0 (0.0)	0 (0.0)	198
2020	5 (10.9)	19 (41.3)	4 (8.7)	15 (32.6)	3 (6.5)	0 (0.0)	0 (0.0)	0 (0.0)	46

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2001-2020

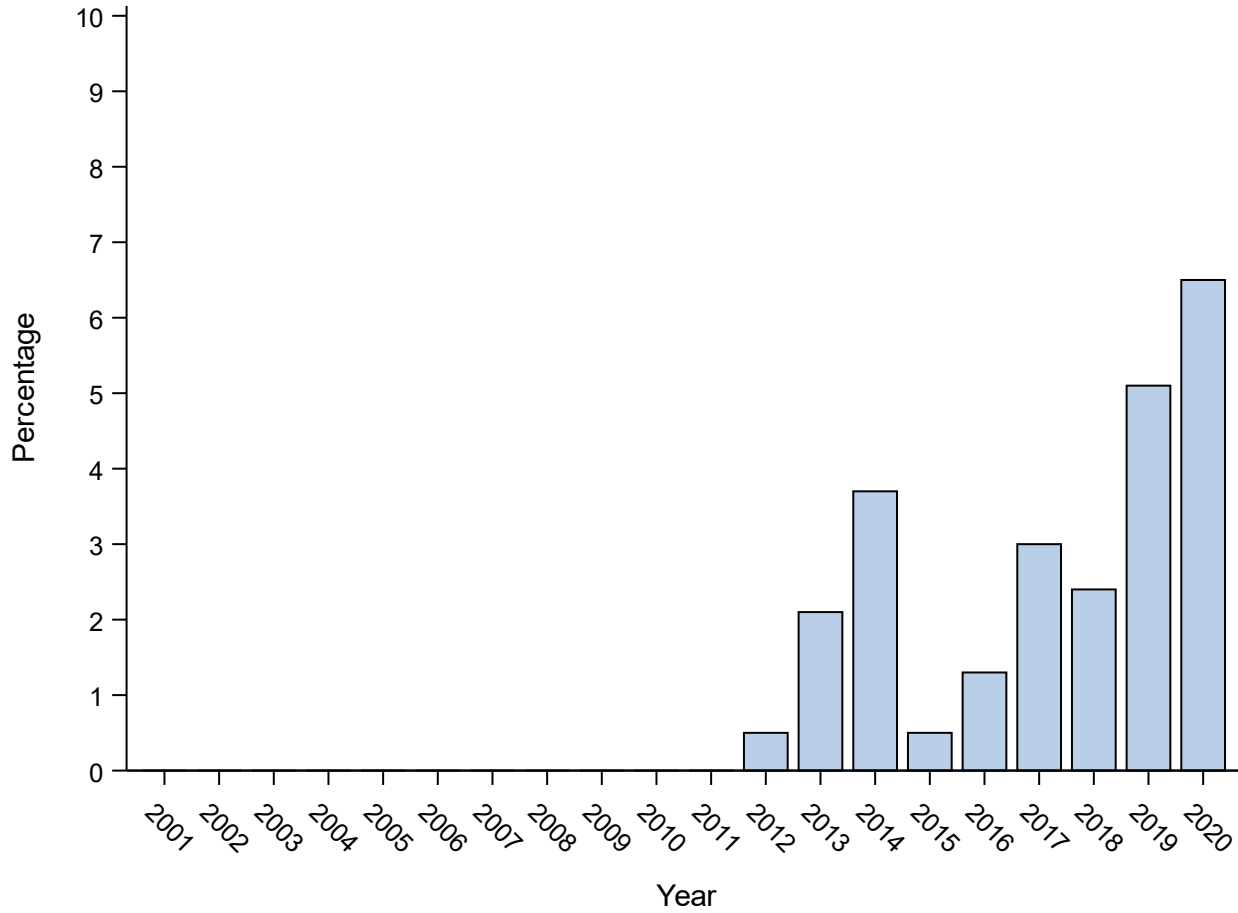


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Pontiac, Michigan, 2001-2020

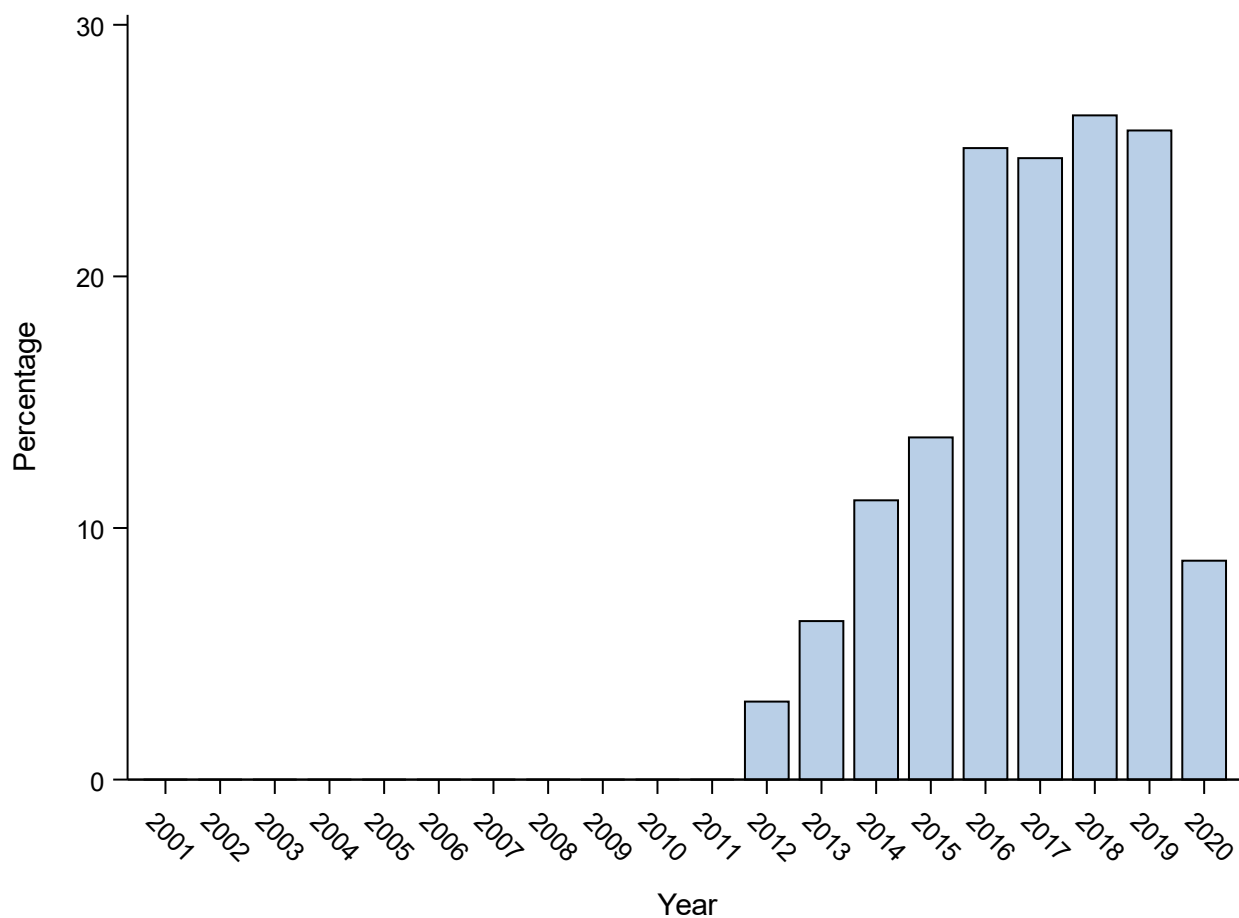


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (0.5)	4 (2.1)	5 (3.7)	1 (0.5)	3 (1.3)	7 (3.0)	6 (2.4)	10 (5.1)	3 (6.5)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
Pontiac, Michigan, 2001-2020

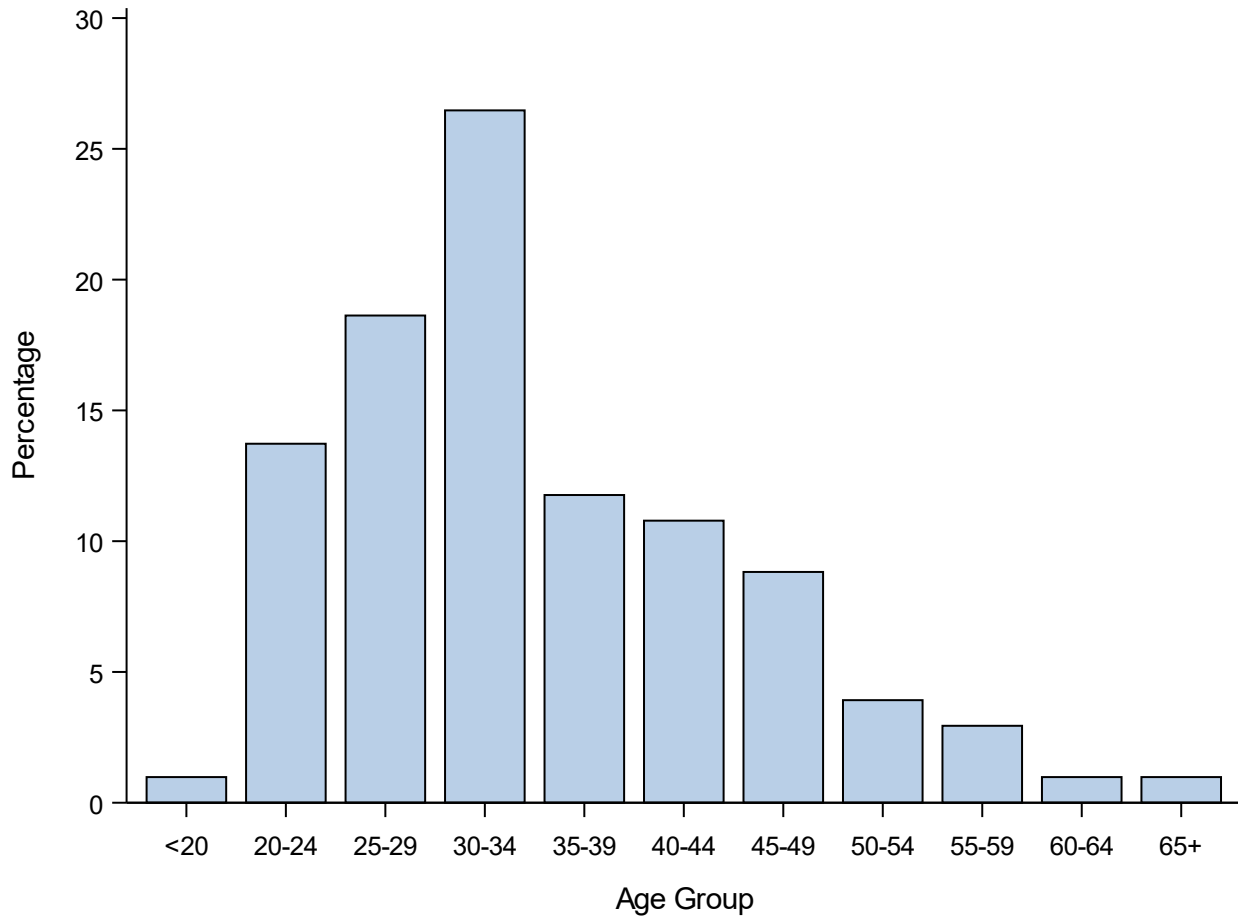


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	6 (3.1)	12 (6.3)	15 (11.1)	27 (13.6)	59 (25.1)	57 (24.7)	65 (26.4)	51 (25.8)	4 (8.7)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2012-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

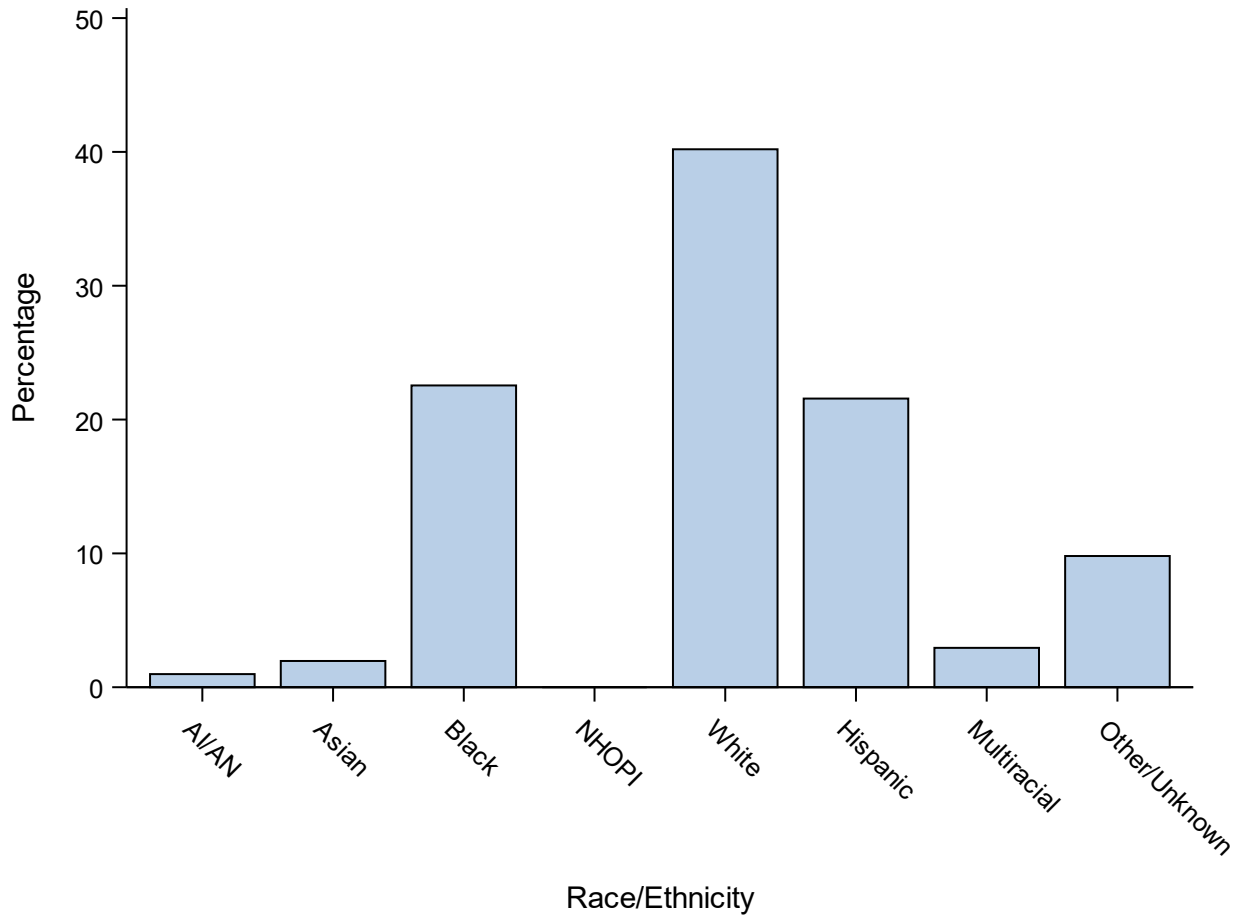
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
1 (1.0)	14 (13.7)	19 (18.6)	27 (26.5)	12 (11.8)	11 (10.8)	9 (8.8)	4 (3.9)	3 (2.9)	1 (1.0)	1 (1.0)	102

Note: Cases with unknown age were excluded.

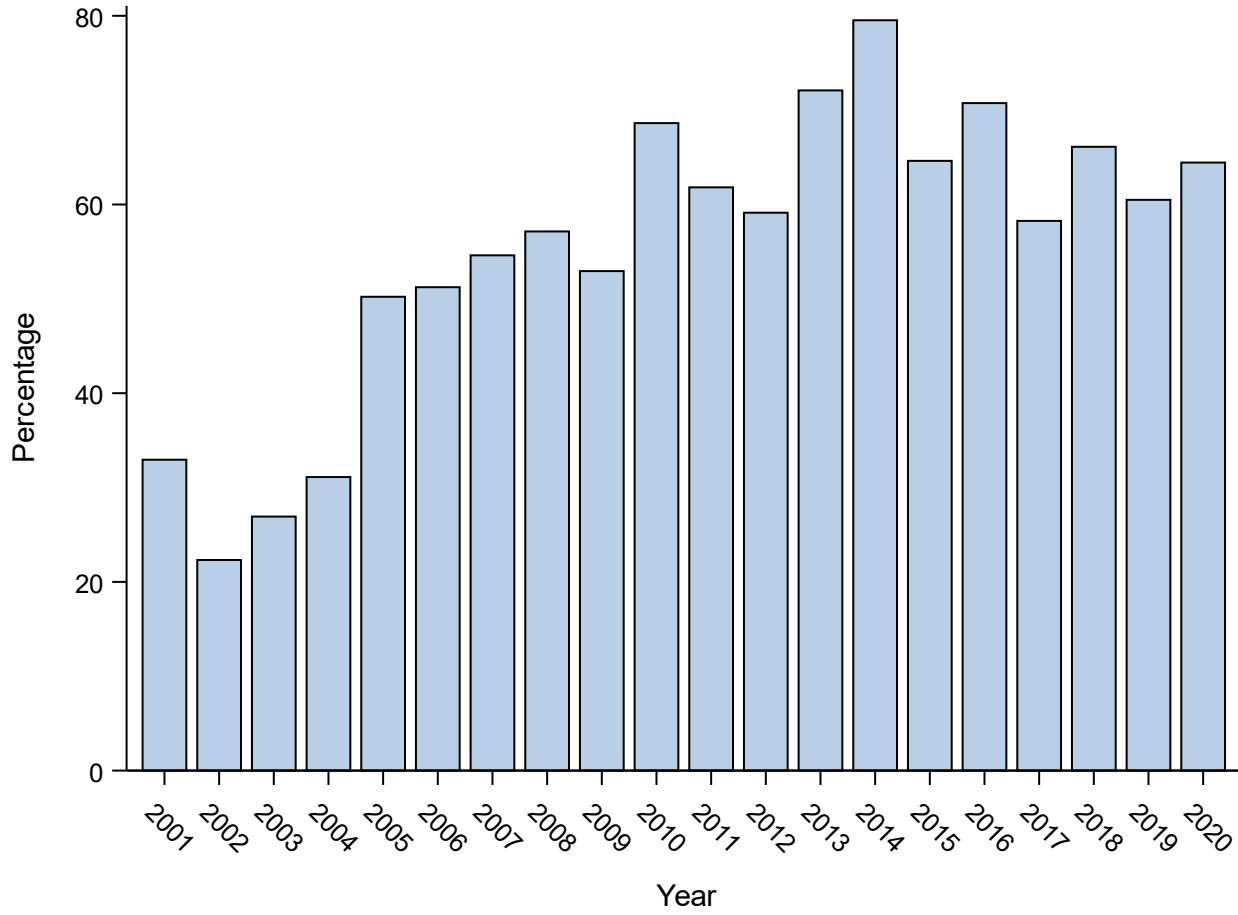
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (1.0)	2 (2.0)	23 (22.5)	0 (0.0)	41 (40.2)	22 (21.6)	3 (2.9)	10 (9.8)	102

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2001-2020

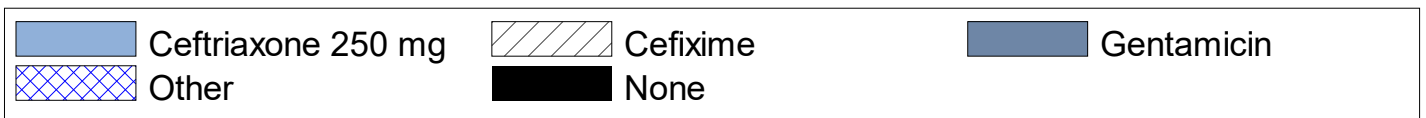
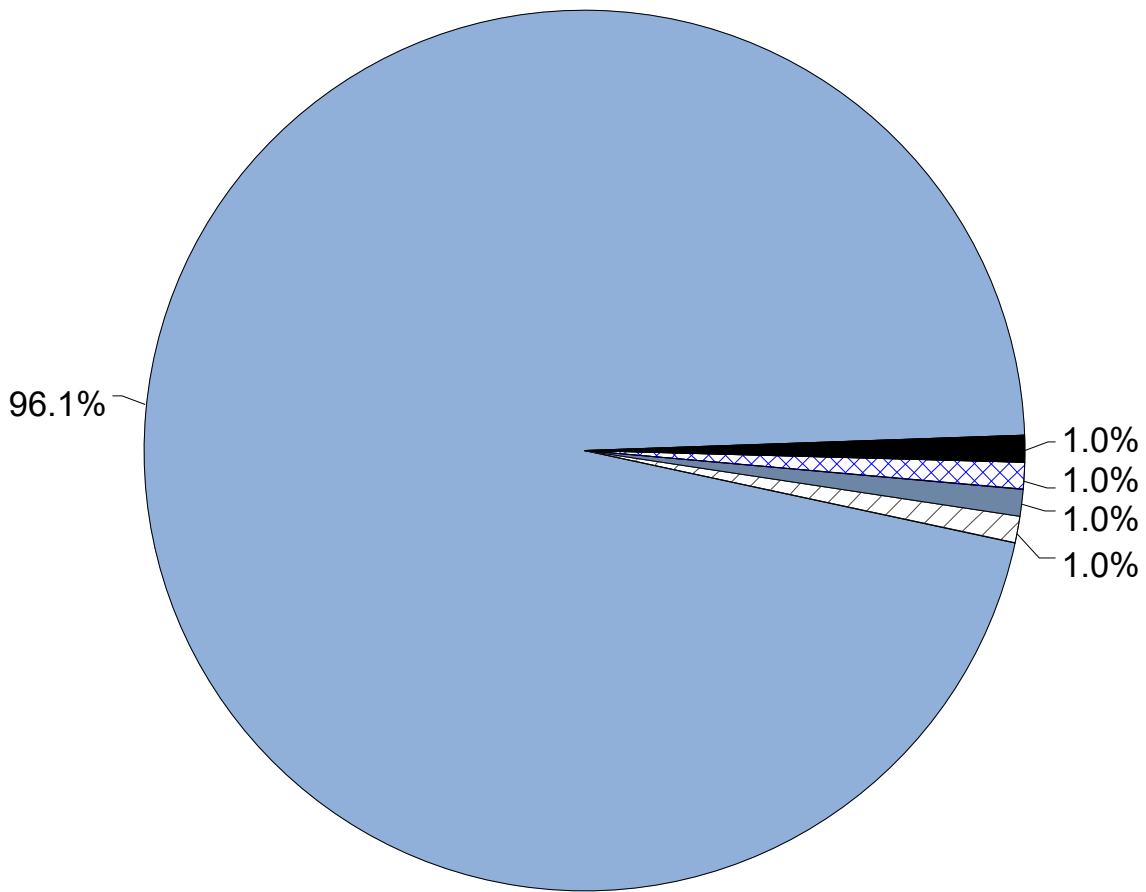


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
57 (32.9)	25 (22.3)	35 (26.9)	56 (31.1)	114 (50.2)	83 (51.2)	77 (54.6)	84 (57.1)	54 (52.9)	70 (68.6)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
102 (61.8)	68 (59.1)	93 (72.1)	101 (79.5)	95 (64.6)	104 (70.7)	67 (58.3)	80 (66.1)	49 (60.5)	58 (64.4)

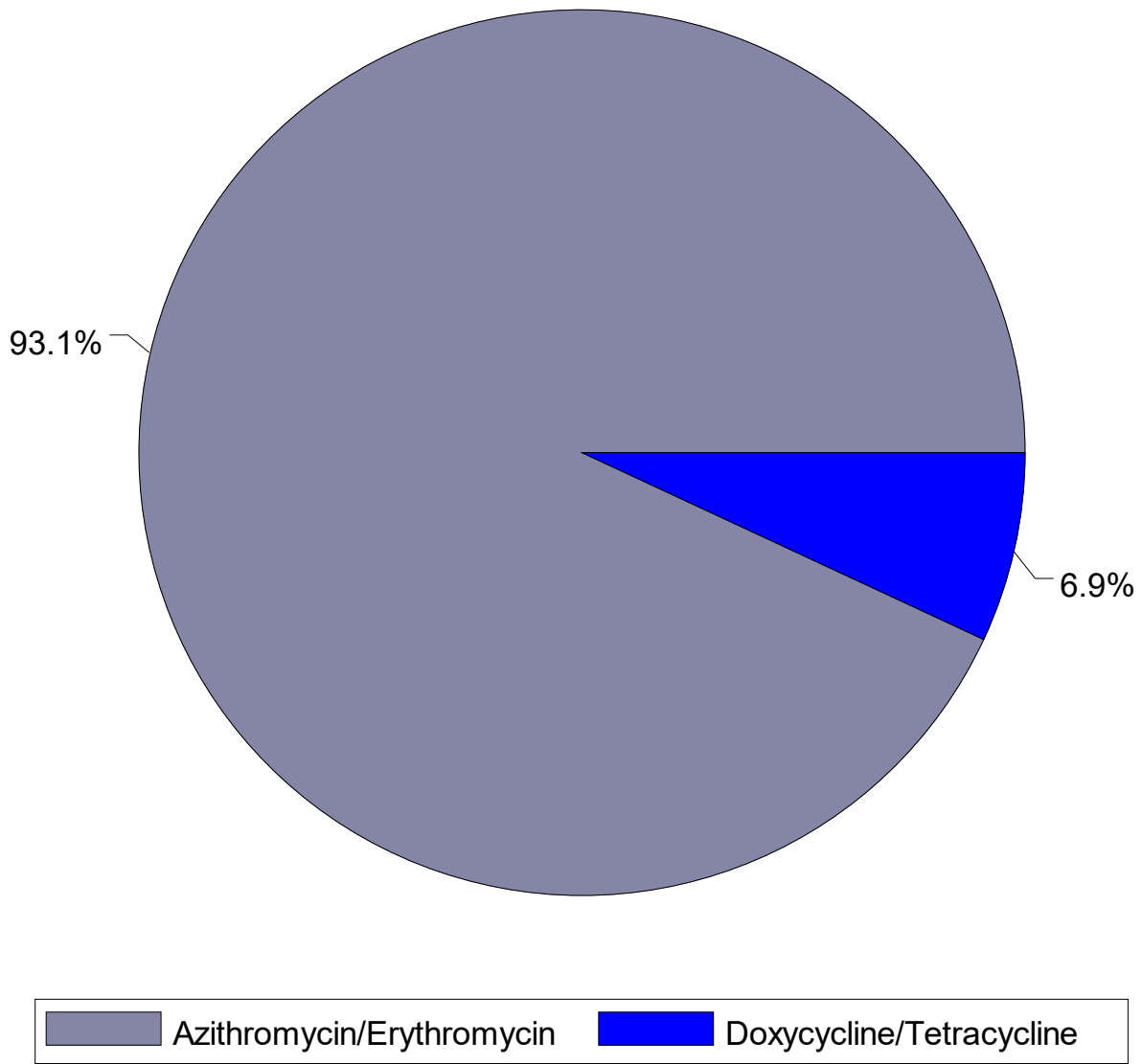
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2020



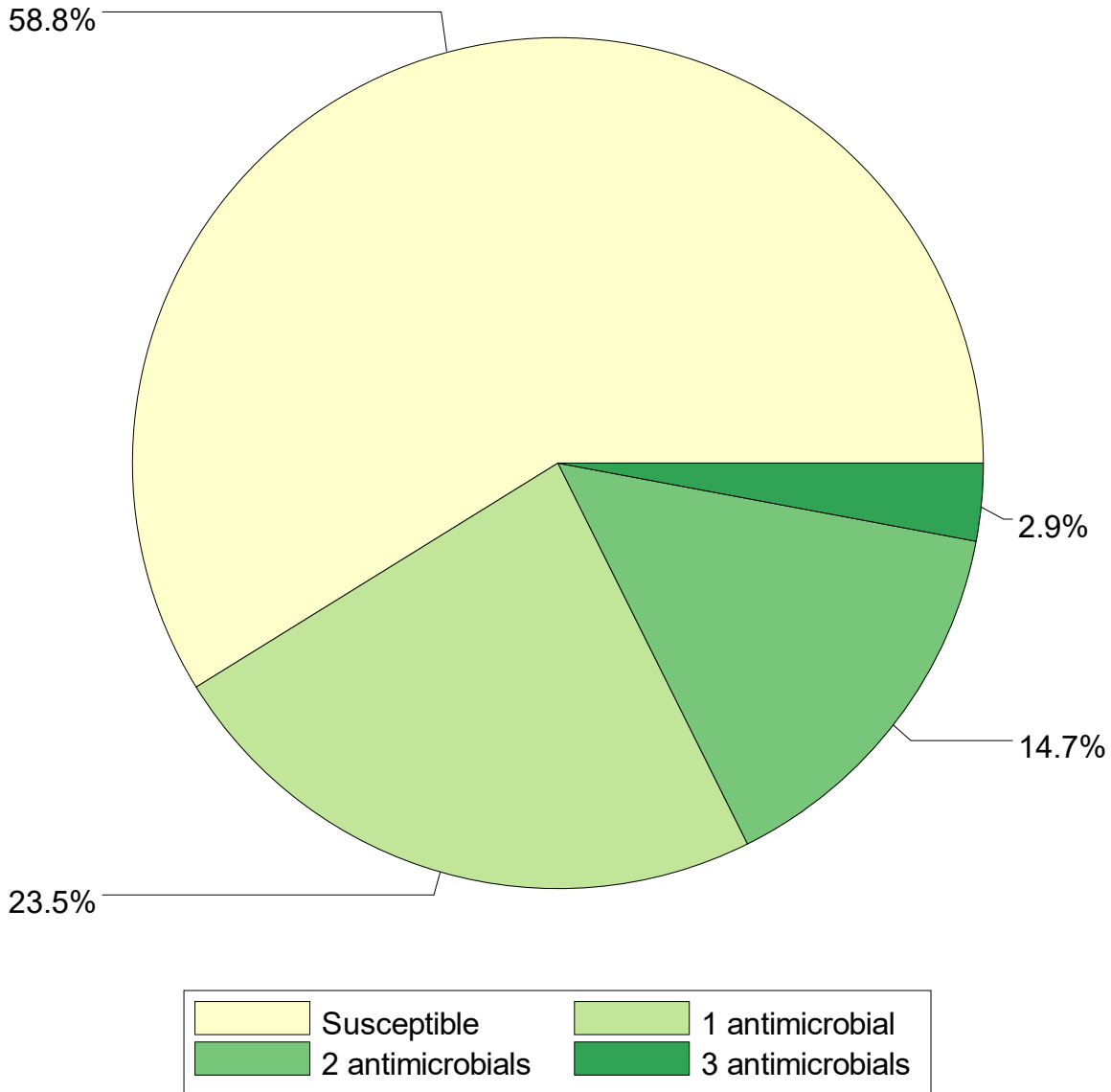
Primary Treatment	Count	Percentage
None	1	1.0
Ceftriaxone 250 mg	98	96.1
Cefixime	1	1.0
Gentamicin	1	1.0
Other	1	1.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	94	93.1
Doxycycline/Tetracycline	7	6.9

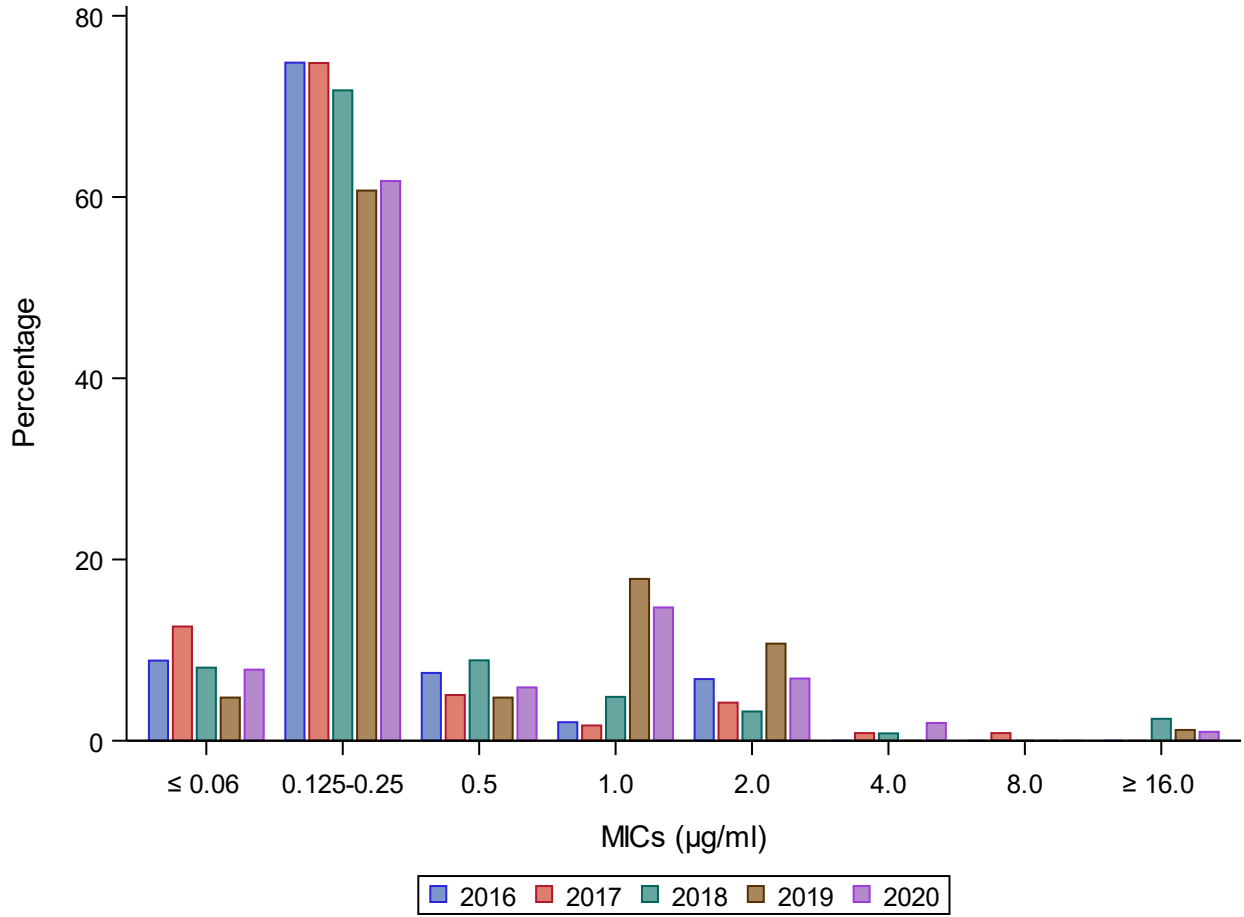
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	60	58.8
1 antimicrobial	24	23.5
2 antimicrobials	15	14.7
3 antimicrobials	3	2.9
4+ antimicrobials	0	0.0

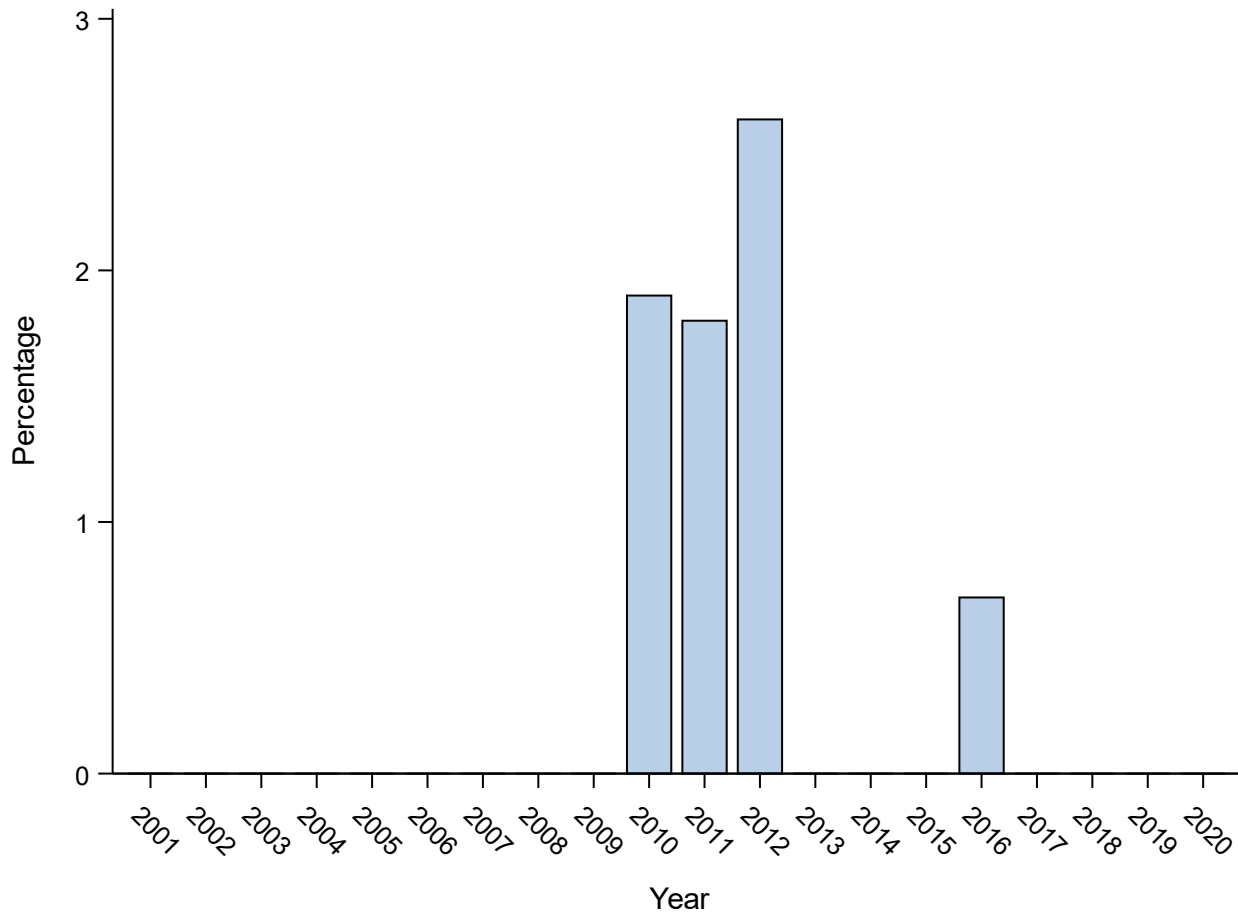
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2016-2020



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
2016	13 (8.8)	110 (74.8)	11 (7.5)	3 (2.0)	10 (6.8)	0 (0.0)	0 (0.0)	0 (0.0)	147
2017	15 (12.6)	89 (74.8)	6 (5.0)	2 (1.7)	5 (4.2)	1 (0.8)	1 (0.8)	0 (0.0)	119
2018	10 (8.1)	89 (71.8)	11 (8.9)	6 (4.8)	4 (3.2)	1 (0.8)	0 (0.0)	3 (2.4)	124
2019	4 (4.8)	51 (60.7)	4 (4.8)	15 (17.9)	9 (10.7)	0 (0.0)	0 (0.0)	1 (1.2)	84
2020	8 (7.8)	63 (61.8)	6 (5.9)	15 (14.7)	7 (6.9)	2 (2.0)	0 (0.0)	1 (1.0)	102

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2001-2020

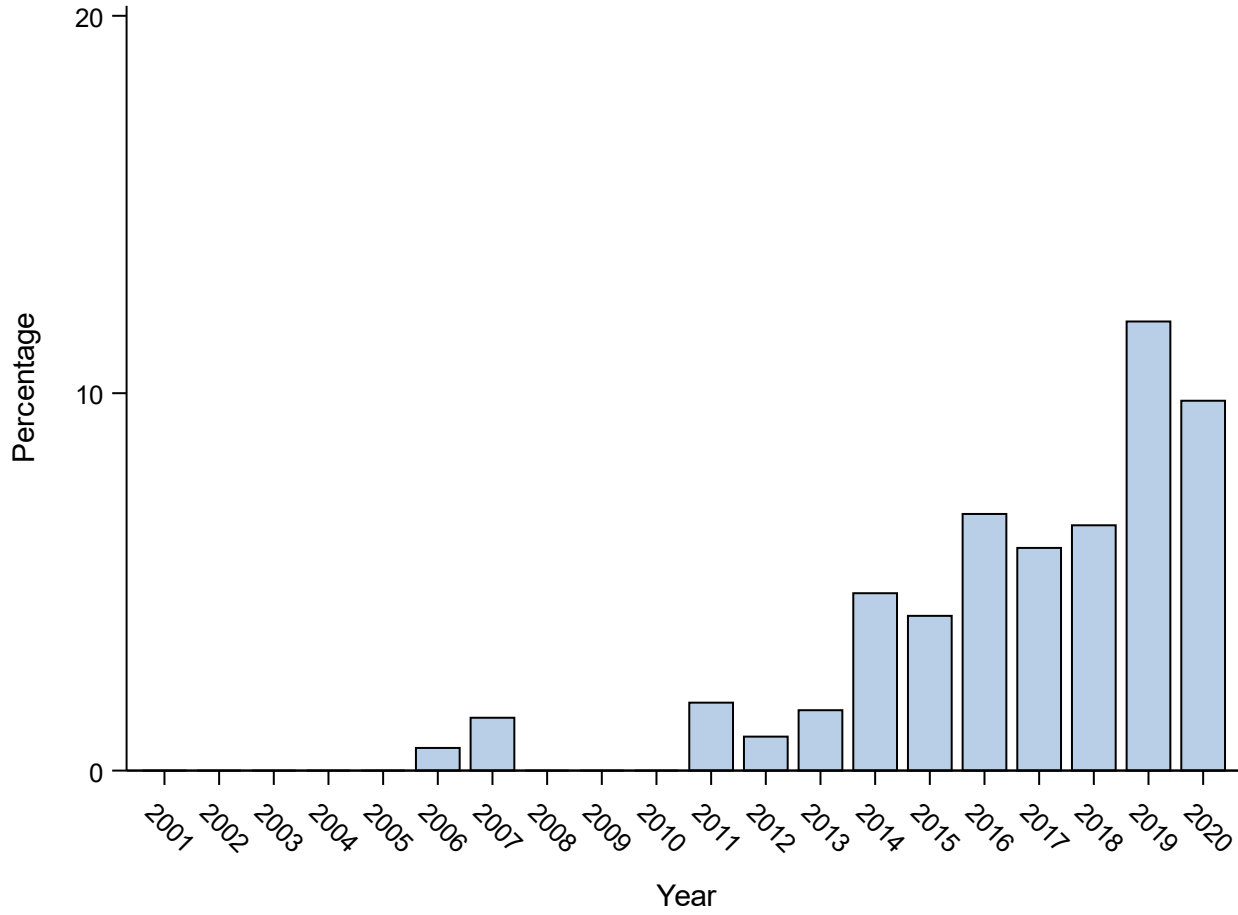


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
3 (1.8)	3 (2.6)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2001-2020

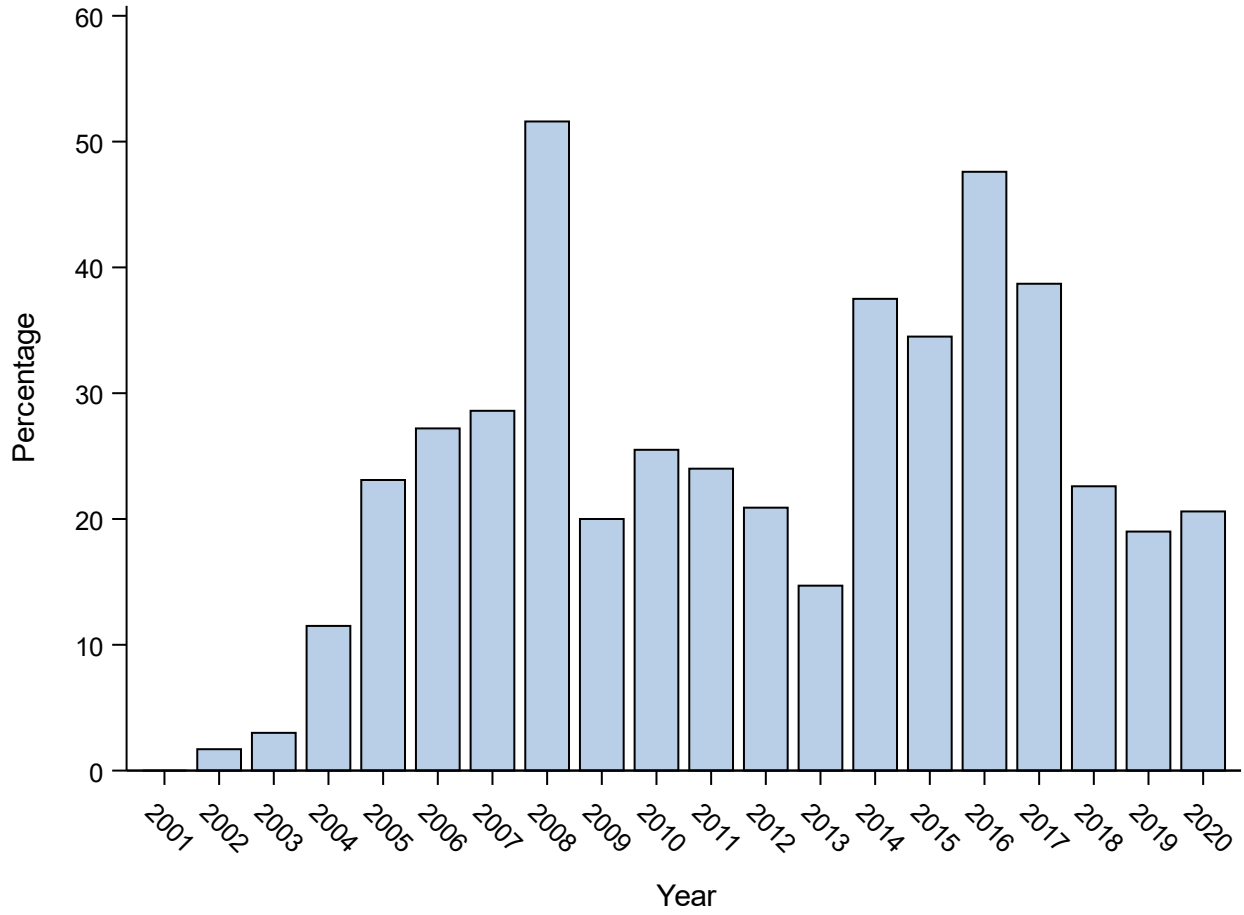


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	2 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
3 (1.8)	1 (0.9)	2 (1.6)	6 (4.7)	6 (4.1)	10 (6.8)	7 (5.9)	8 (6.5)	10 (11.9)	10 (9.8)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Portland, Oregon, 2001-2020

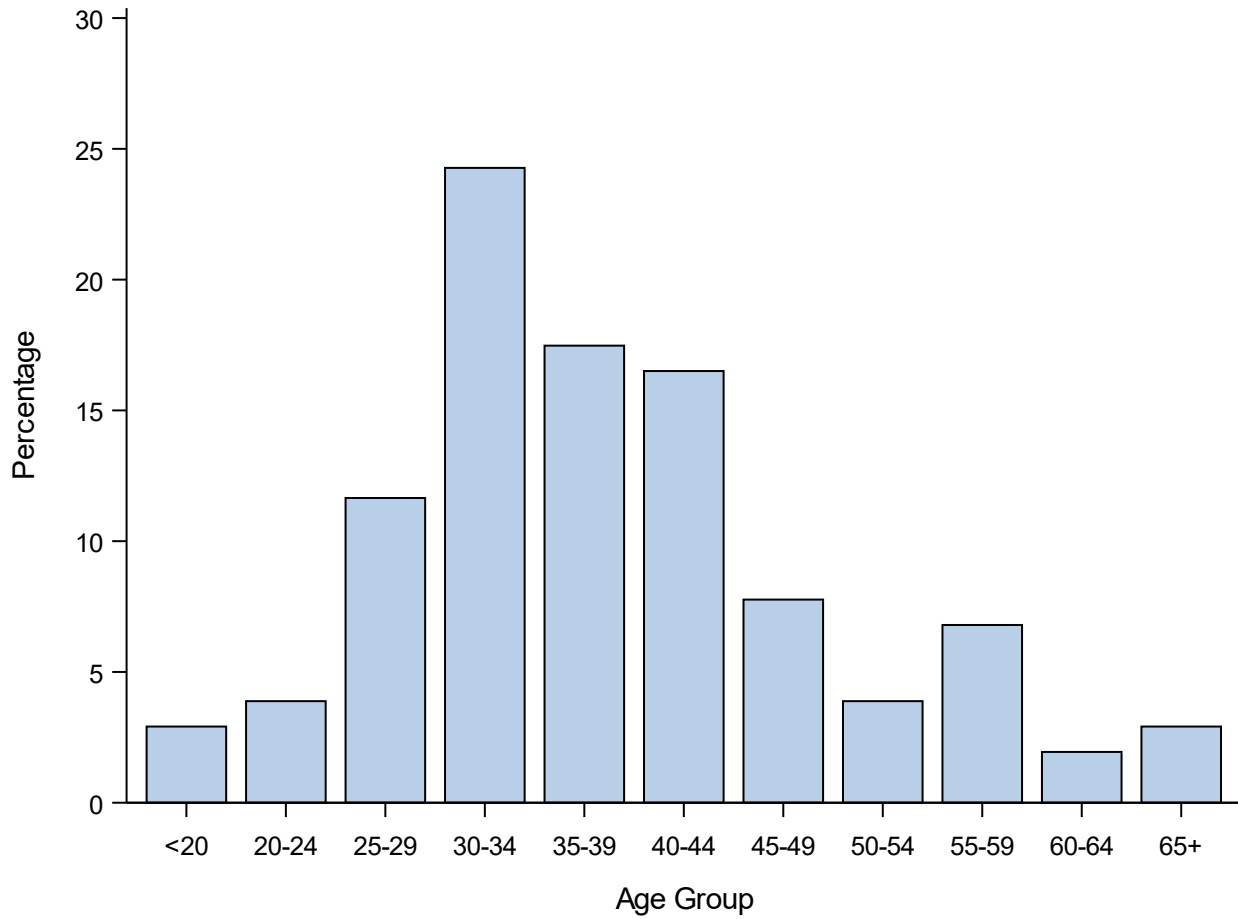


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	2 (1.7)	4 (3.0)	22 (11.5)	55 (23.1)	46 (27.2)	42 (28.6)	81 (51.6)	21 (20.0)	27 (25.5)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
40 (24.0)	24 (20.9)	19 (14.7)	48 (37.5)	51 (34.5)	70 (47.6)	46 (38.7)	28 (22.6)	16 (19.0)	21 (20.6)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

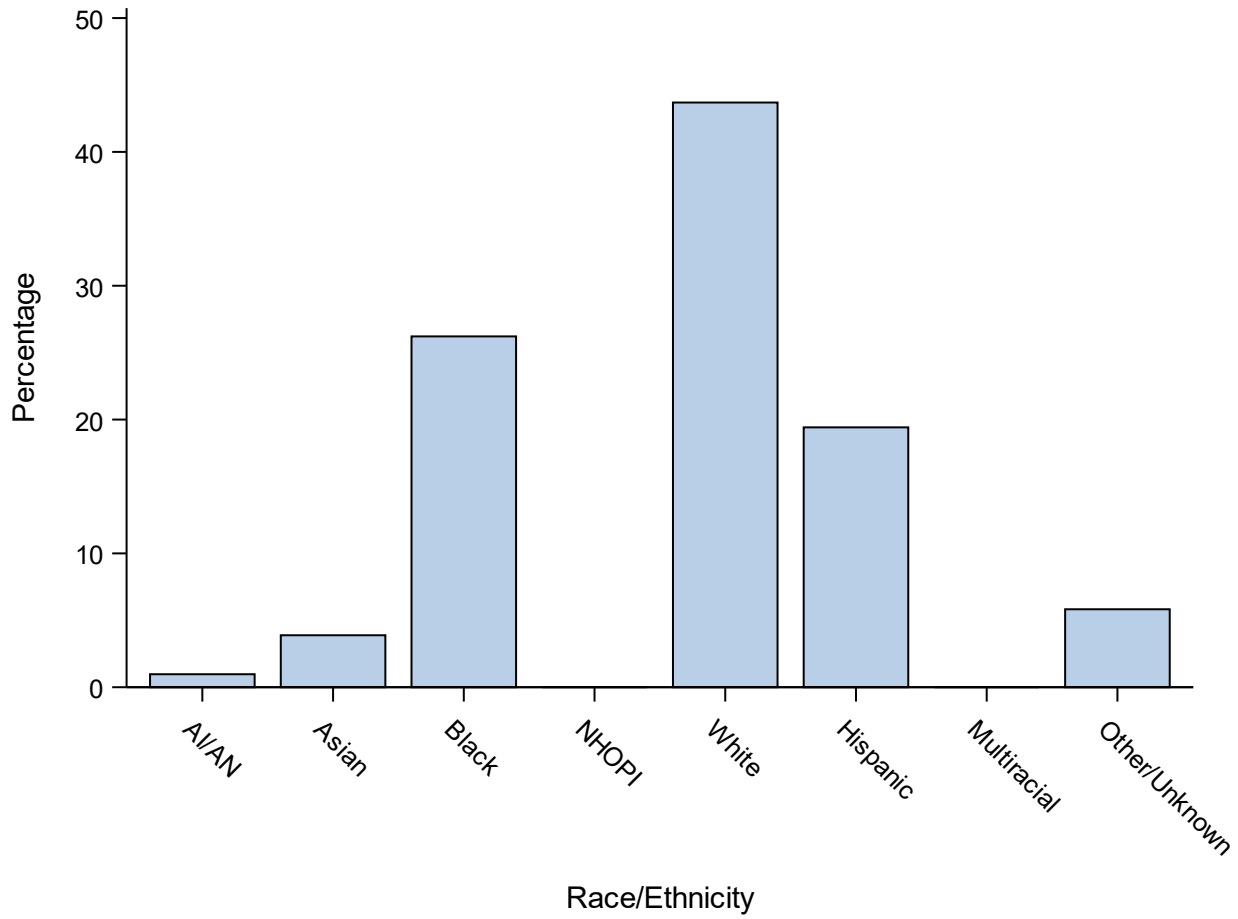
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
3 (2.9)	4 (3.9)	12 (11.7)	25 (24.3)	18 (17.5)	17 (16.5)	8 (7.8)	4 (3.9)	7 (6.8)	2 (1.9)	3 (2.9)	103

Note: Cases with unknown age were excluded.

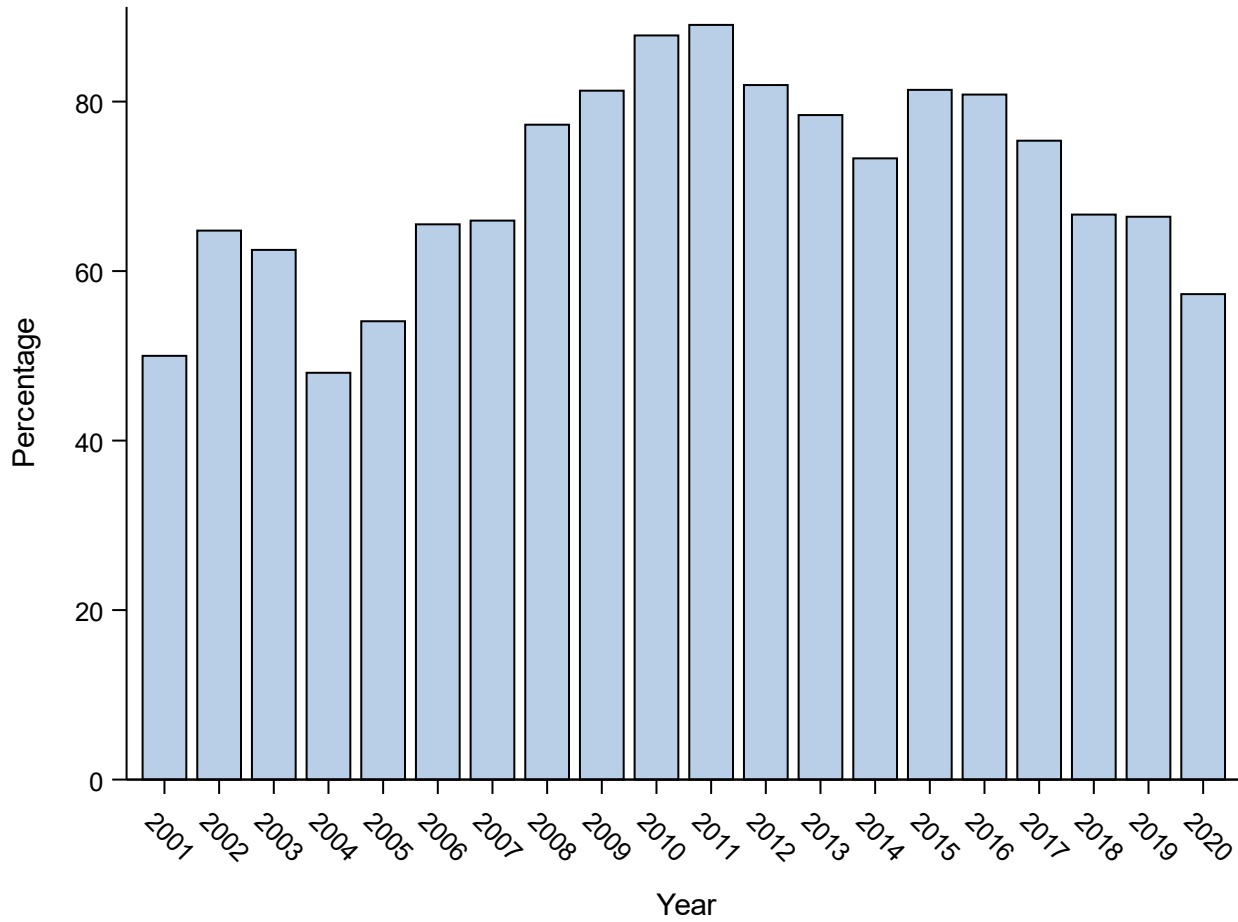
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (1.0)	4 (3.9)	27 (26.2)	0 (0.0)	45 (43.7)	20 (19.4)	0 (0.0)	6 (5.8)	103

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2001-2020

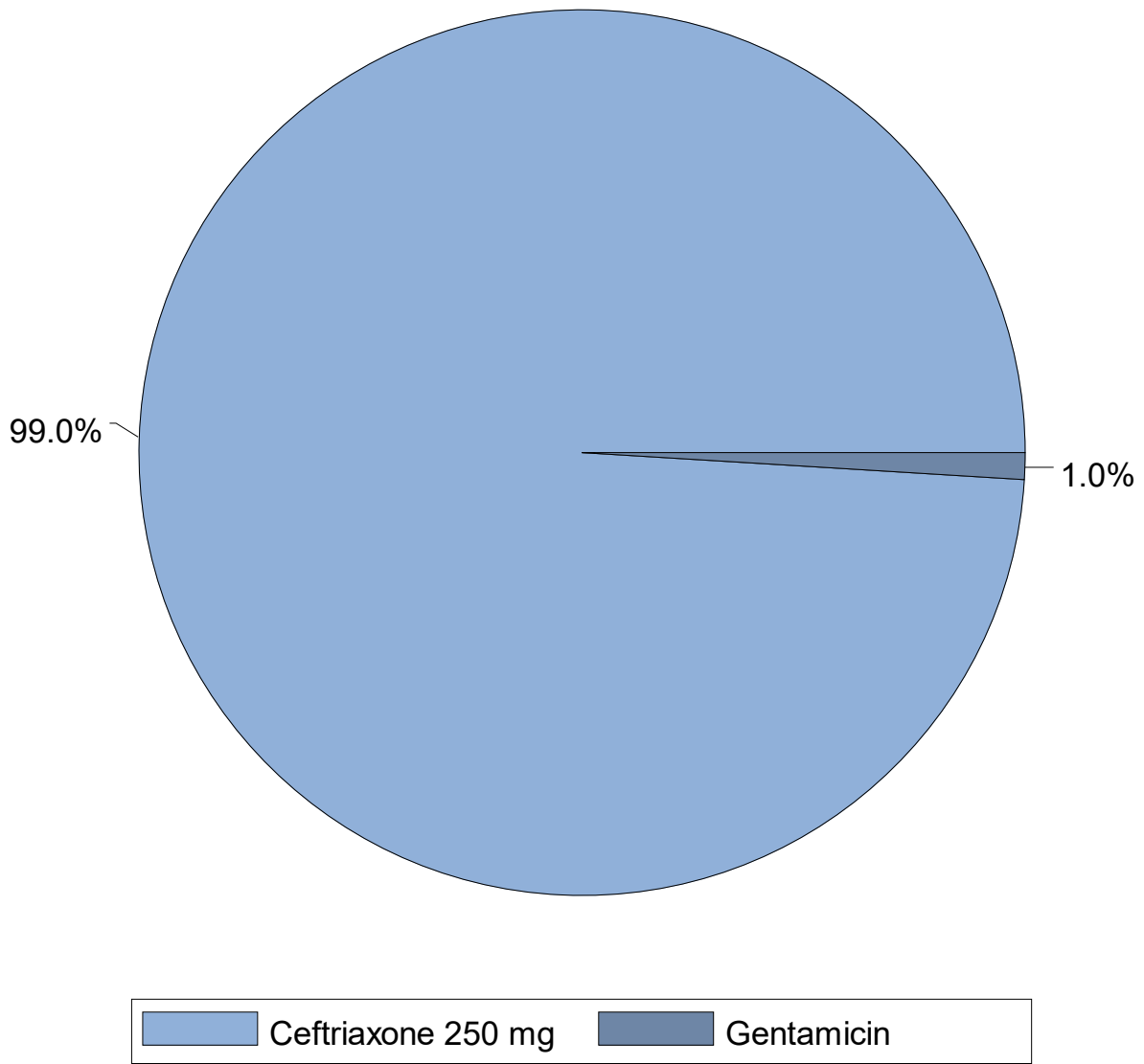


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
116 (50.0)	160 (64.8)	160 (62.5)	120 (48.0)	159 (54.1)	171 (65.5)	124 (66.0)	136 (77.3)	139 (81.3)	180 (87.8)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
187 (89.0)	168 (82.0)	138 (78.4)	151 (73.3)	153 (81.4)	156 (80.8)	147 (75.4)	98 (66.7)	87 (66.4)	59 (57.3)

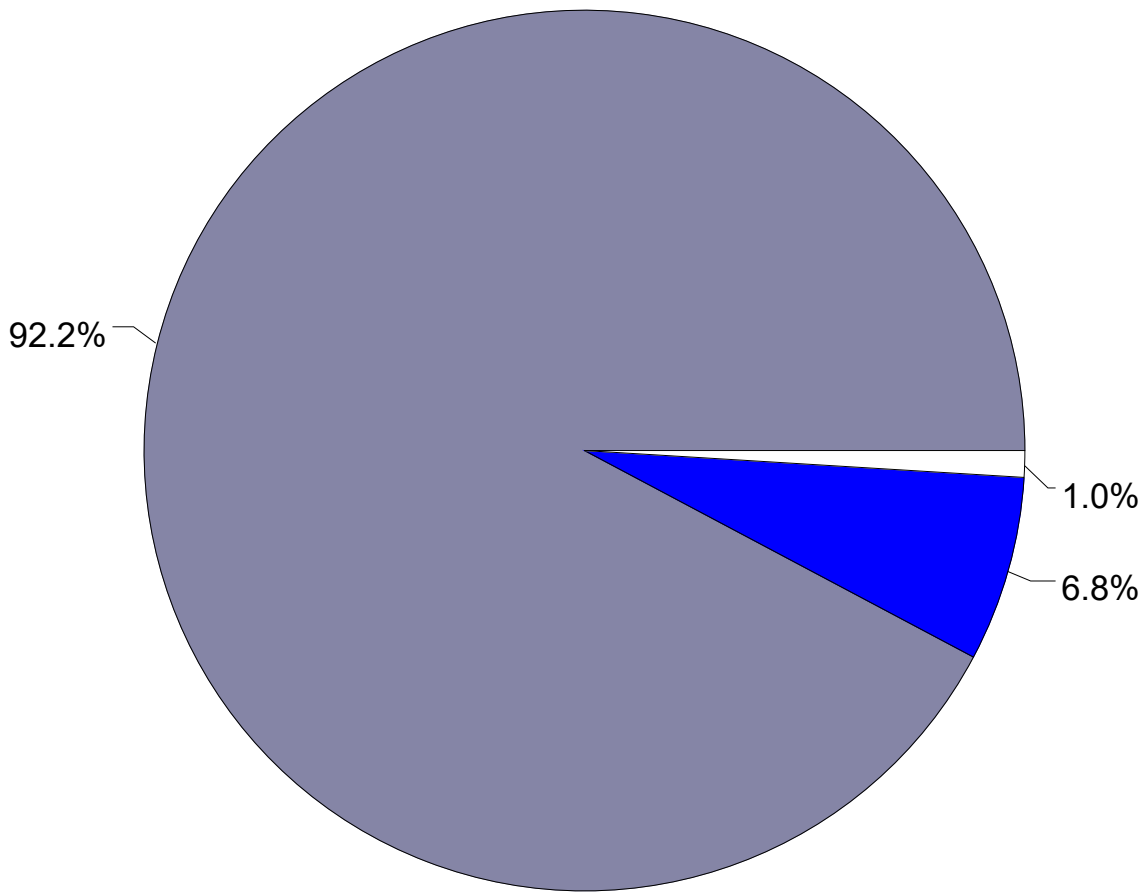
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2020



Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	102	99.0
Gentamicin	1	1.0

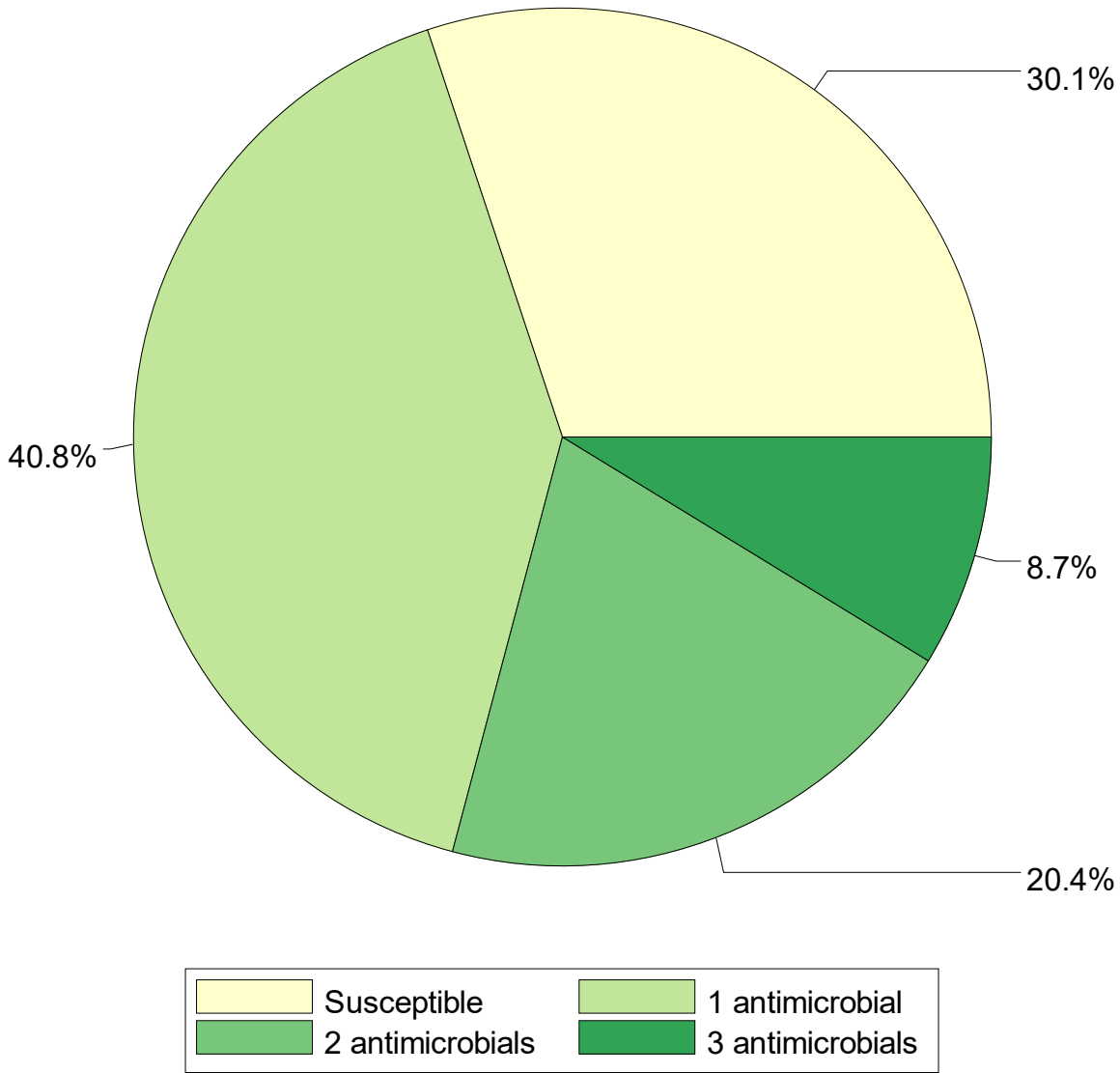
Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2020



 Azithromycin/Erythromycin	 Doxycycline/Tetracycline
 None/Other	

Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	95	92.2
Doxycycline/Tetracycline	7	6.8
None/Other	1	1.0

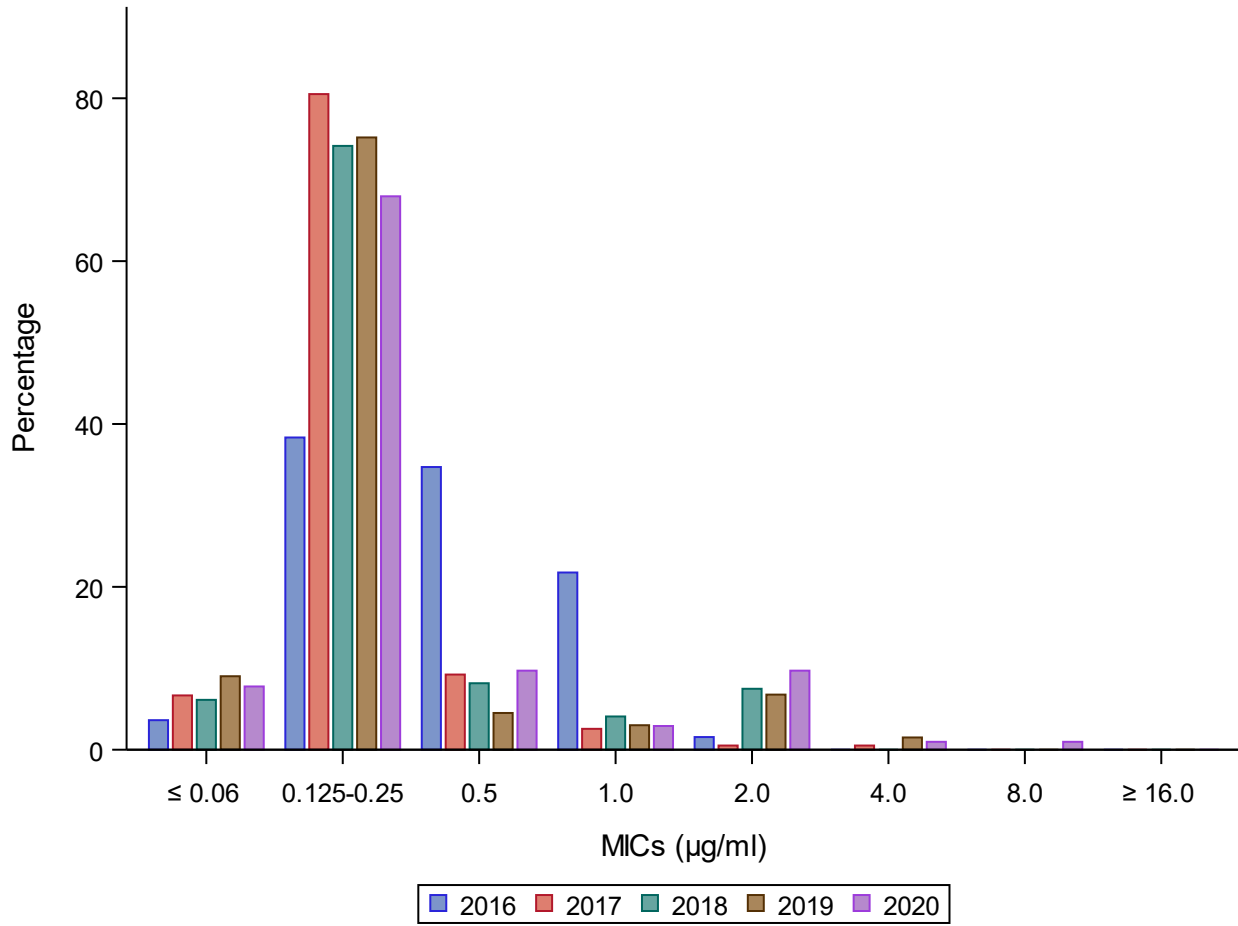
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	31	30.1
1 antimicrobial	42	40.8
2 antimicrobials	21	20.4
3 antimicrobials	9	8.7
4+ antimicrobials	0	0.0

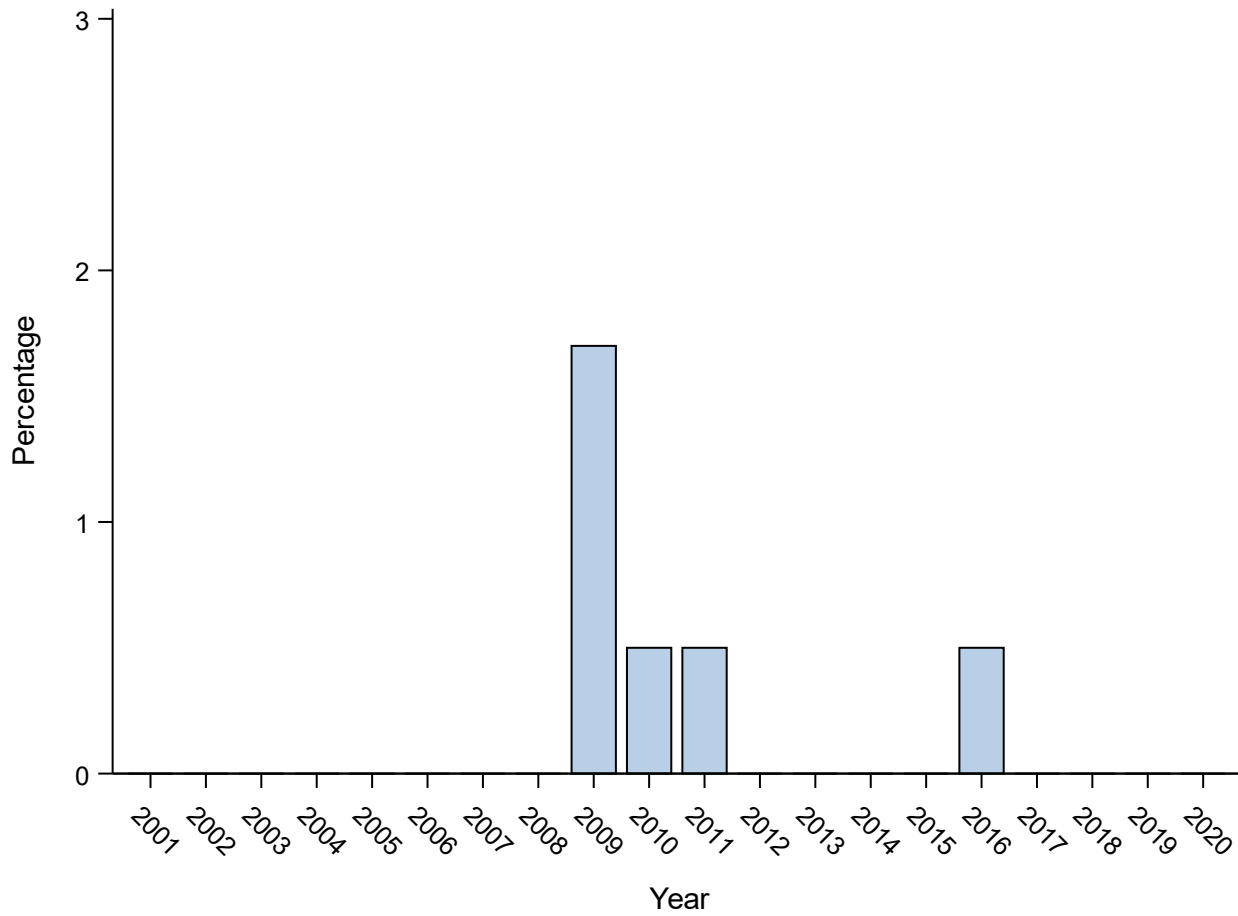
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/mL}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2016-2020



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
2016	7 (3.6)	74 (38.3)	67 (34.7)	42 (21.8)	3 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	193
2017	13 (6.7)	157 (80.5)	18 (9.2)	5 (2.6)	1 (0.5)	1 (0.5)	0 (0.0)	0 (0.0)	195
2018	9 (6.1)	109 (74.1)	12 (8.2)	6 (4.1)	11 (7.5)	0 (0.0)	0 (0.0)	0 (0.0)	147
2019	12 (9.0)	100 (75.2)	6 (4.5)	4 (3.0)	9 (6.8)	2 (1.5)	0 (0.0)	0 (0.0)	133
2020	8 (7.8)	70 (68.0)	10 (9.7)	3 (2.9)	10 (9.7)	1 (1.0)	1 (1.0)	0 (0.0)	103

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2001-2020

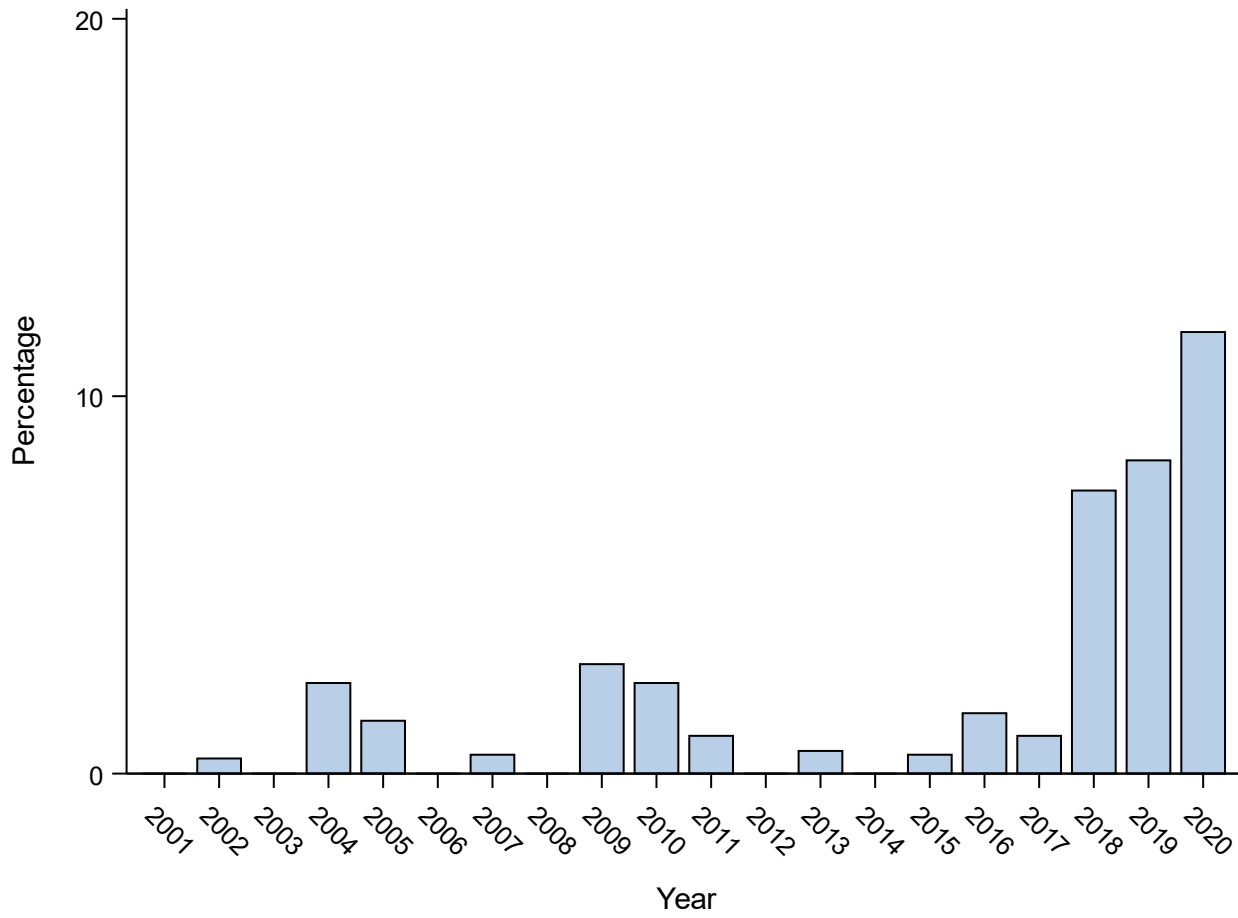


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.7)	1 (0.5)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), San Diego, California, 2001-2020

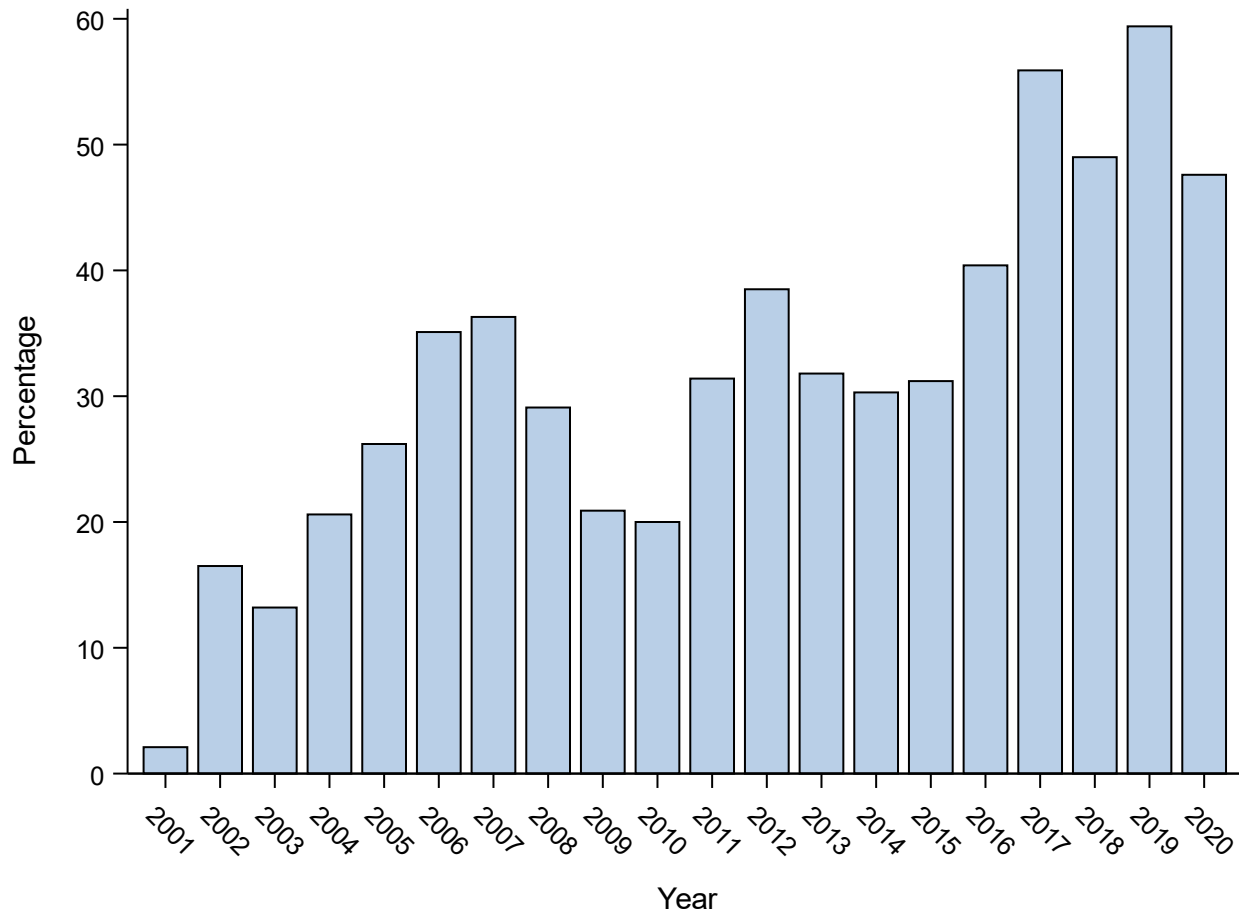


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.4)	0 (0.0)	6 (2.4)	4 (1.4)	0 (0.0)	1 (0.5)	0 (0.0)	5 (2.9)	5 (2.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
2 (1.0)	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.5)	3 (1.6)	2 (1.0)	11 (7.5)	11 (8.3)	12 (11.7)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin,
Gonococcal Isolate Surveillance Project (GISP),
San Diego, California, 2001-2020

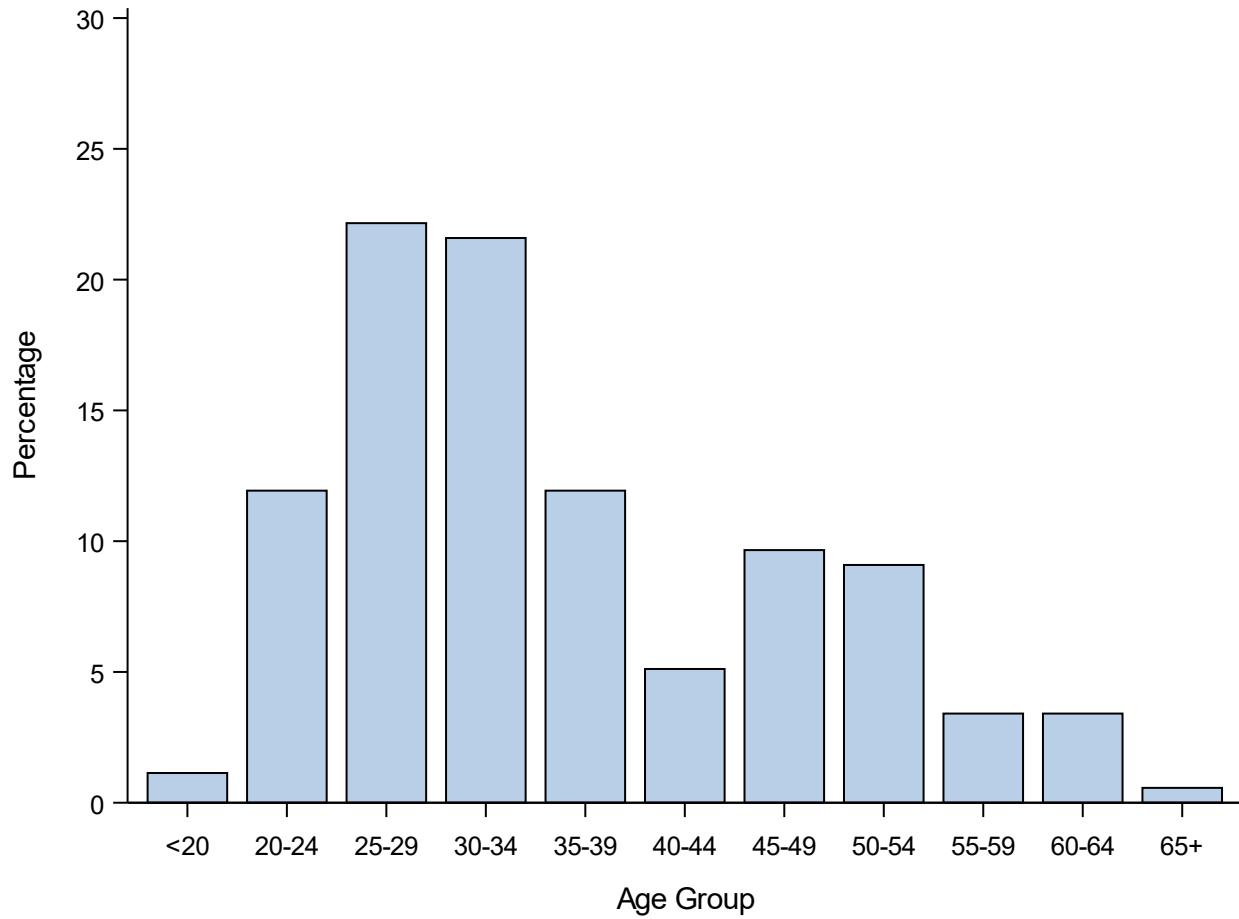


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
5 (2.1)	41 (16.5)	34 (13.2)	52 (20.6)	77 (26.2)	92 (35.1)	69 (36.3)	53 (29.1)	36 (20.9)	41 (20.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
66 (31.4)	79 (38.5)	56 (31.8)	66 (30.3)	59 (31.2)	78 (40.4)	109 (55.9)	72 (49.0)	79 (59.4)	49 (47.6)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$.

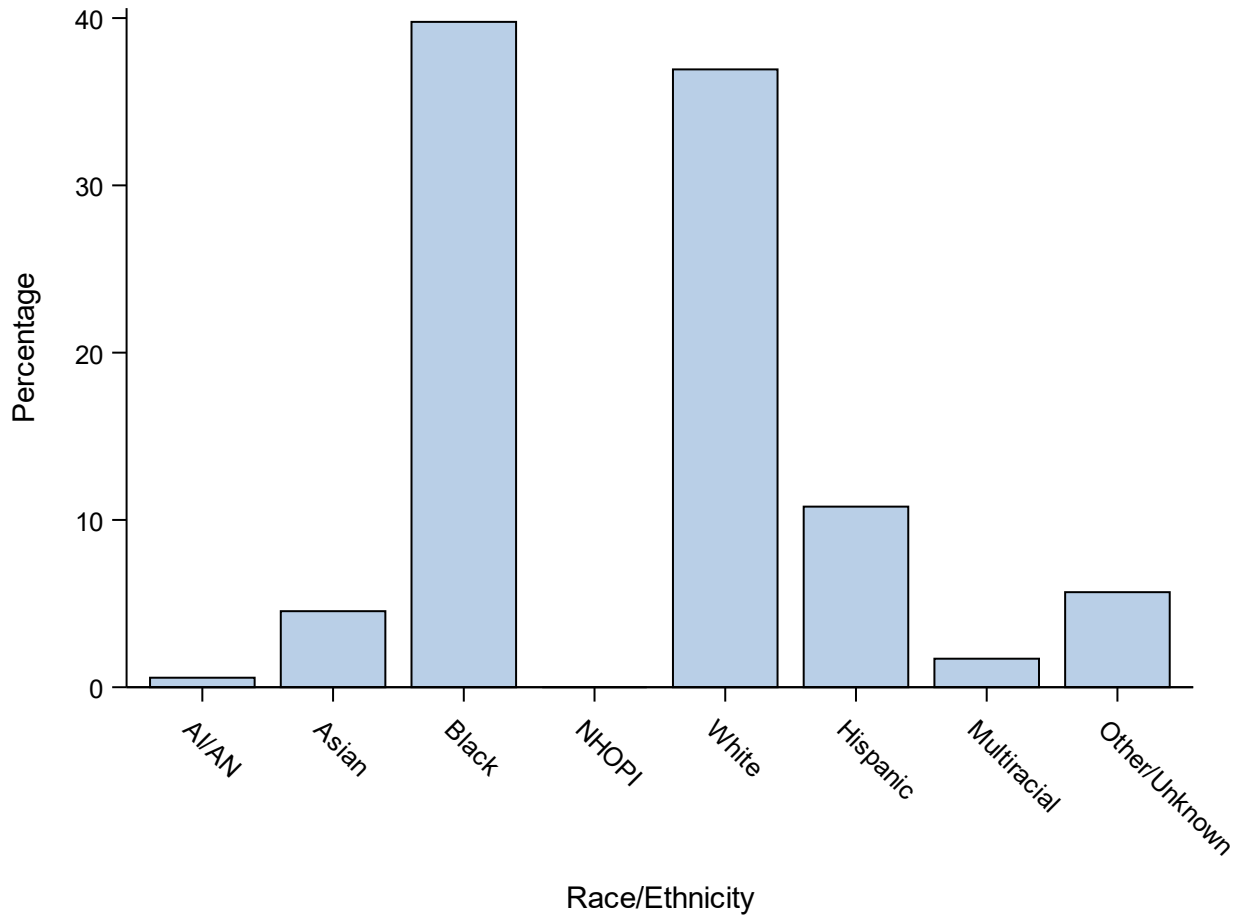
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (1.1)	21 (11.9)	39 (22.2)	38 (21.6)	21 (11.9)	9 (5.1)	17 (9.7)	16 (9.1)	6 (3.4)	6 (3.4)	1 (0.6)	176

Note: Cases with unknown age were excluded.

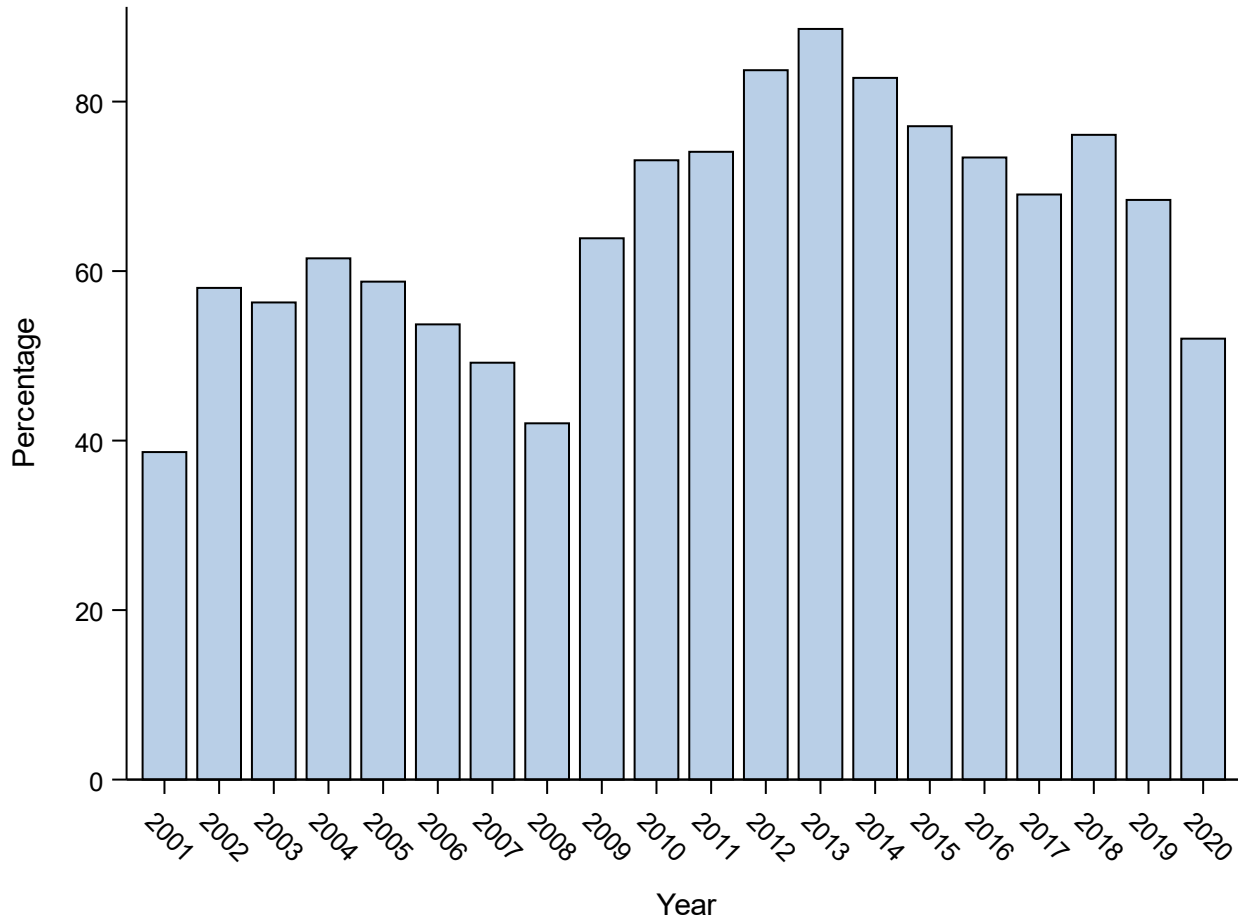
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
1 (0.6)	8 (4.5)	70 (39.8)	0 (0.0)	65 (36.9)	19 (10.8)	3 (1.7)	10 (5.7)	176

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2001-2020

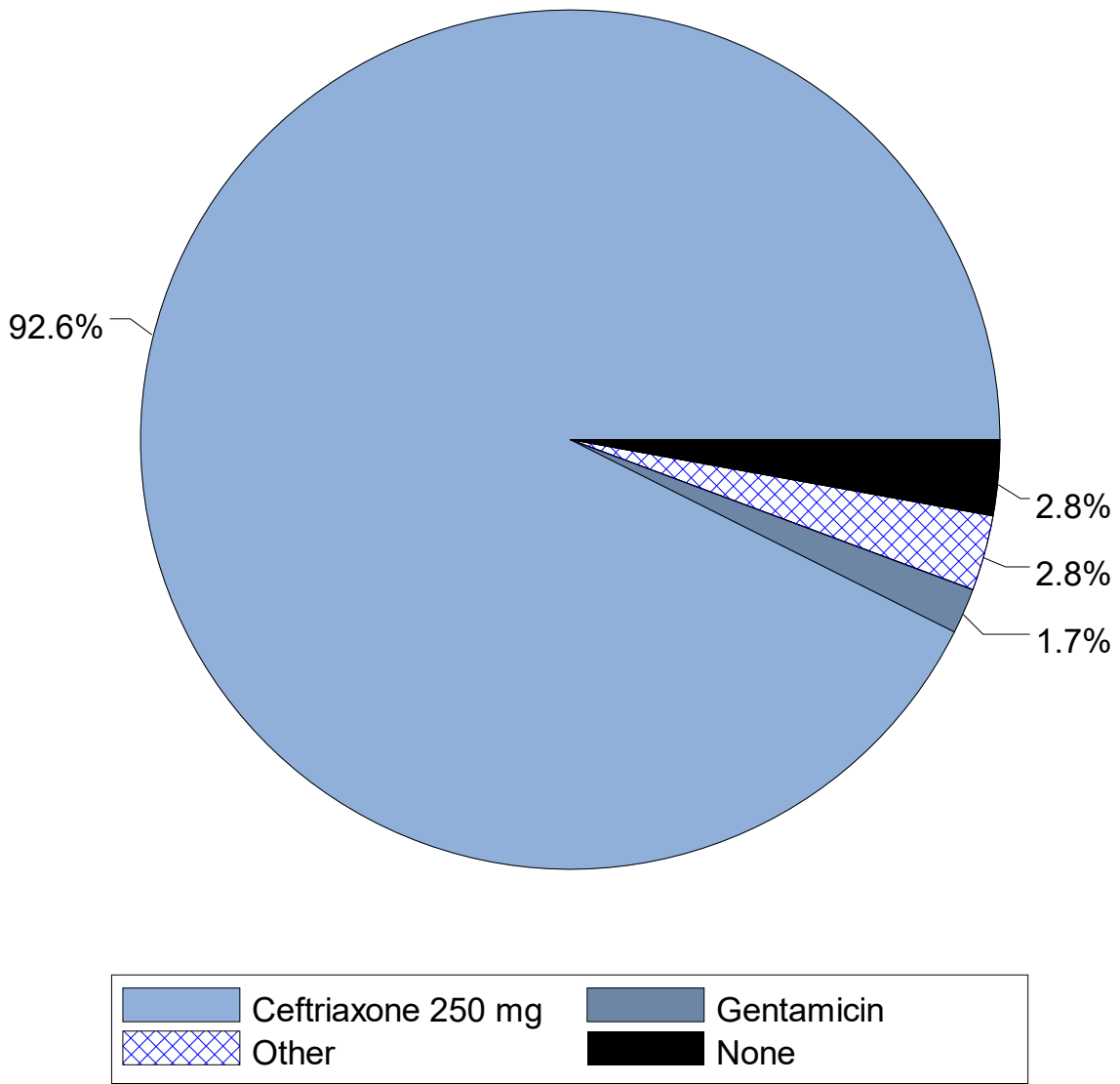


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
97 (38.6)	152 (58.0)	143 (56.3)	139 (61.5)	151 (58.8)	123 (53.7)	91 (49.2)	66 (42.0)	99 (63.9)	171 (73.1)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
120 (74.1)	113 (83.7)	124 (88.6)	154 (82.8)	138 (77.1)	138 (73.4)	165 (69.0)	159 (76.1)	145 (68.4)	77 (52.0)

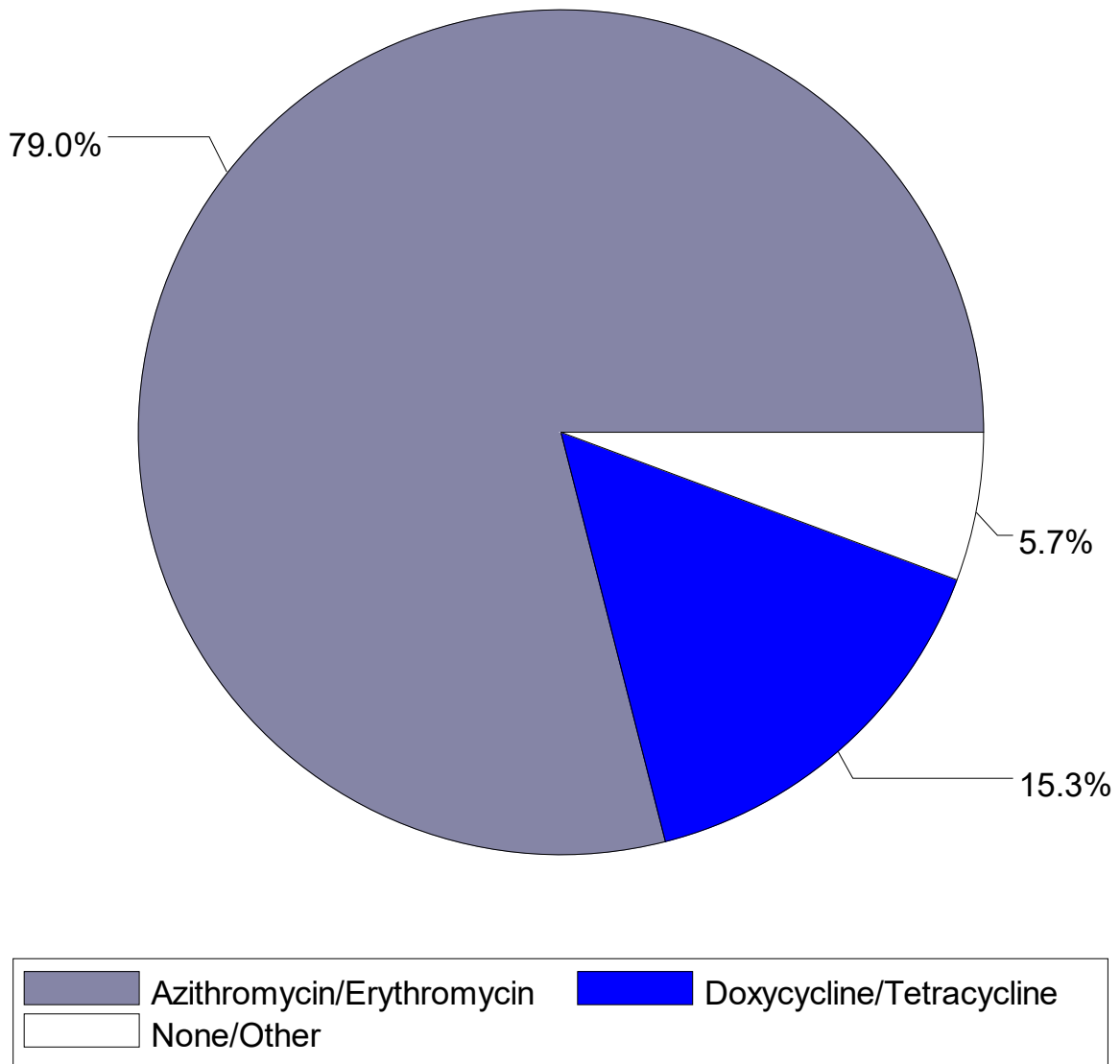
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2020



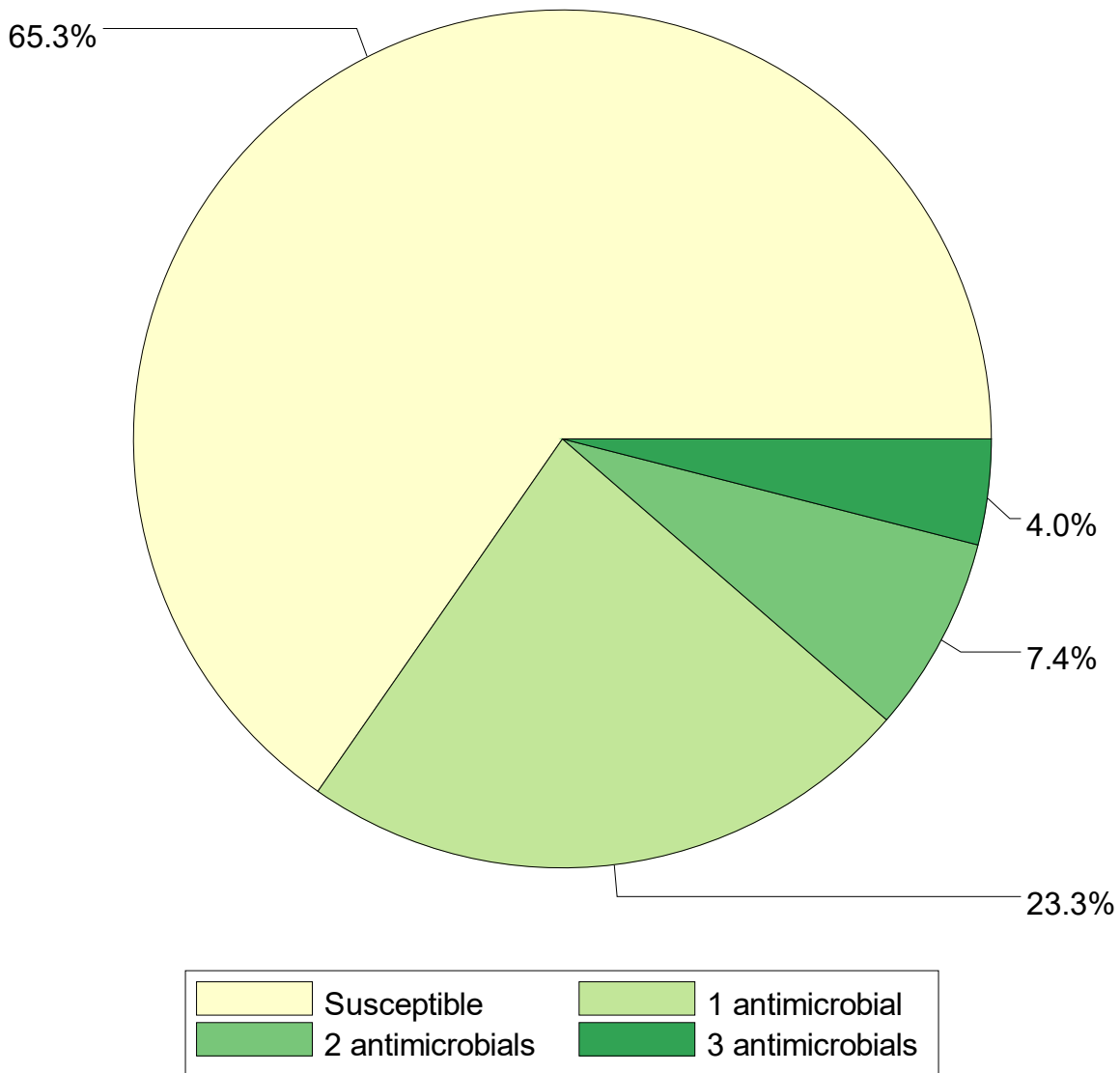
Primary Treatment	Count	Percentage
None	5	2.8
Ceftriaxone 250 mg	163	92.6
Gentamicin	3	1.7
Other	5	2.8

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	139	79.0
Doxycycline/Tetracycline	27	15.3
None/Other	10	5.7

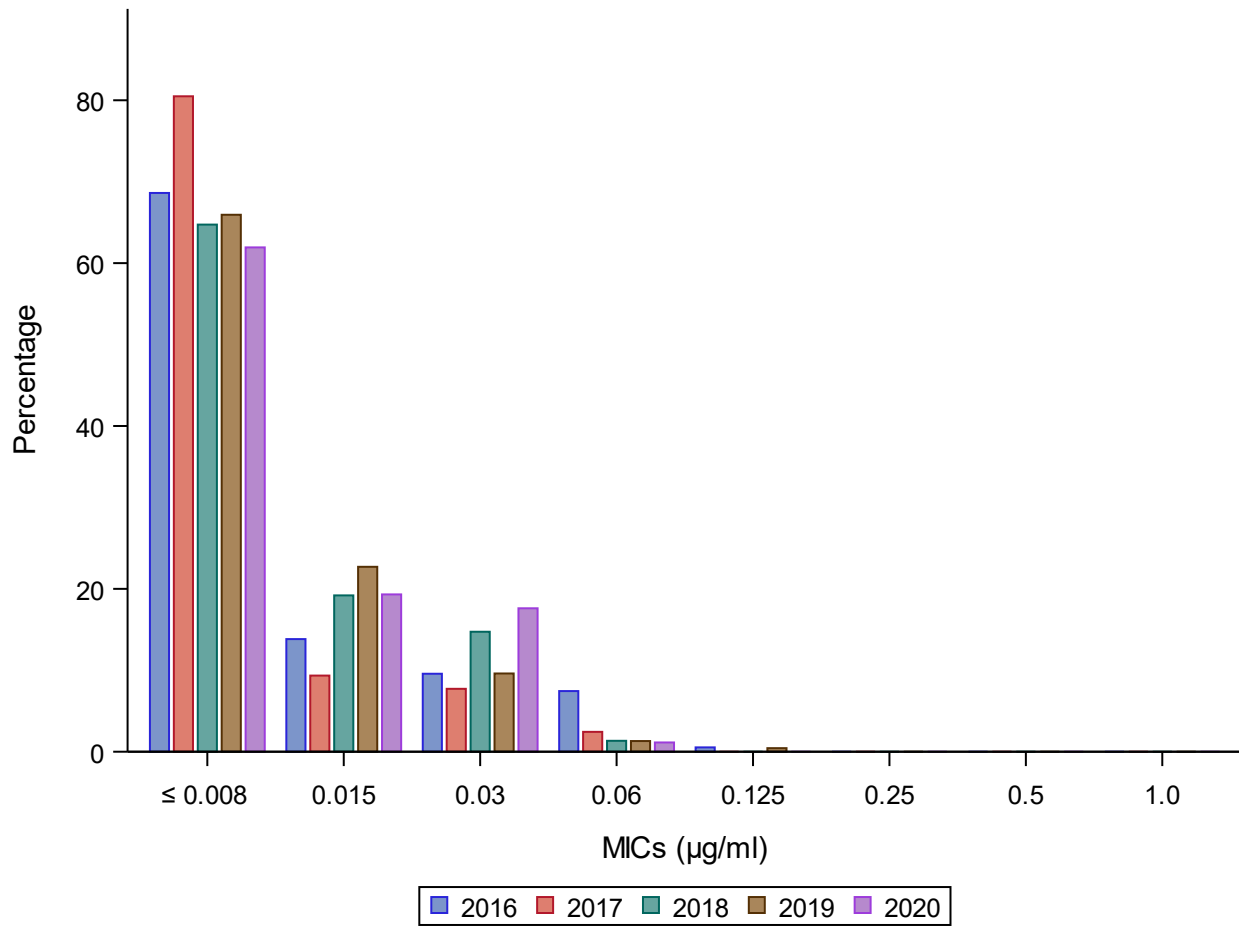
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	115	65.3
1 antimicrobial	41	23.3
2 antimicrobials	13	7.4
3 antimicrobials	7	4.0
4+ antimicrobials	0	0.0

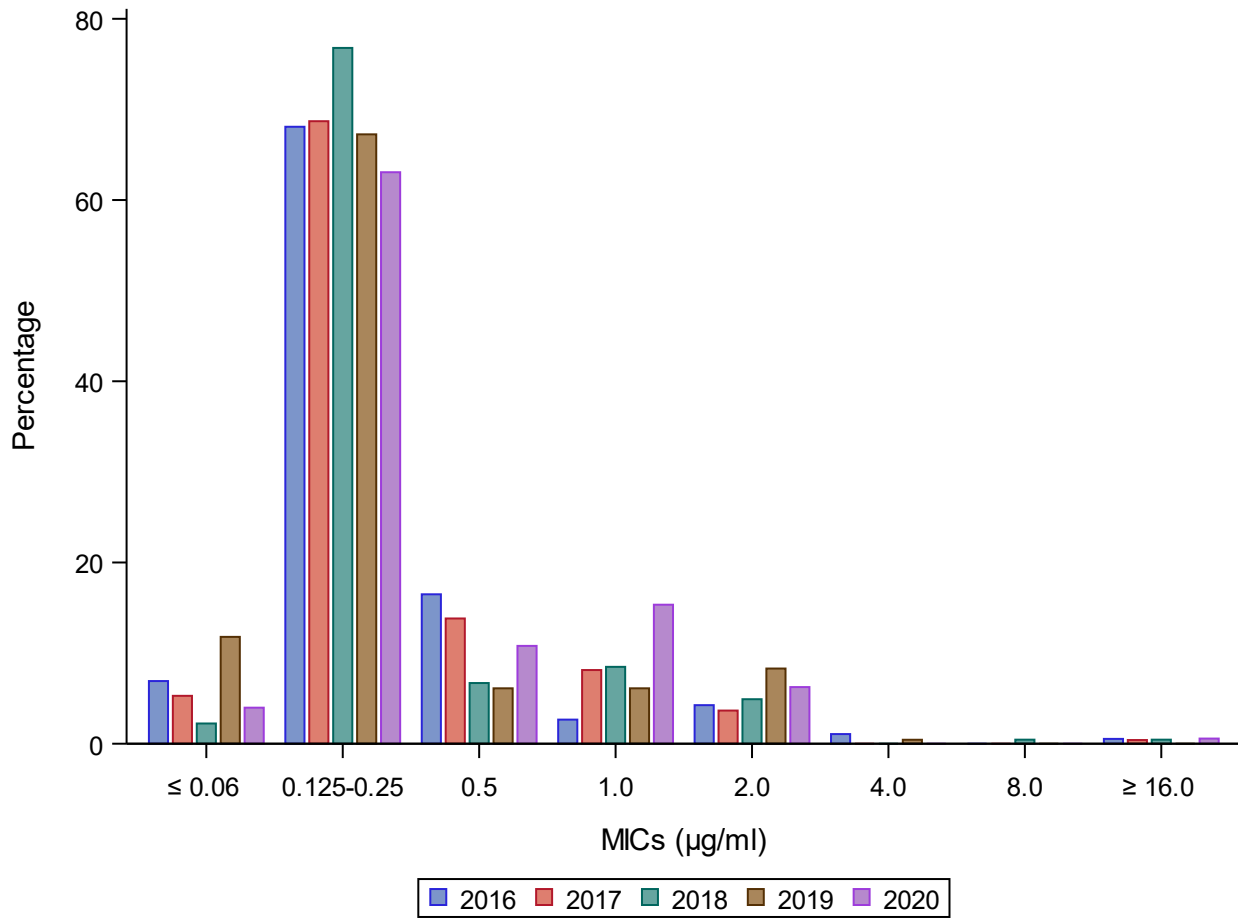
Note: Elevated = Ceftriaxone: MICs ≥ 0.125 $\mu\text{g/mL}$; Cefixime: MICs ≥ 0.25 $\mu\text{g/mL}$; Azithromycin: MICs ≥ 2.0 $\mu\text{g/mL}$; Resistance = Tetracycline: MICs ≥ 2.0 $\mu\text{g/mL}$; Ciprofloxacin: MICs ≥ 1.0 $\mu\text{g/mL}$; Penicillin: MICs ≥ 2.0 $\mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2016-2020



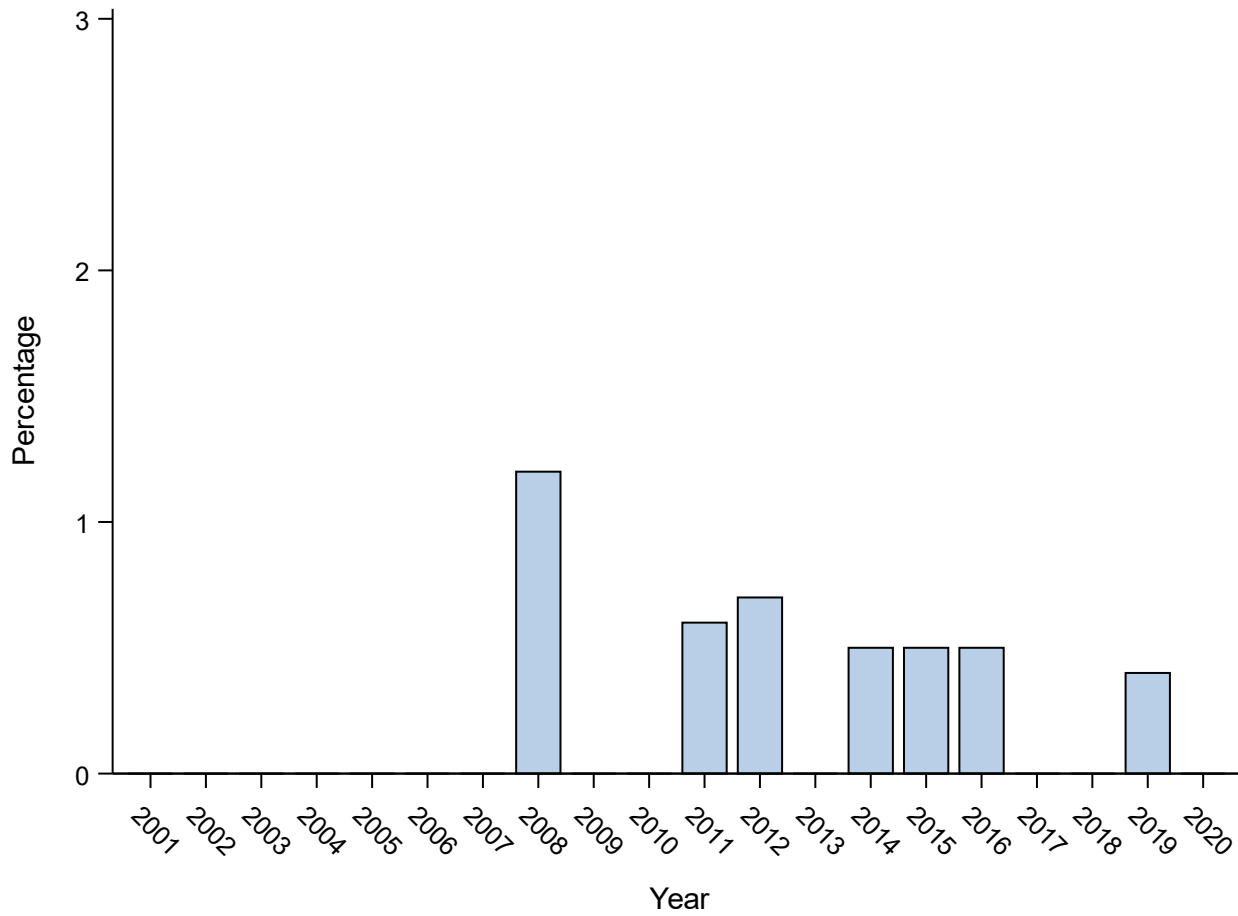
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	129 (68.6)	26 (13.8)	18 (9.6)	14 (7.4)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	188
2017	198 (80.5)	23 (9.3)	19 (7.7)	6 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	246
2018	145 (64.7)	43 (19.2)	33 (14.7)	3 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	224
2019	151 (65.9)	52 (22.7)	22 (9.6)	3 (1.3)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	229
2020	109 (61.9)	34 (19.3)	31 (17.6)	2 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	176

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2016-2020



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
2016	13 (6.9)	128 (68.1)	31 (16.5)	5 (2.7)	8 (4.3)	2 (1.1)	0 (0.0)	1 (0.5)	188
2017	13 (5.3)	169 (68.7)	34 (13.8)	20 (8.1)	9 (3.7)	0 (0.0)	0 (0.0)	1 (0.4)	246
2018	5 (2.2)	172 (76.8)	15 (6.7)	19 (8.5)	11 (4.9)	0 (0.0)	1 (0.4)	1 (0.4)	224
2019	27 (11.8)	154 (67.2)	14 (6.1)	14 (6.1)	19 (8.3)	1 (0.4)	0 (0.0)	0 (0.0)	229
2020	7 (4.0)	111 (63.1)	19 (10.8)	27 (15.3)	11 (6.3)	0 (0.0)	0 (0.0)	1 (0.6)	176

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2001-2020

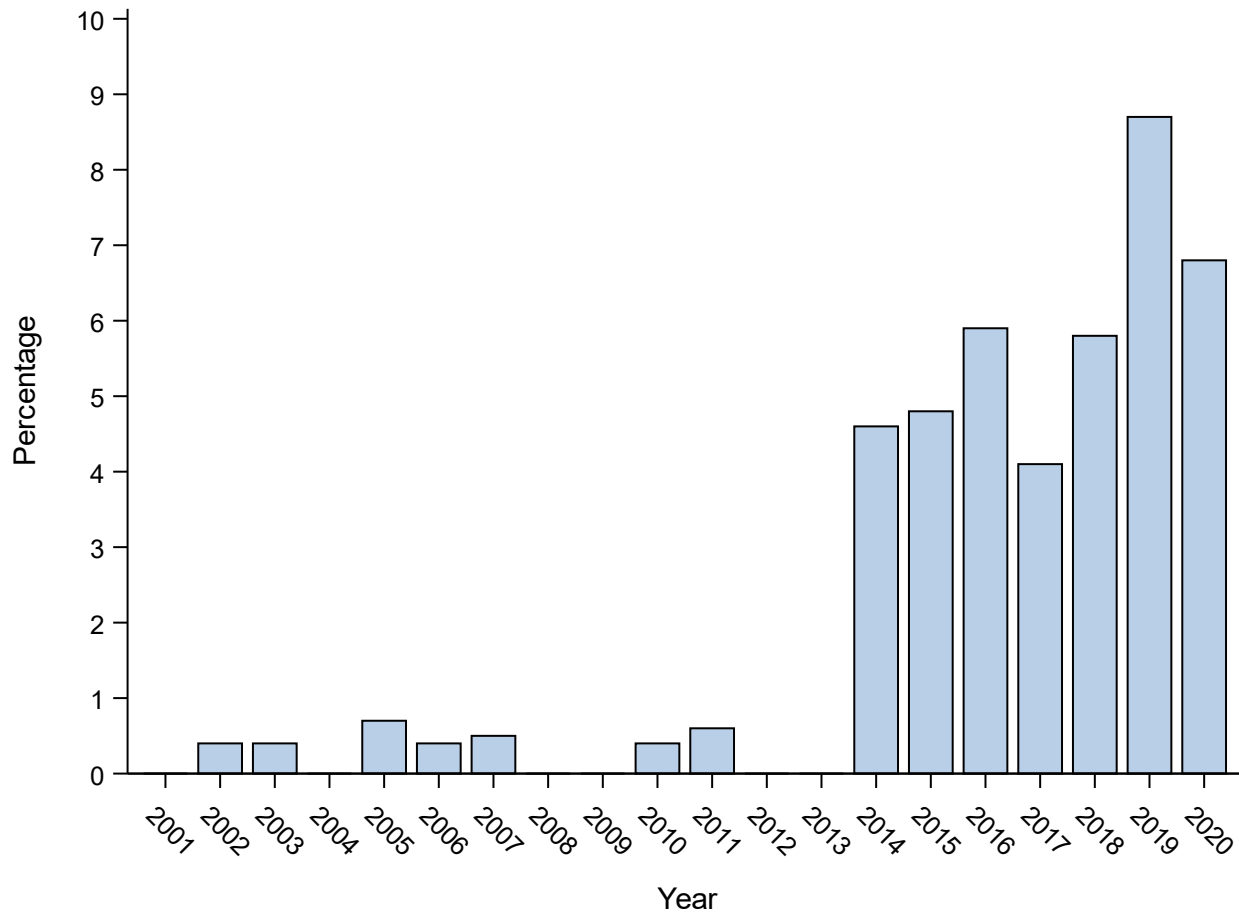


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.2)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.6)	1 (0.7)	0 (0.0)	1 (0.5)	1 (0.5)	1 (0.5)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2001-2020

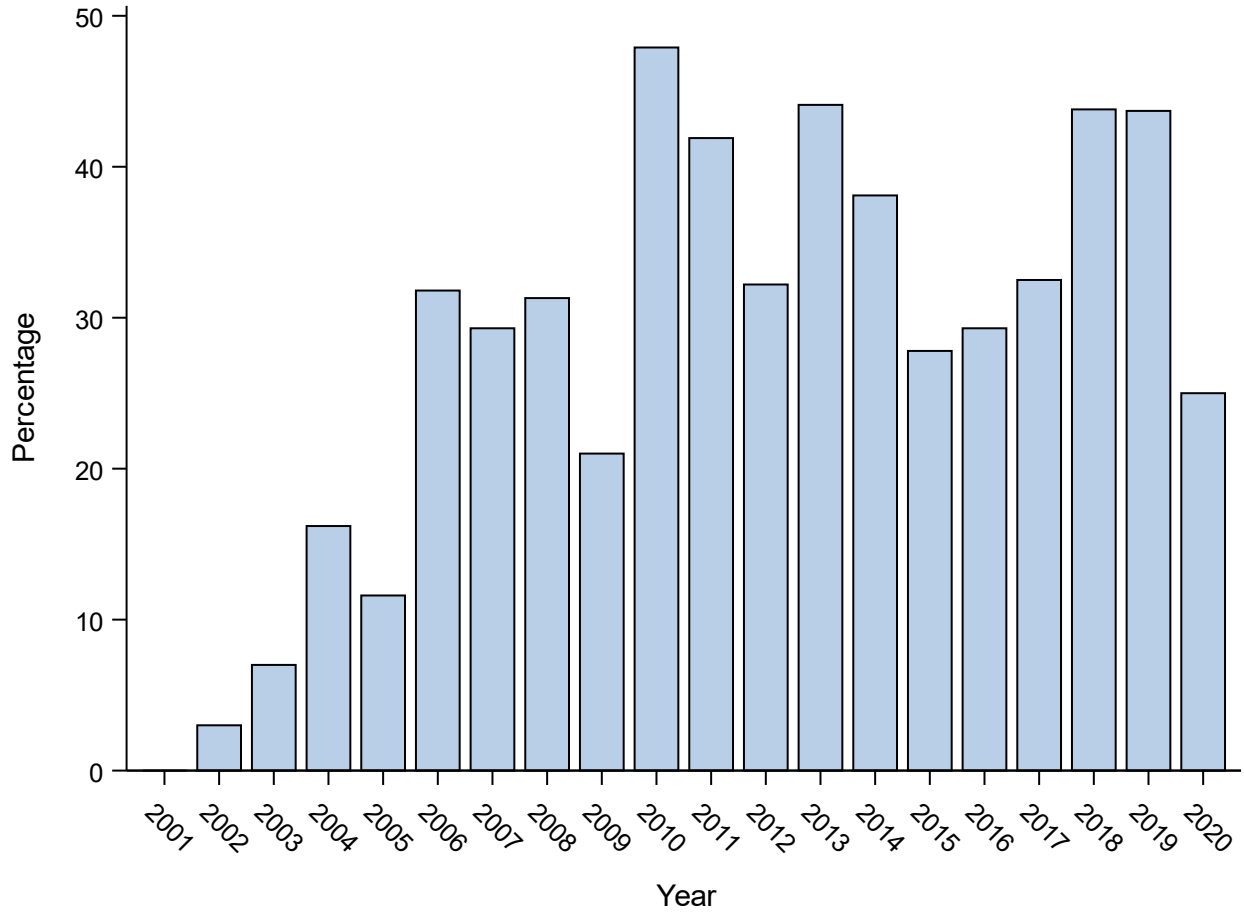


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	1 (0.4)	1 (0.4)	0 (0.0)	2 (0.7)	1 (0.4)	1 (0.5)	0 (0.0)	0 (0.0)	1 (0.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.6)	0 (0.0)	0 (0.0)	9 (4.6)	9 (4.8)	11 (5.9)	10 (4.1)	13 (5.8)	20 (8.7)	12 (6.8)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Seattle, Washington, 2001-2020

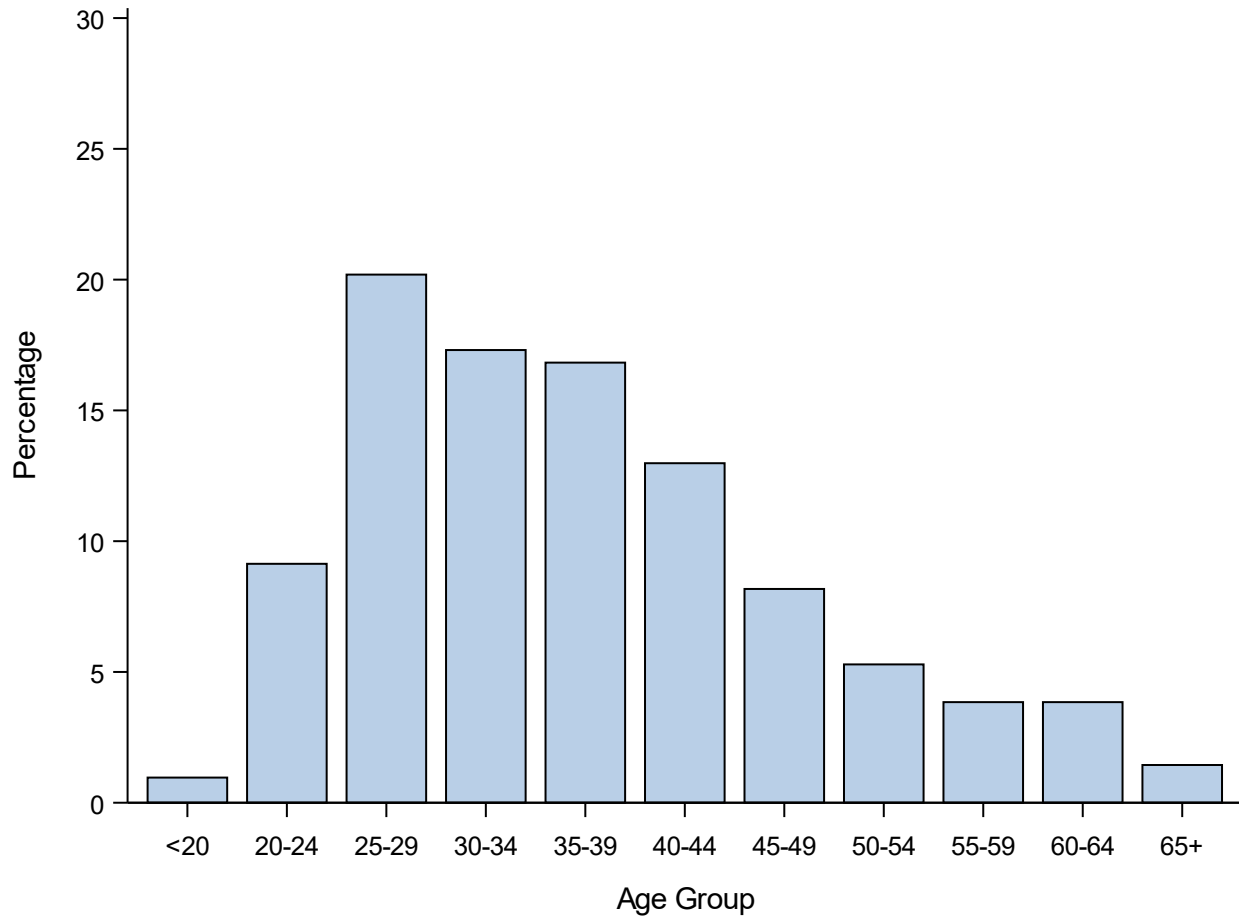


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	8 (3.0)	18 (7.0)	38 (16.2)	31 (11.6)	77 (31.8)	55 (29.3)	51 (31.3)	34 (21.0)	114 (47.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
70 (41.9)	48 (32.2)	63 (44.1)	74 (38.1)	52 (27.8)	55 (29.3)	80 (32.5)	98 (43.8)	100 (43.7)	44 (25.0)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

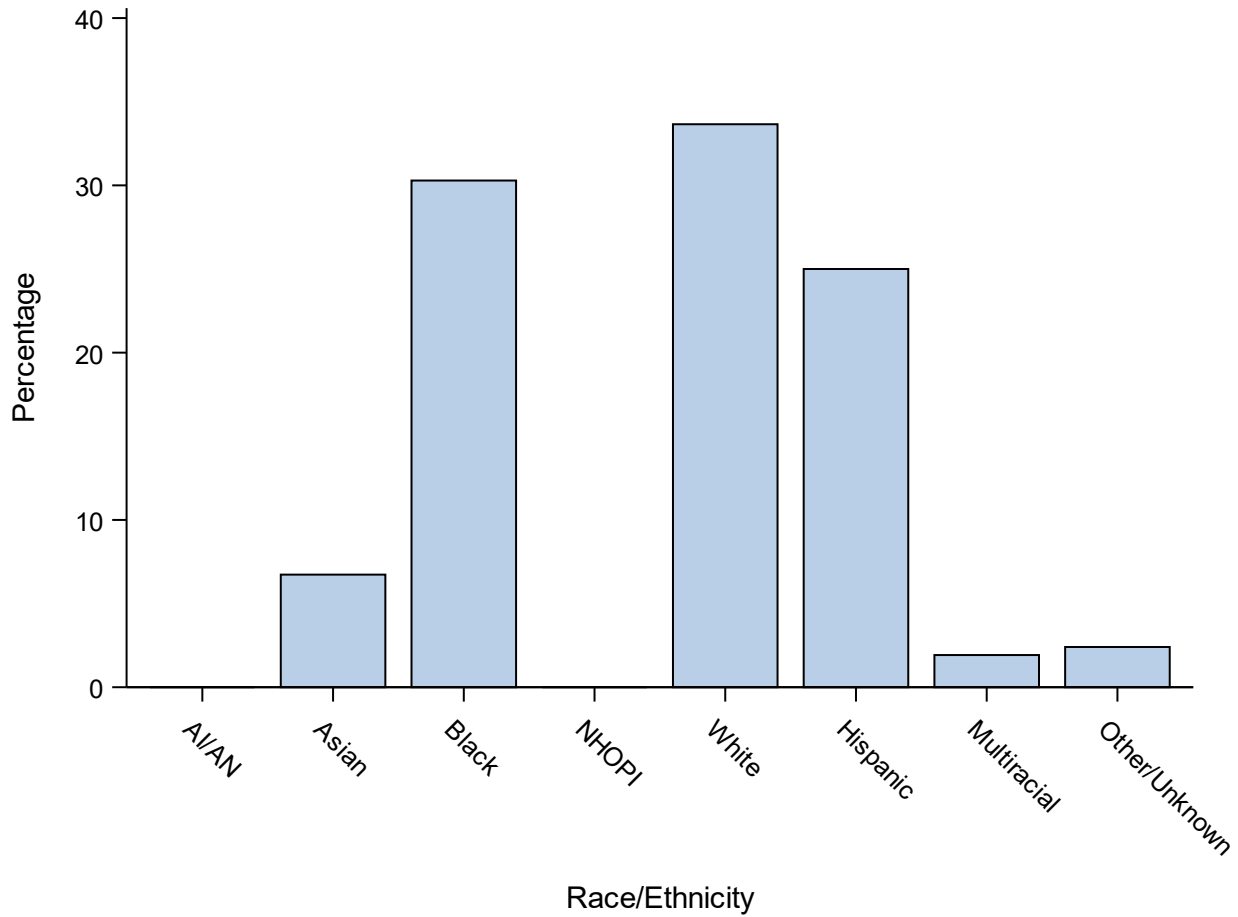
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
2 (1.0)	19 (9.1)	42 (20.2)	36 (17.3)	35 (16.8)	27 (13.0)	17 (8.2)	11 (5.3)	8 (3.8)	8 (3.8)	3 (1.4)	208

Note: Cases with unknown age were excluded.

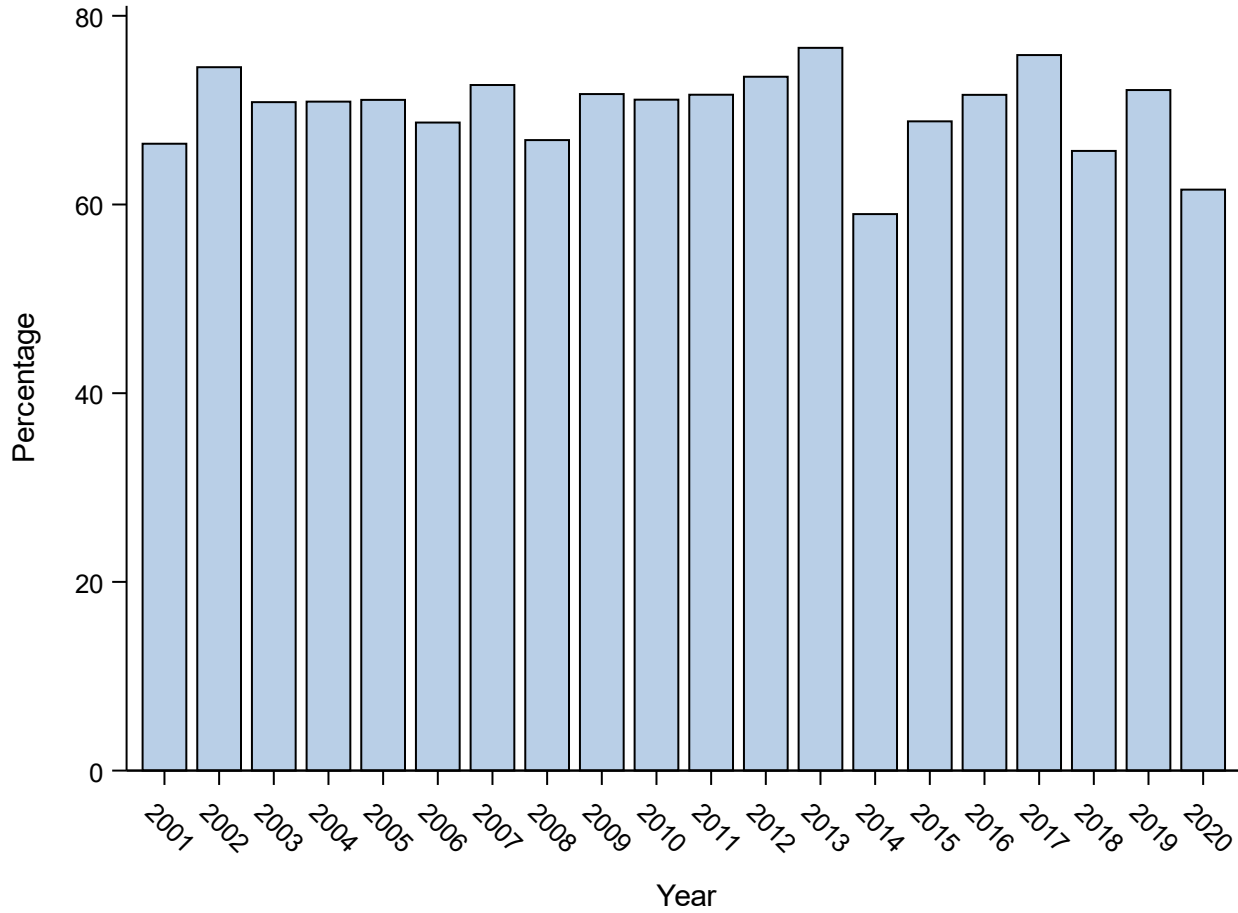
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	14 (6.7)	63 (30.3)	0 (0.0)	70 (33.7)	52 (25.0)	4 (1.9)	5 (2.4)	208

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2001-2020

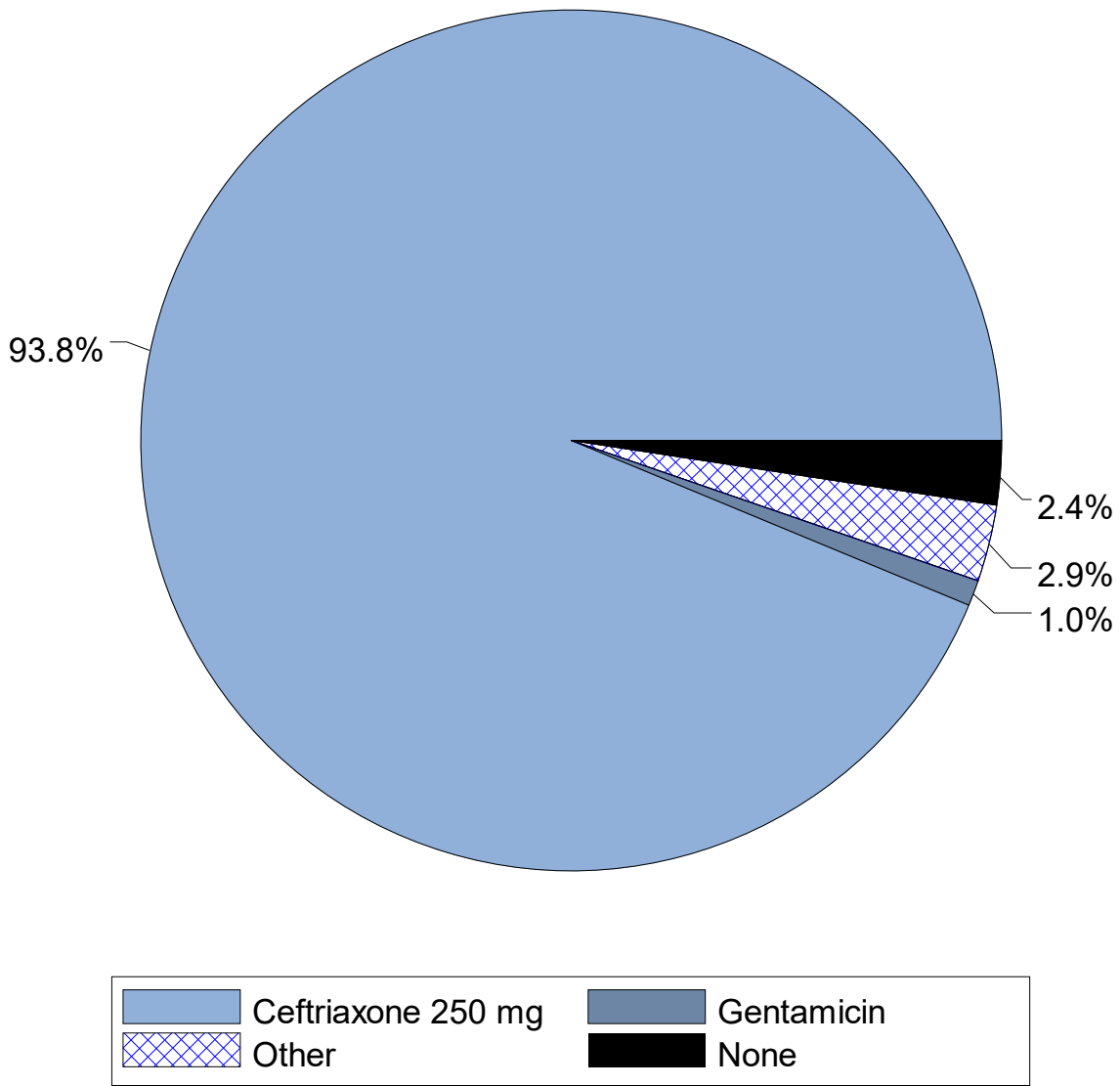


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
196 (66.4)	208 (74.6)	192 (70.8)	212 (70.9)	209 (71.1)	204 (68.7)	210 (72.7)	139 (66.8)	185 (71.7)	160 (71.1)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
149 (71.6)	189 (73.5)	203 (76.6)	174 (59.0)	203 (68.8)	212 (71.6)	226 (75.8)	155 (65.7)	176 (72.1)	125 (61.6)

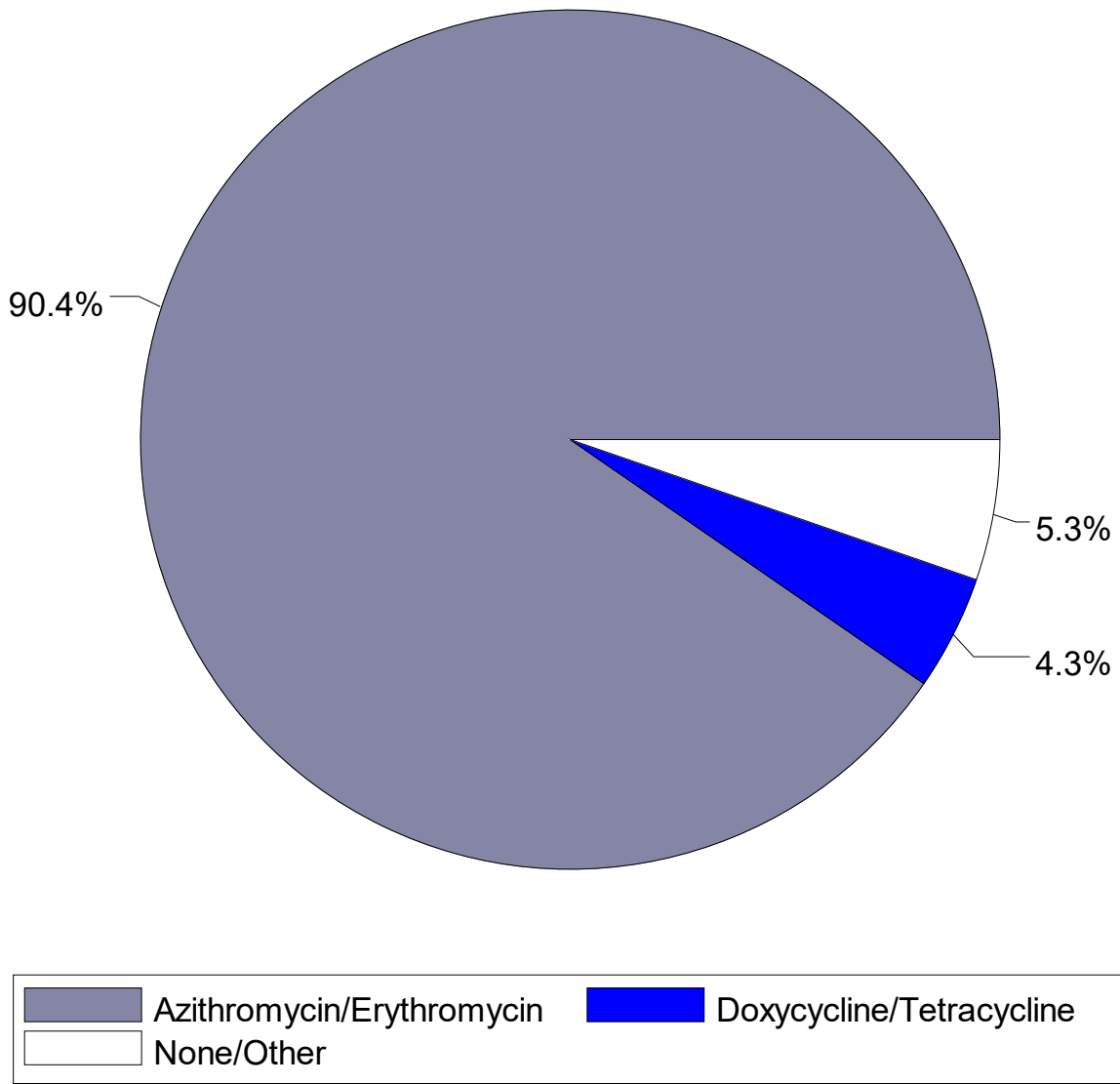
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2020



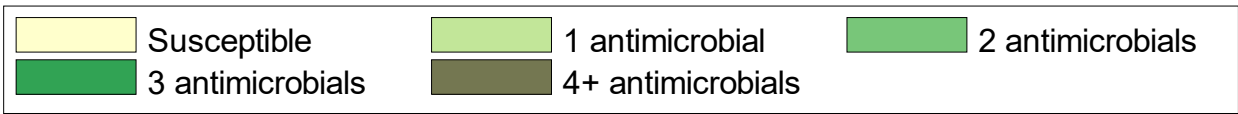
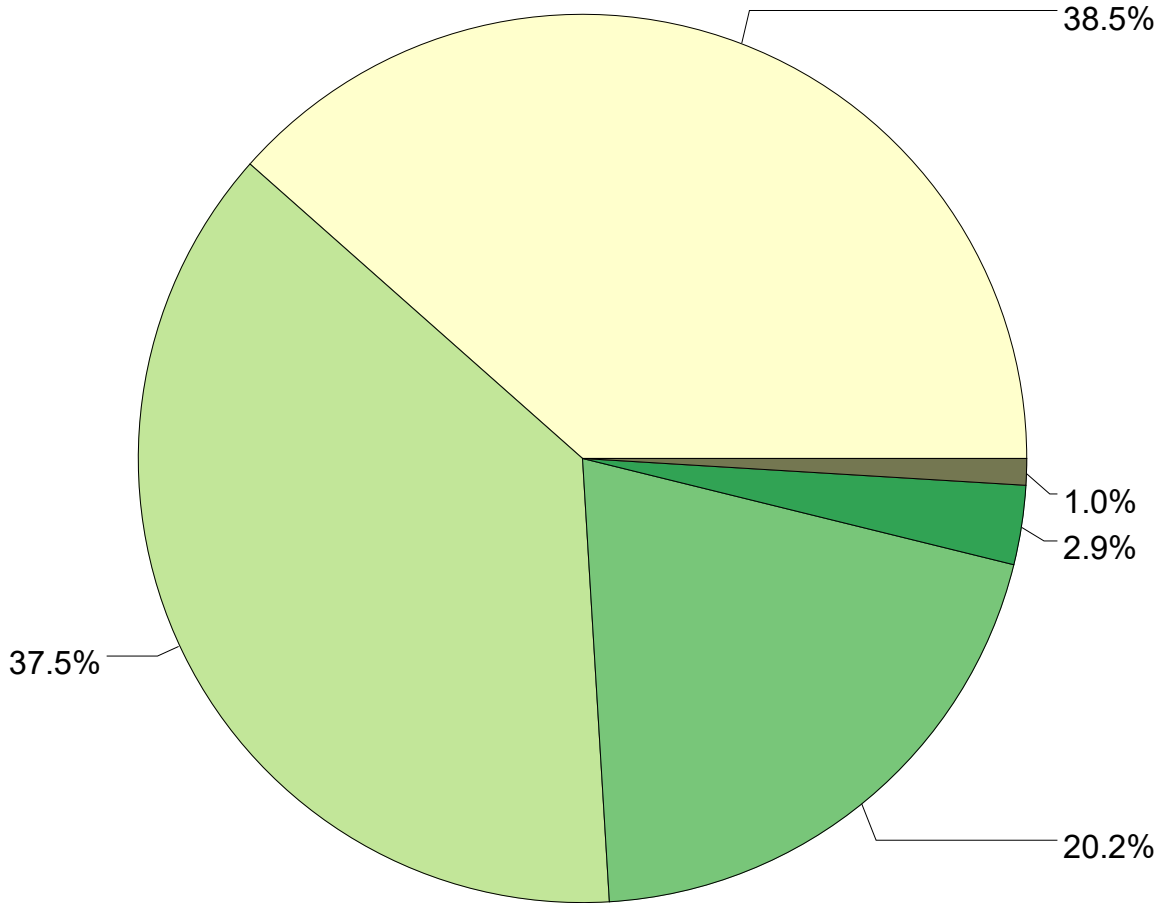
Primary Treatment	Count	Percentage
None	5	2.4
Ceftriaxone 250 mg	195	93.8
Gentamicin	2	1.0
Other	6	2.9

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	188	90.4
Doxycycline/Tetracycline	9	4.3
None/Other	11	5.3

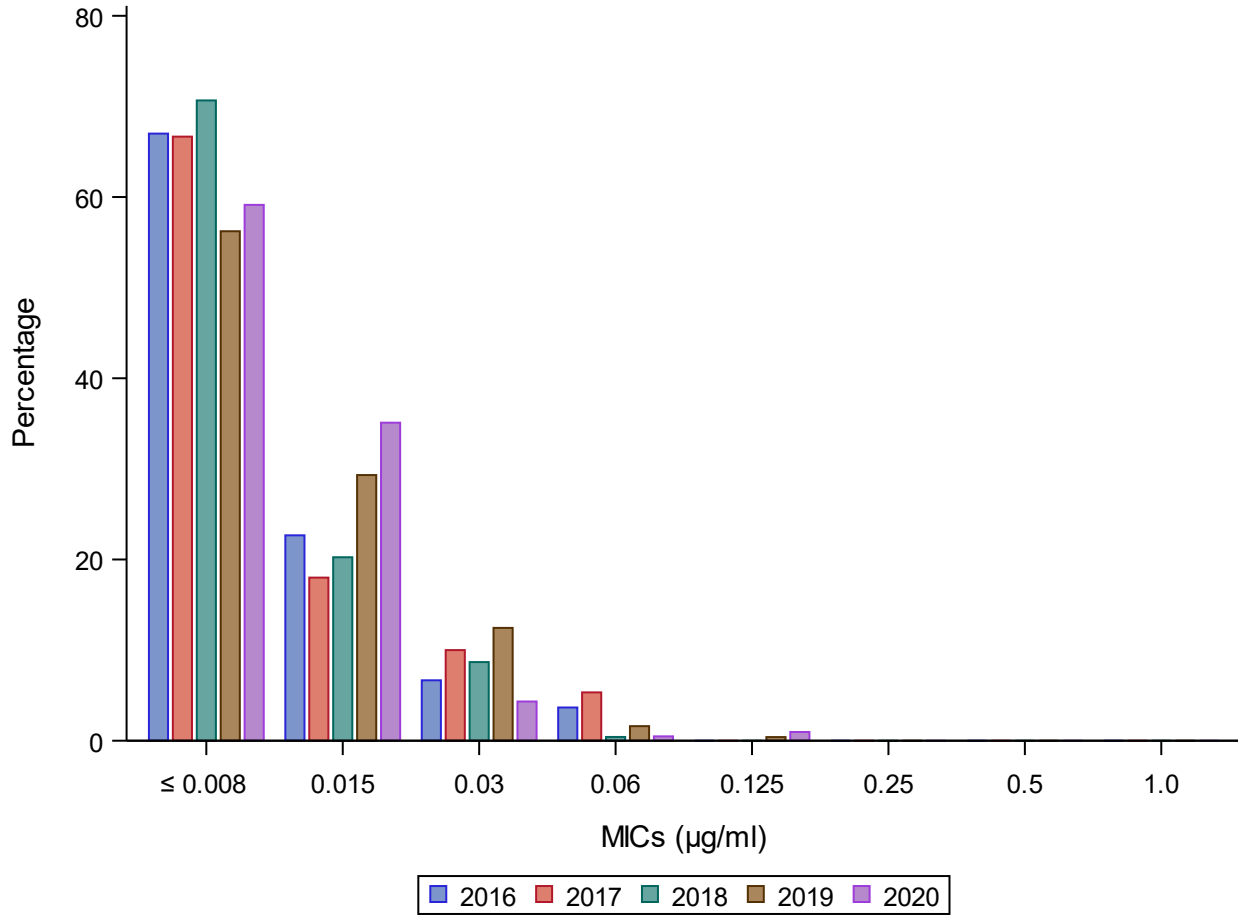
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	80	38.5
1 antimicrobial	78	37.5
2 antimicrobials	42	20.2
3 antimicrobials	6	2.9
4+ antimicrobials	1	0.5

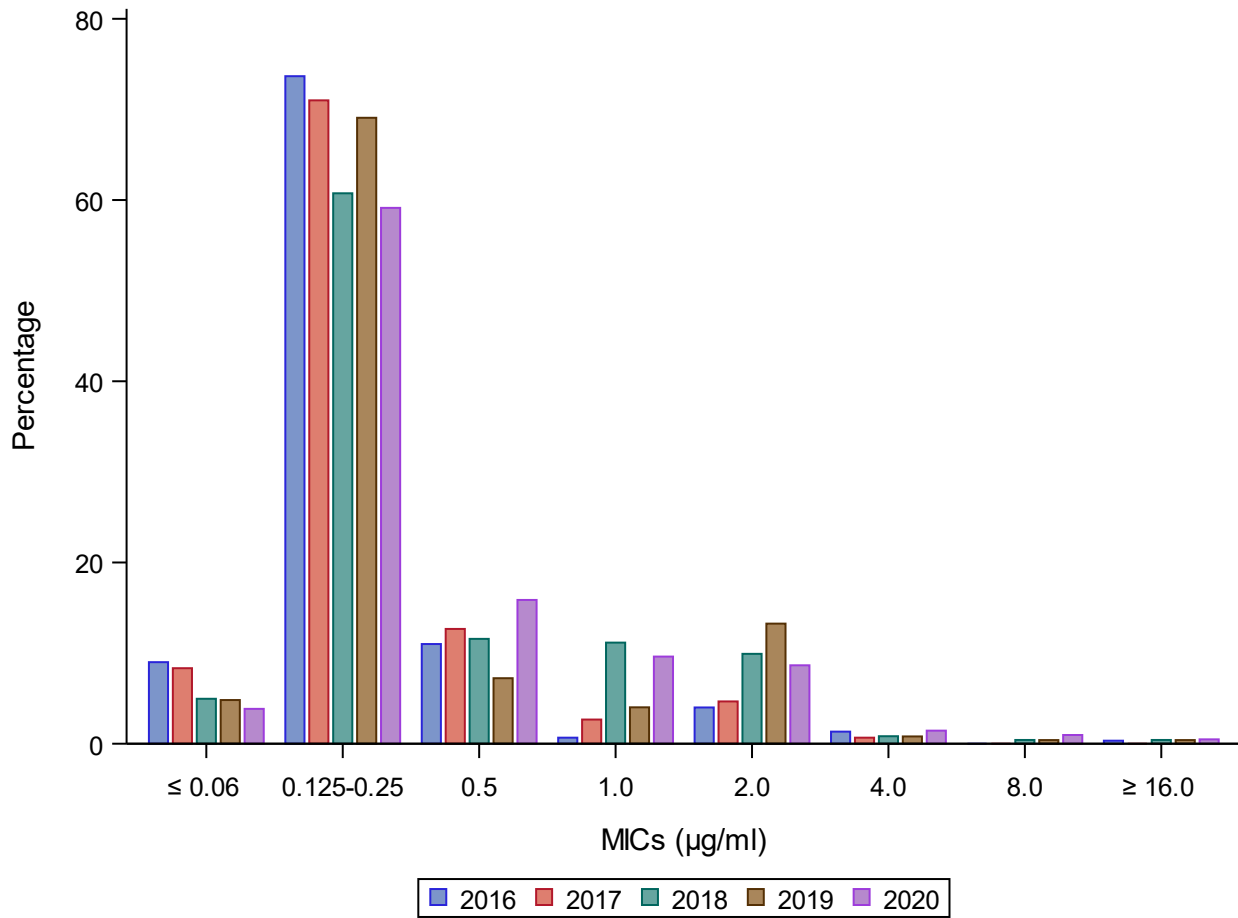
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/mL}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2016-2020



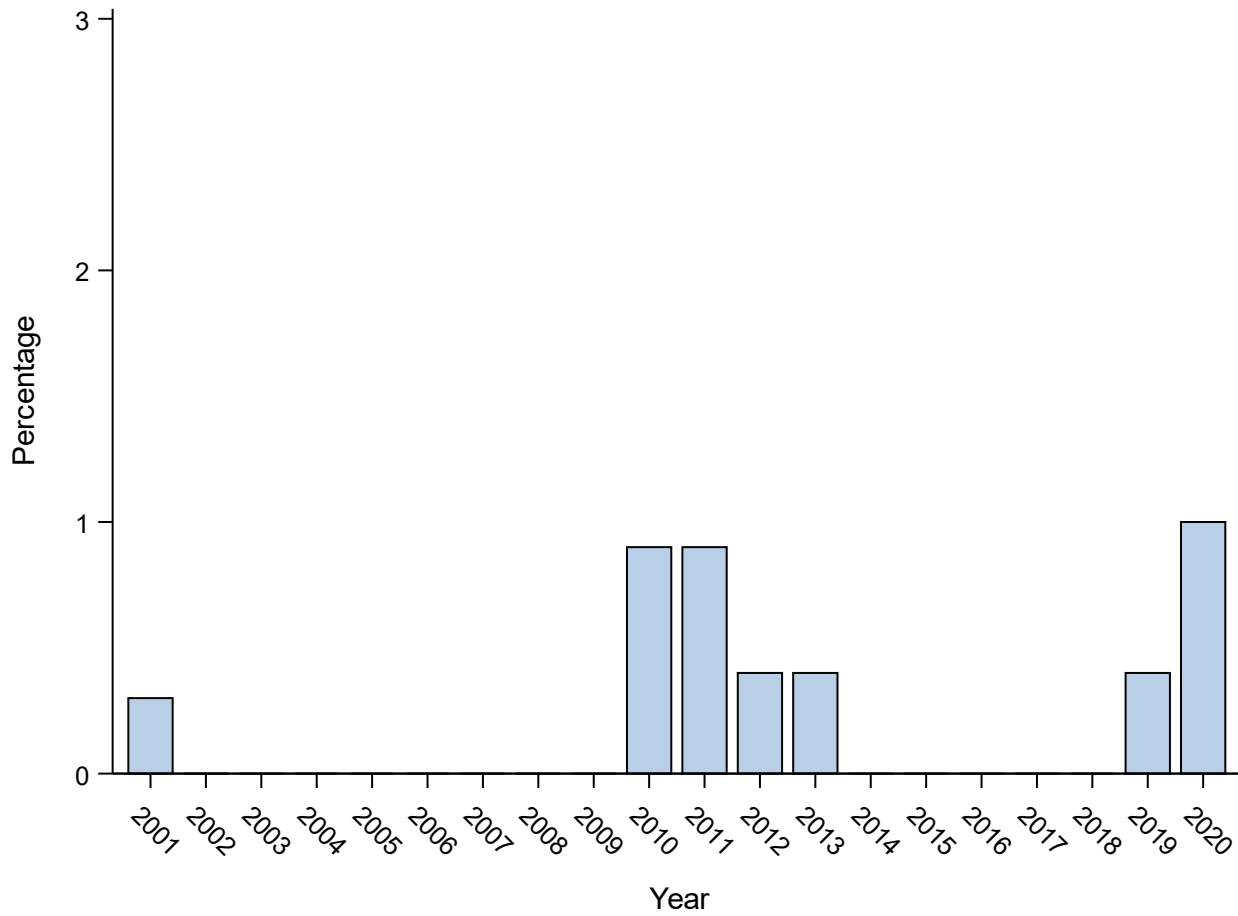
Year	≤ 0.008 n (%)	0.015 n (%)	0.03 n (%)	0.06 n (%)	0.125 n (%)	0.25 n (%)	0.5 n (%)	1.0 n (%)	Total
2016	201 (67.0)	68 (22.7)	20 (6.7)	11 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2017	200 (66.7)	54 (18.0)	30 (10.0)	16 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	300
2018	171 (70.7)	49 (20.2)	21 (8.7)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	242
2019	140 (56.2)	73 (29.3)	31 (12.4)	4 (1.6)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	249
2020	123 (59.1)	73 (35.1)	9 (4.3)	1 (0.5)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	208

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2016-2020



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
2016	27 (9.0)	221 (73.7)	33 (11.0)	2 (0.7)	12 (4.0)	4 (1.3)	0 (0.0)	1 (0.3)	300
2017	25 (8.3)	213 (71.0)	38 (12.7)	8 (2.7)	14 (4.7)	2 (0.7)	0 (0.0)	0 (0.0)	300
2018	12 (5.0)	147 (60.7)	28 (11.6)	27 (11.2)	24 (9.9)	2 (0.8)	1 (0.4)	1 (0.4)	242
2019	12 (4.8)	172 (69.1)	18 (7.2)	10 (4.0)	33 (13.3)	2 (0.8)	1 (0.4)	1 (0.4)	249
2020	8 (3.8)	123 (59.1)	33 (15.9)	20 (9.6)	18 (8.7)	3 (1.4)	2 (1.0)	1 (0.5)	208

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2001-2020

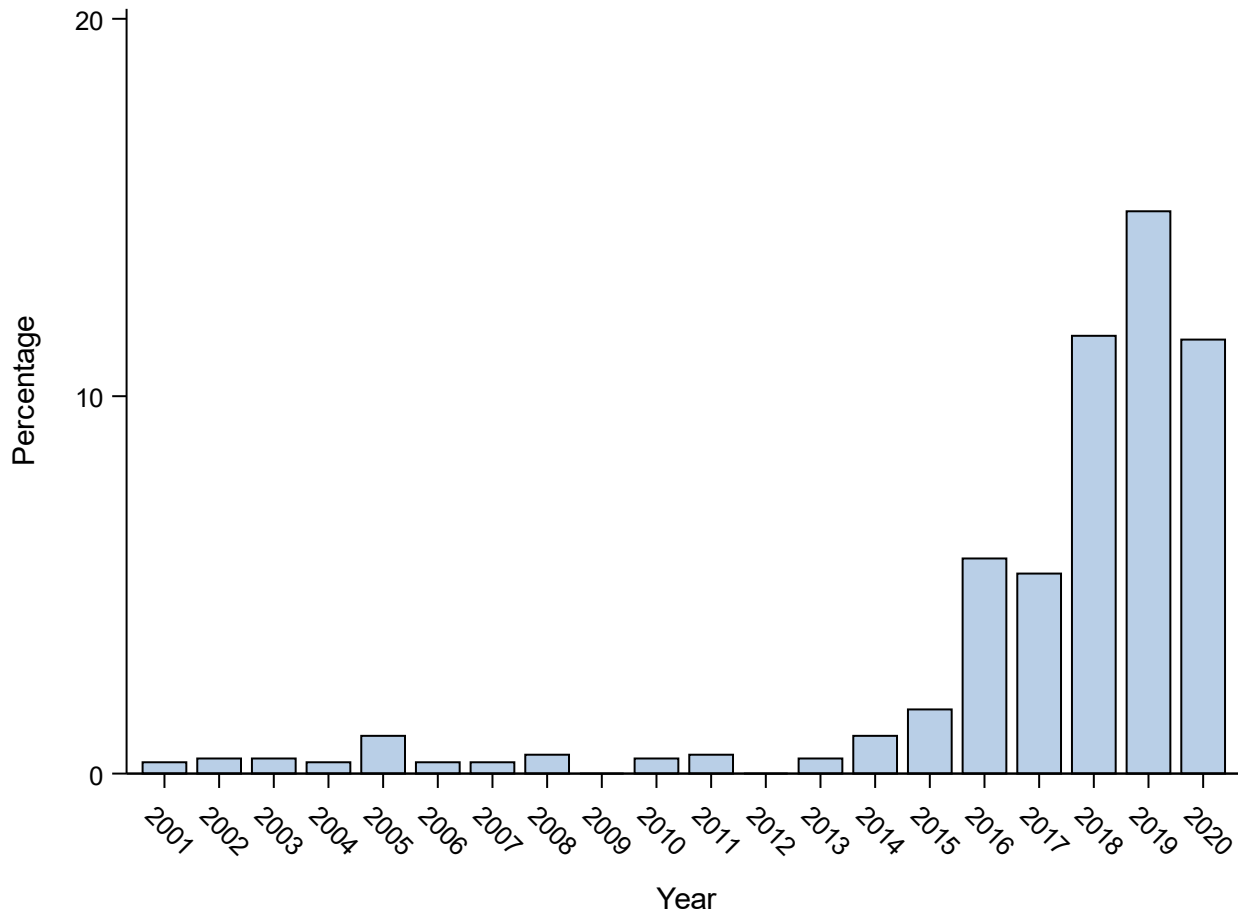


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.9)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
2 (0.9)	1 (0.4)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	2 (1.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2001-2020

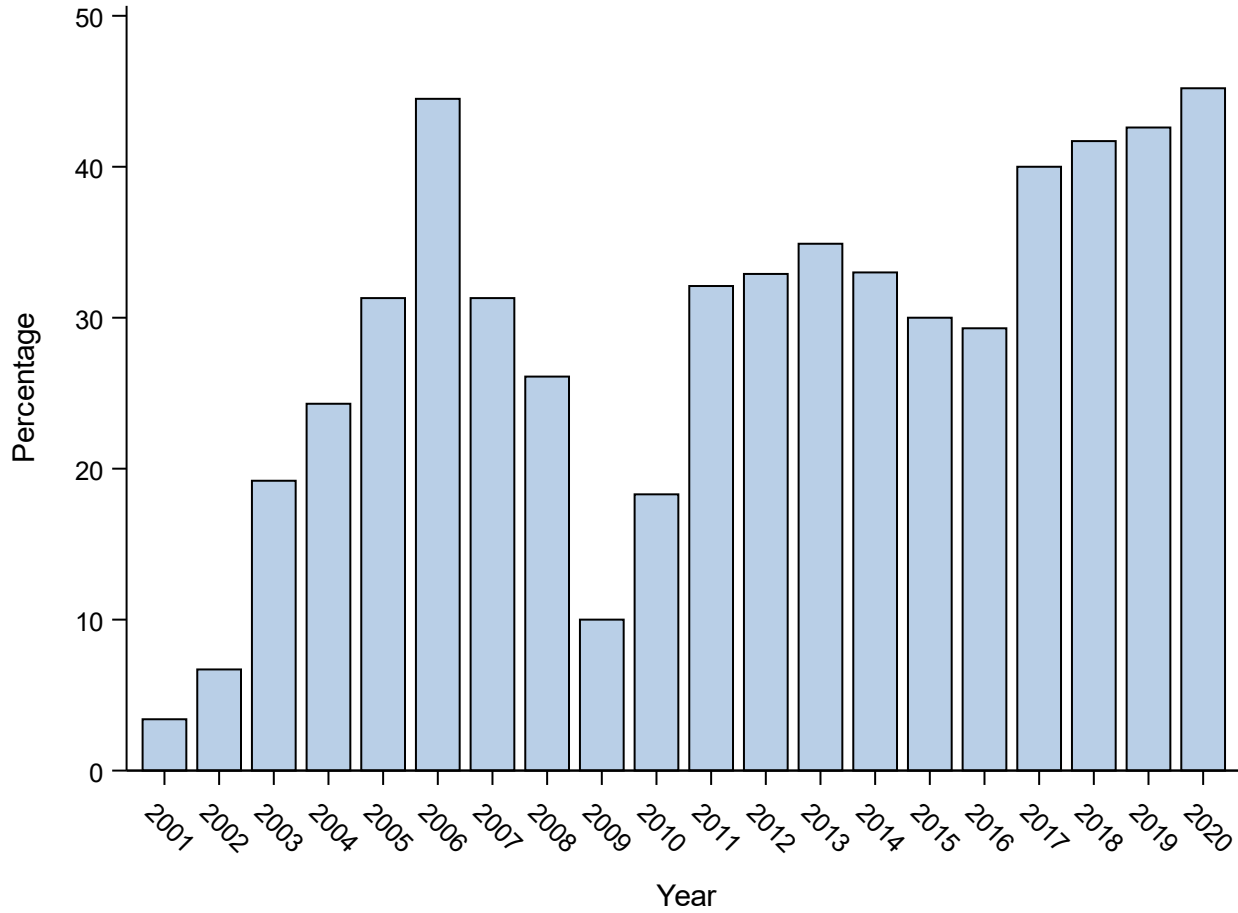


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
1 (0.3)	1 (0.4)	1 (0.4)	1 (0.3)	3 (1.0)	1 (0.3)	1 (0.3)	1 (0.5)	0 (0.0)	1 (0.4)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
1 (0.5)	0 (0.0)	1 (0.4)	3 (1.0)	5 (1.7)	17 (5.7)	16 (5.3)	28 (11.6)	37 (14.9)	24 (11.5)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), San Francisco, California, 2001-2020

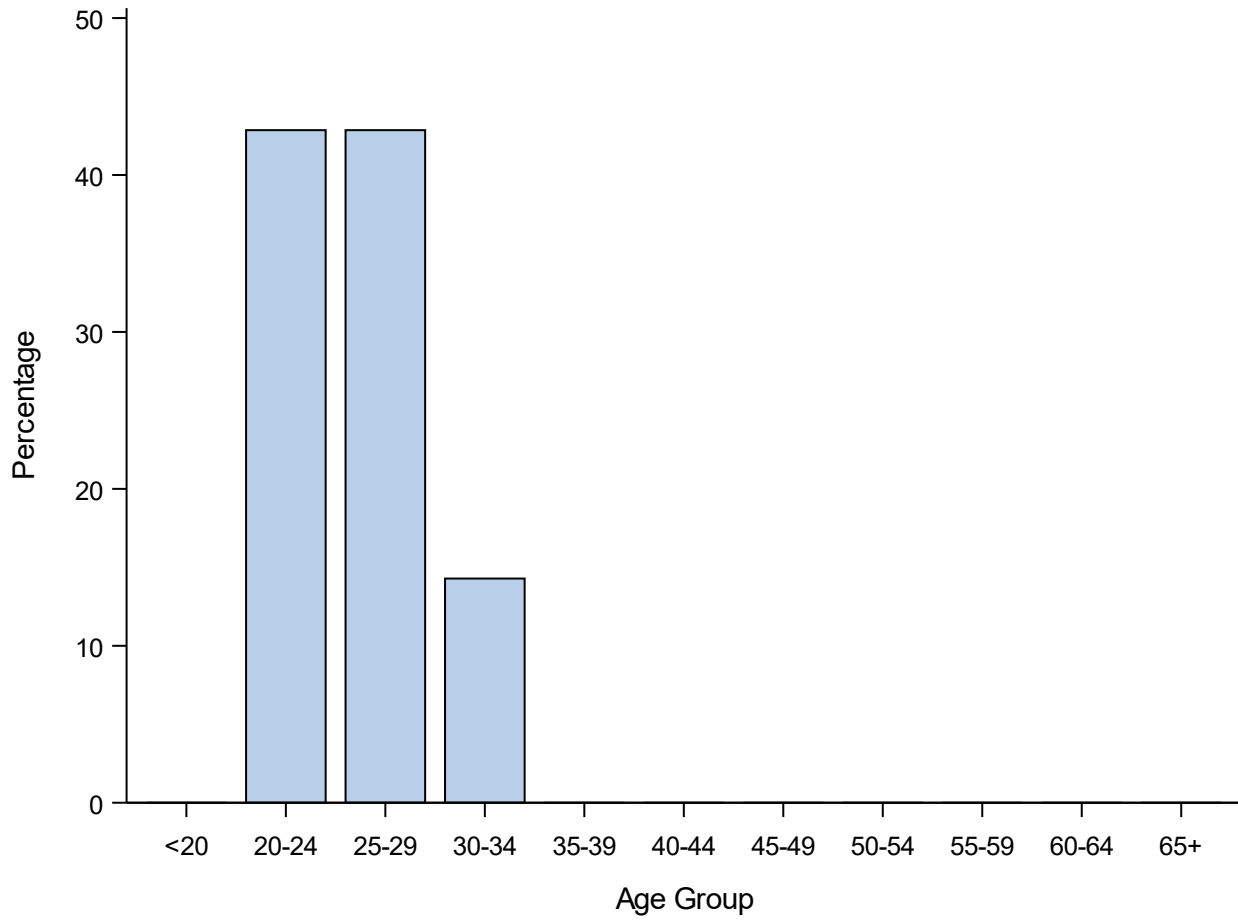


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
10 (3.4)	19 (6.7)	53 (19.2)	73 (24.3)	94 (31.3)	133 (44.5)	94 (31.3)	55 (26.1)	26 (10.0)	42 (18.3)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
68 (32.1)	85 (32.9)	94 (34.9)	99 (33.0)	90 (30.0)	88 (29.3)	120 (40.0)	101 (41.7)	106 (42.6)	94 (45.2)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

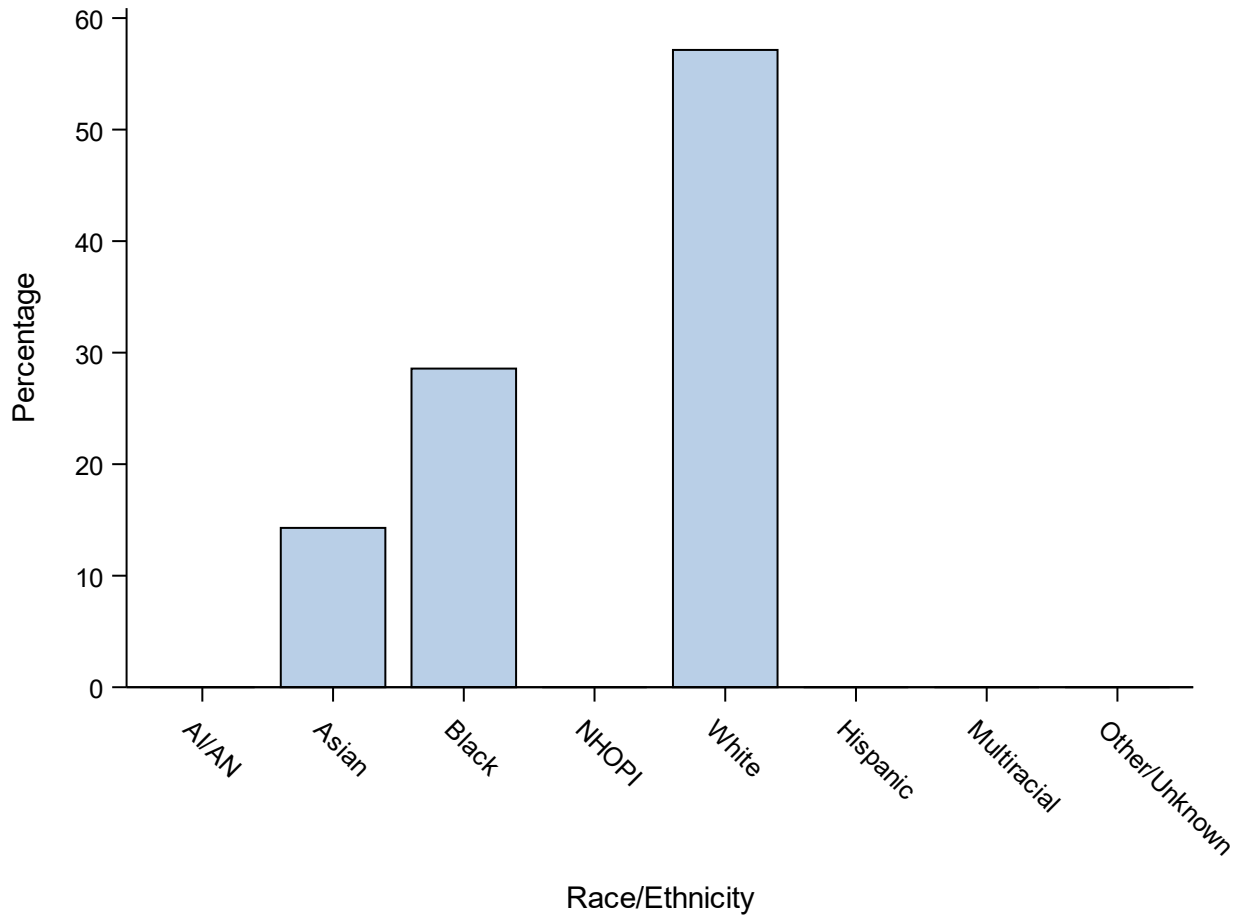
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
0 (0.0)	3 (42.9)	3 (42.9)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7

Note: Cases with unknown age were excluded.

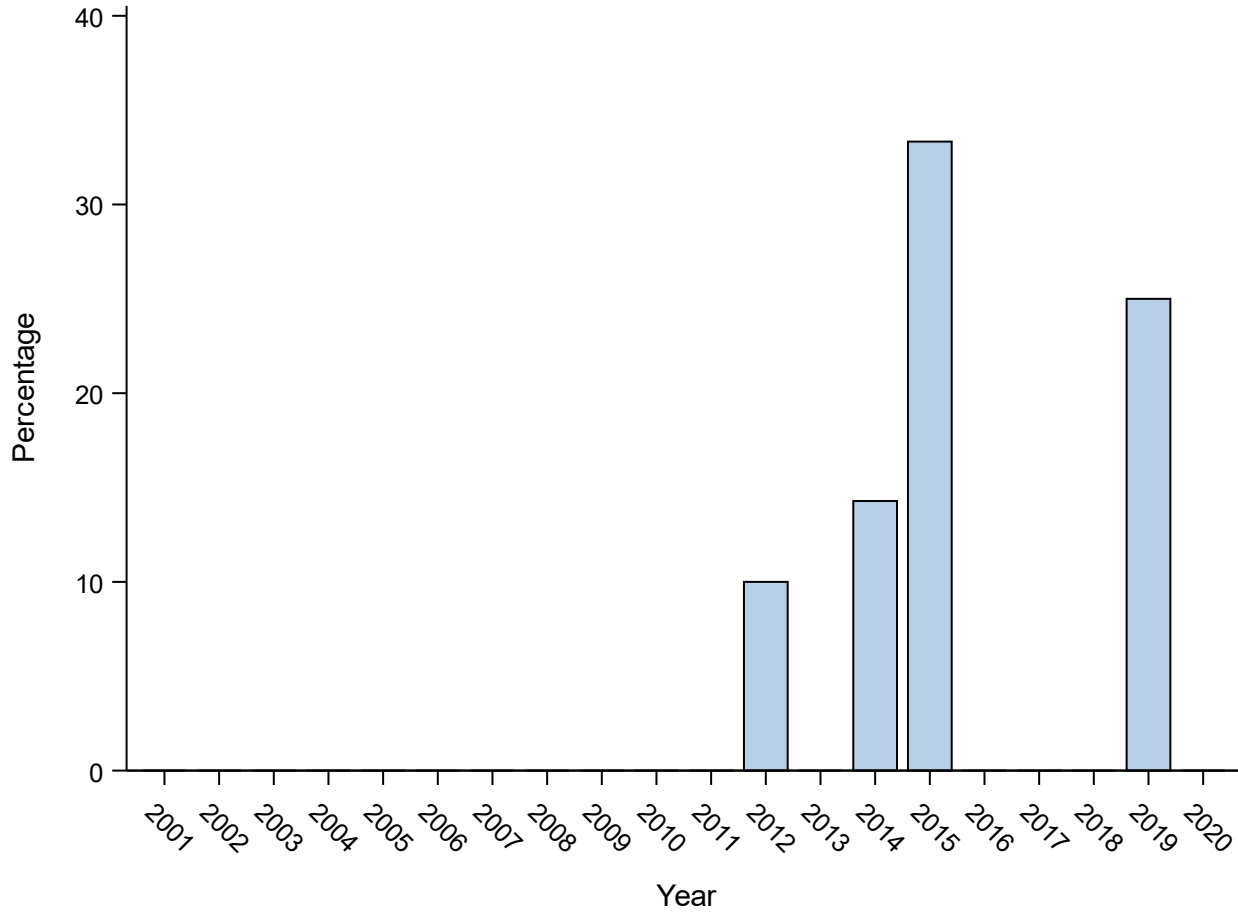
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	1 (14.3)	2 (28.6)	0 (0.0)	4 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	7

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2001-2020

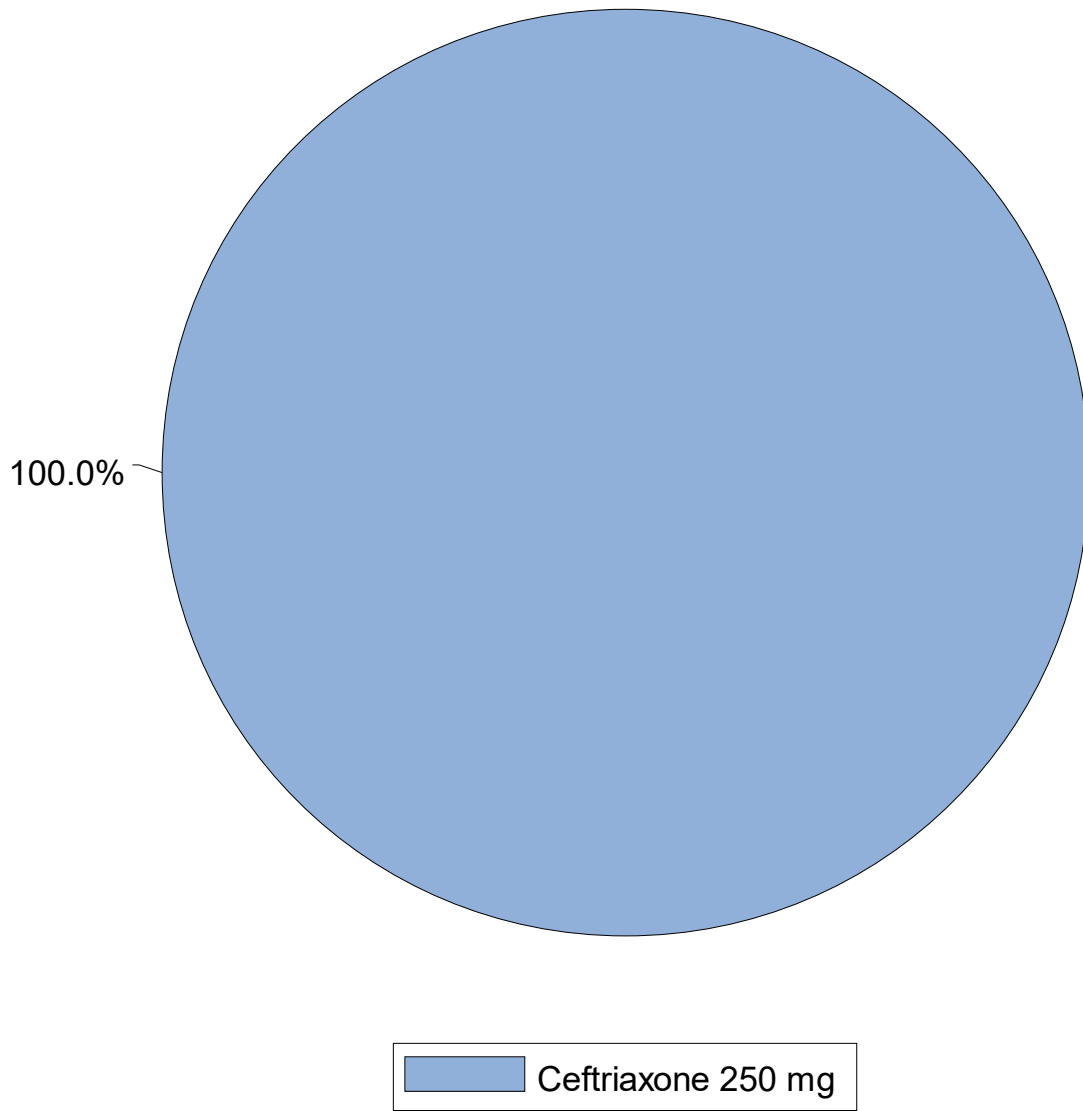


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	1 (10.0)	0 (0.0)	1 (14.3)	3 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	0 (0.0)

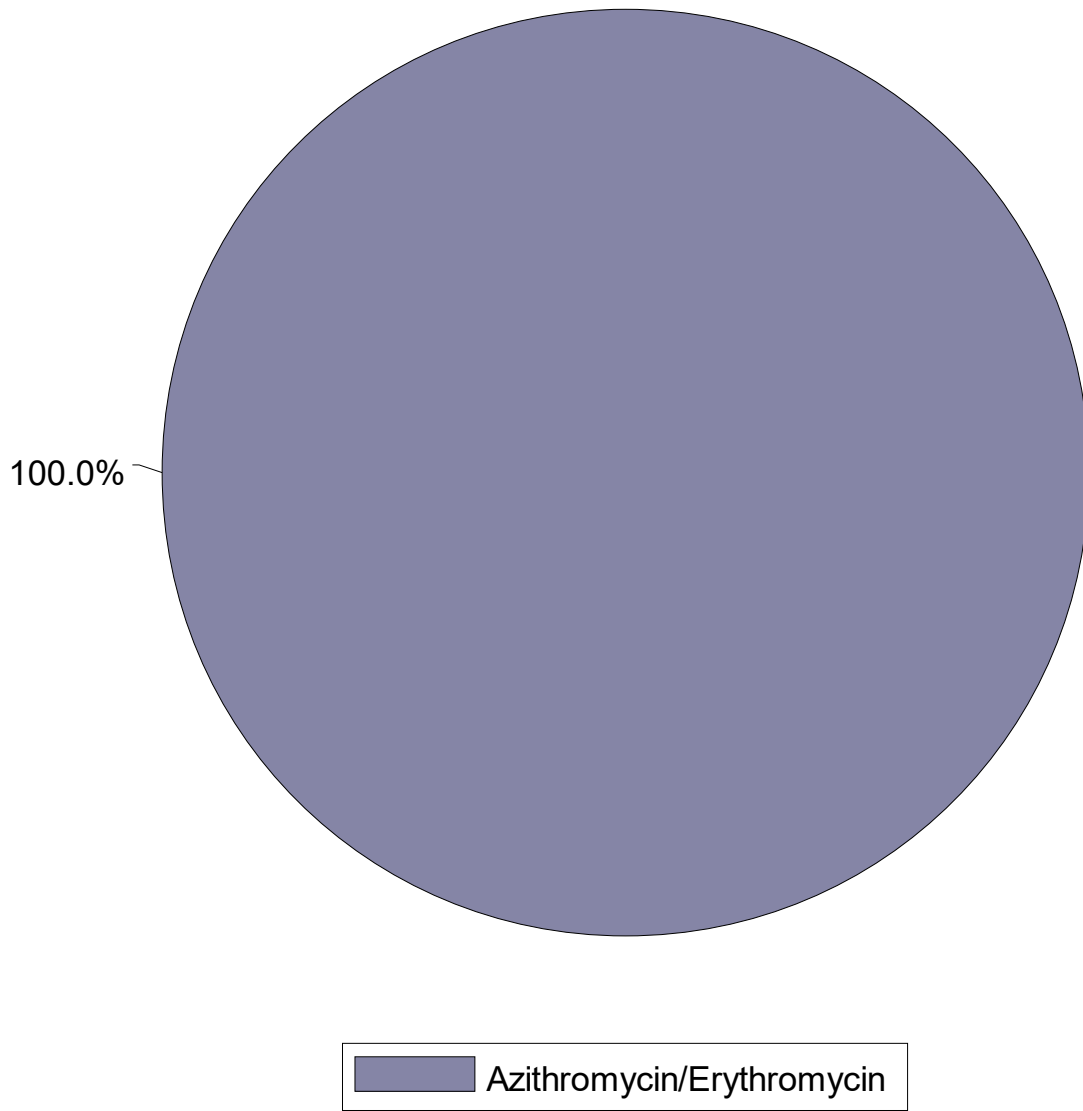
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2020



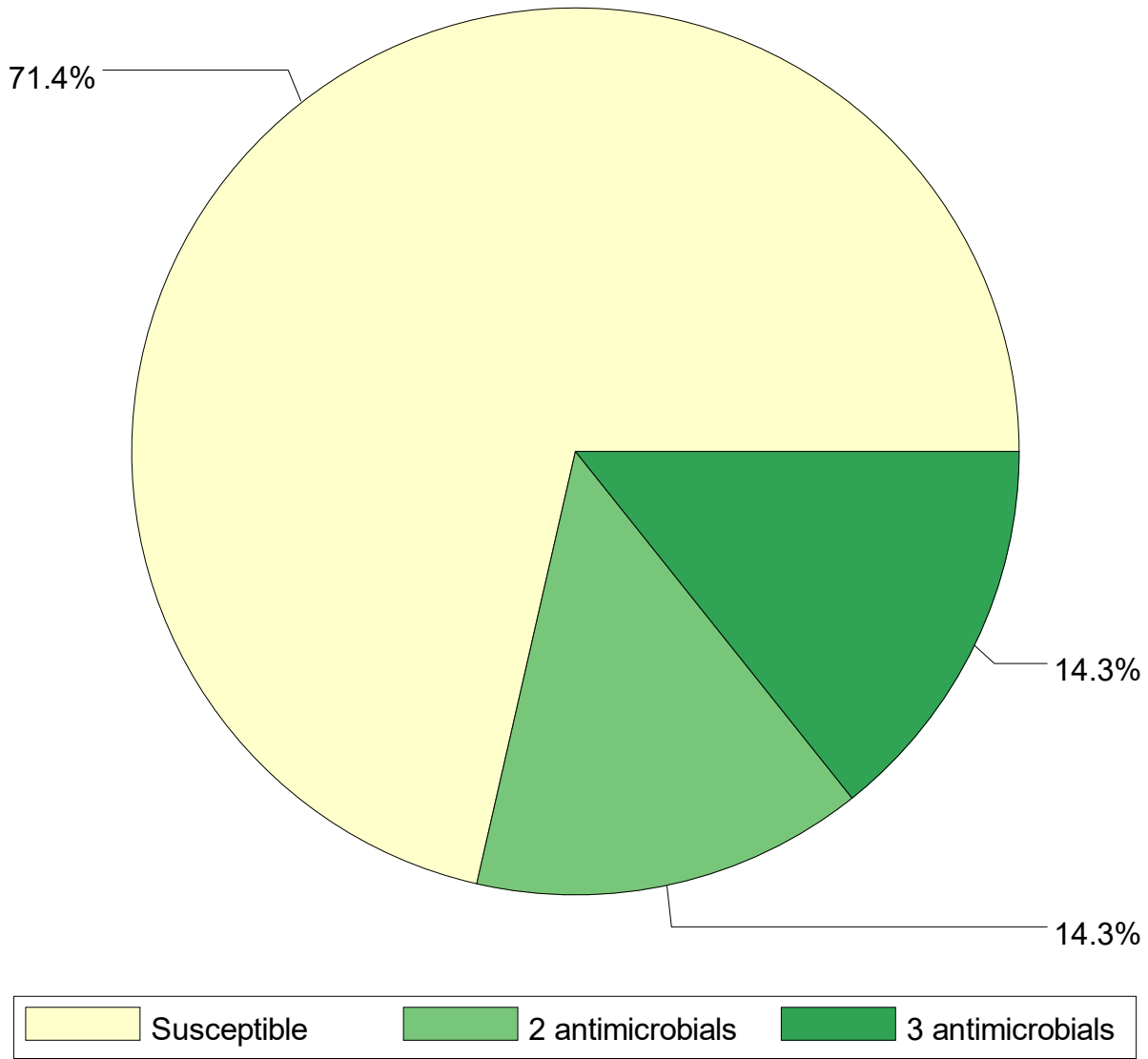
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	7	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	7	100.0

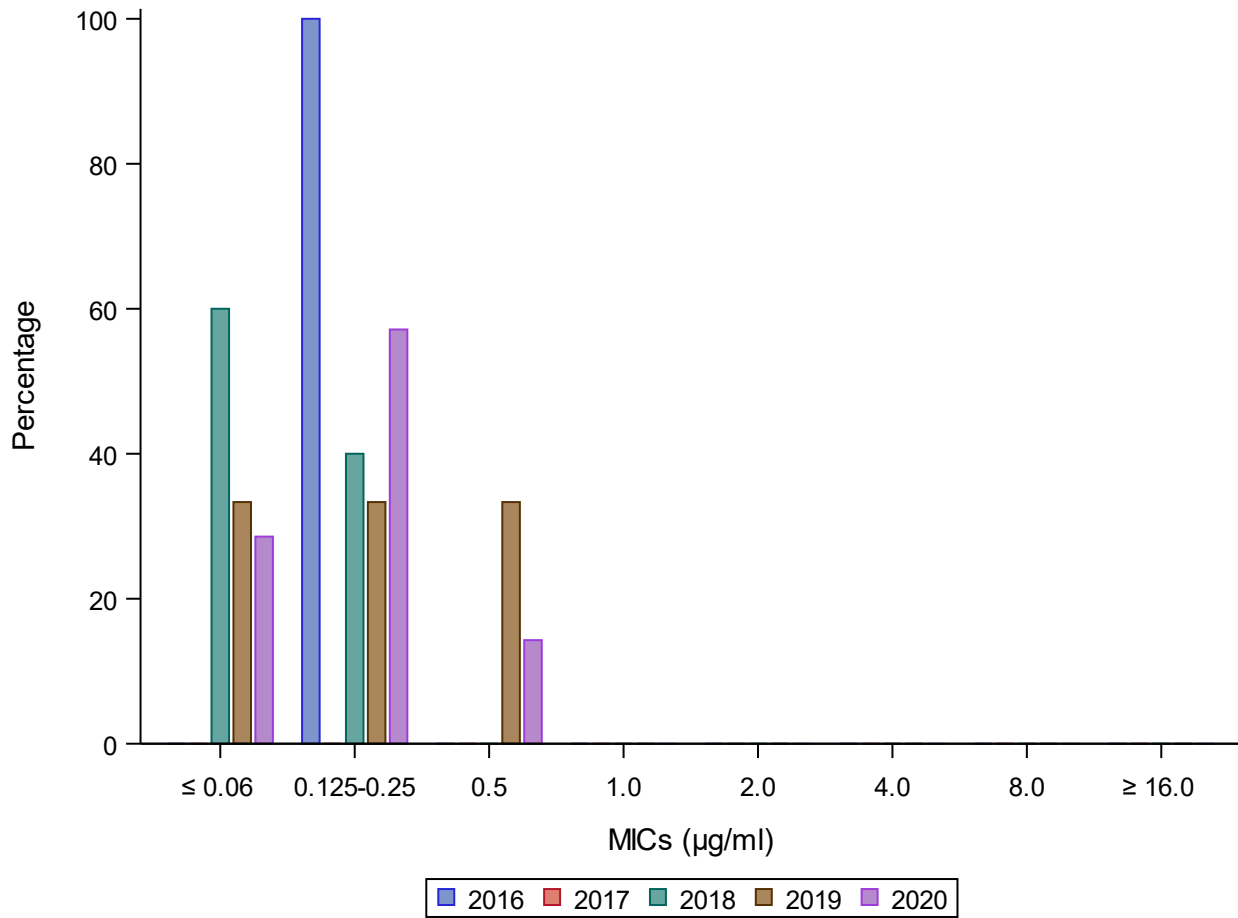
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	5	71.4
1 antimicrobial	0	0.0
2 antimicrobials	1	14.3
3 antimicrobials	1	14.3
4+ antimicrobials	0	0.0

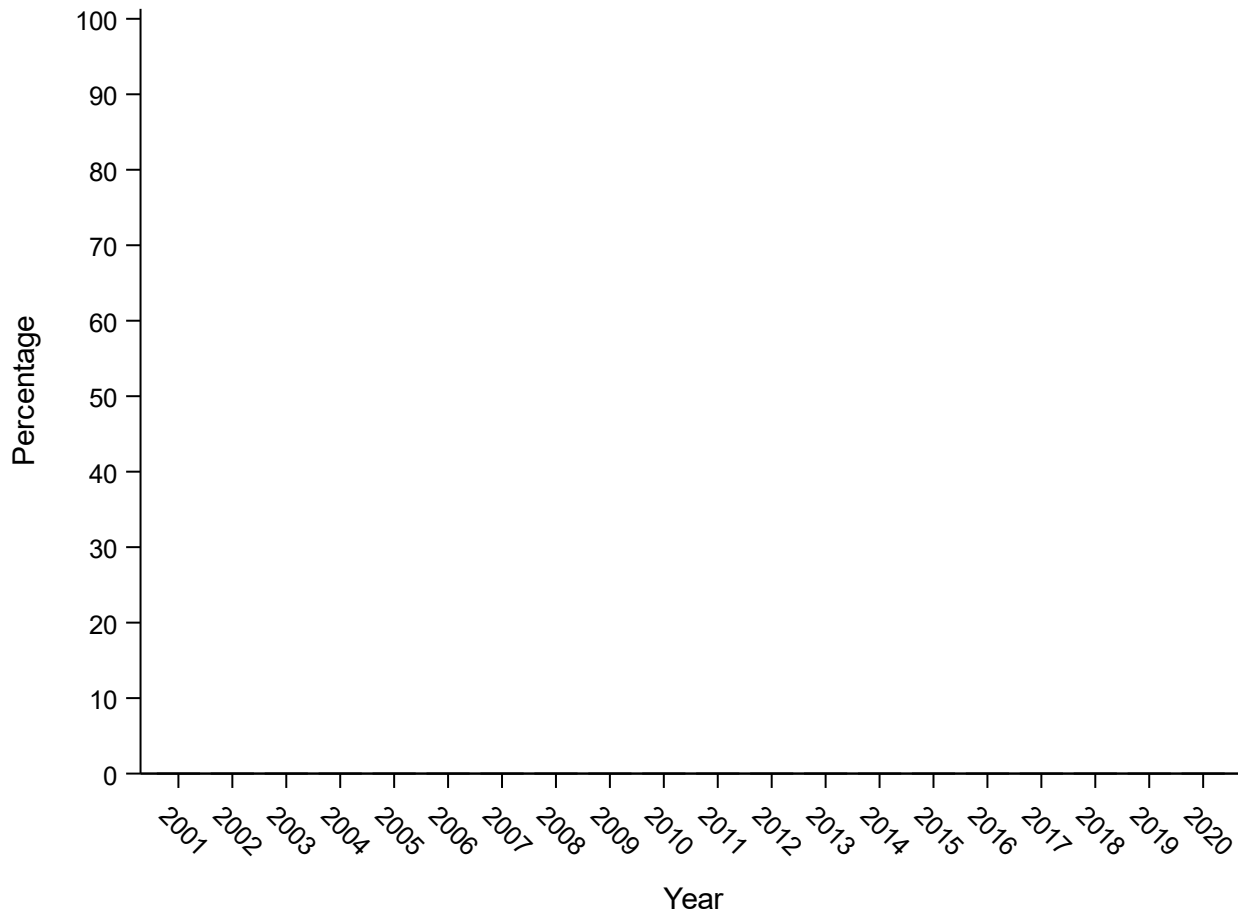
Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2016-2020



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
2016	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2
2017	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
2018	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5
2019	2 (33.3)	2 (33.3)	2 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6
2020	2 (28.6)	4 (57.1)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2001-2020

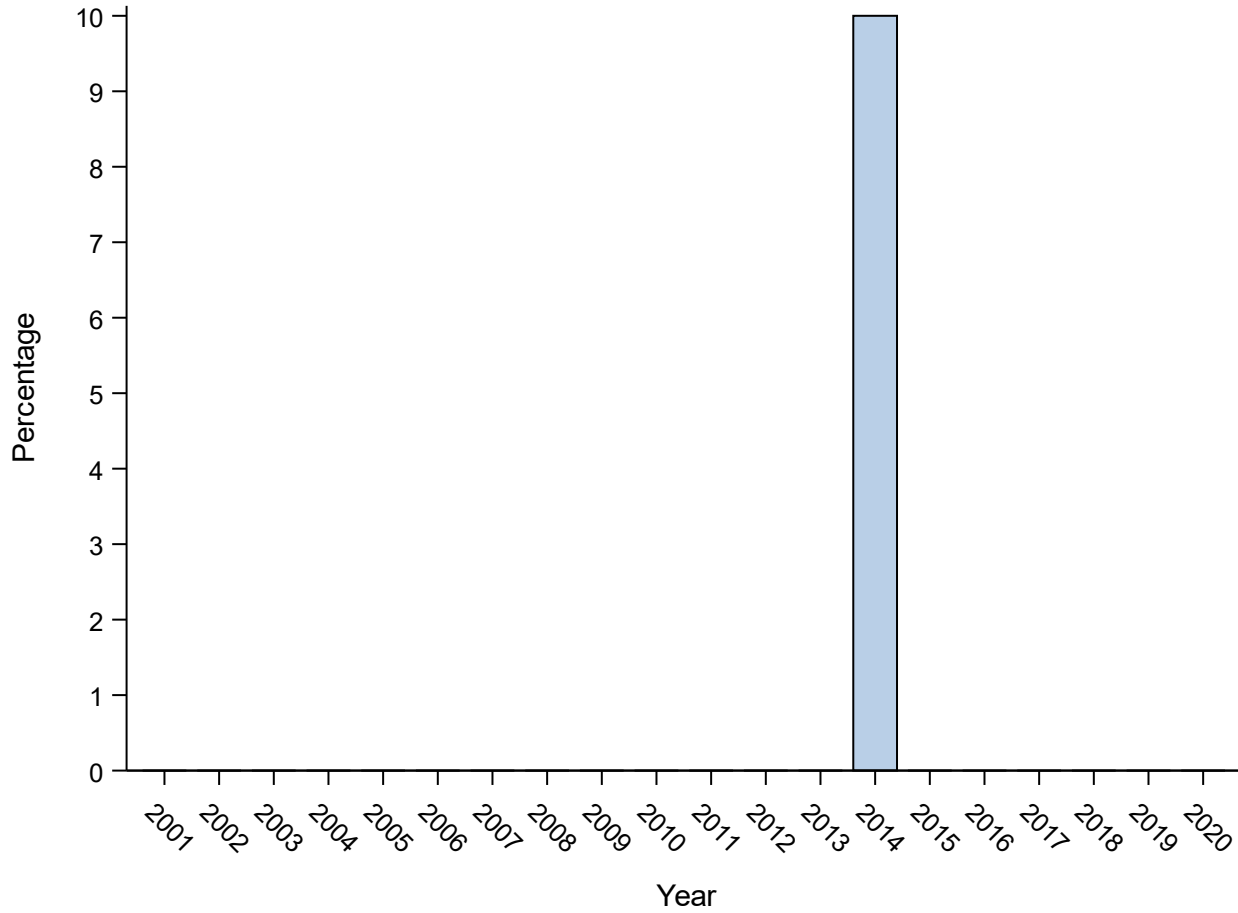


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs $\geq 0.125 \mu\text{g/ml}$.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2001-2020

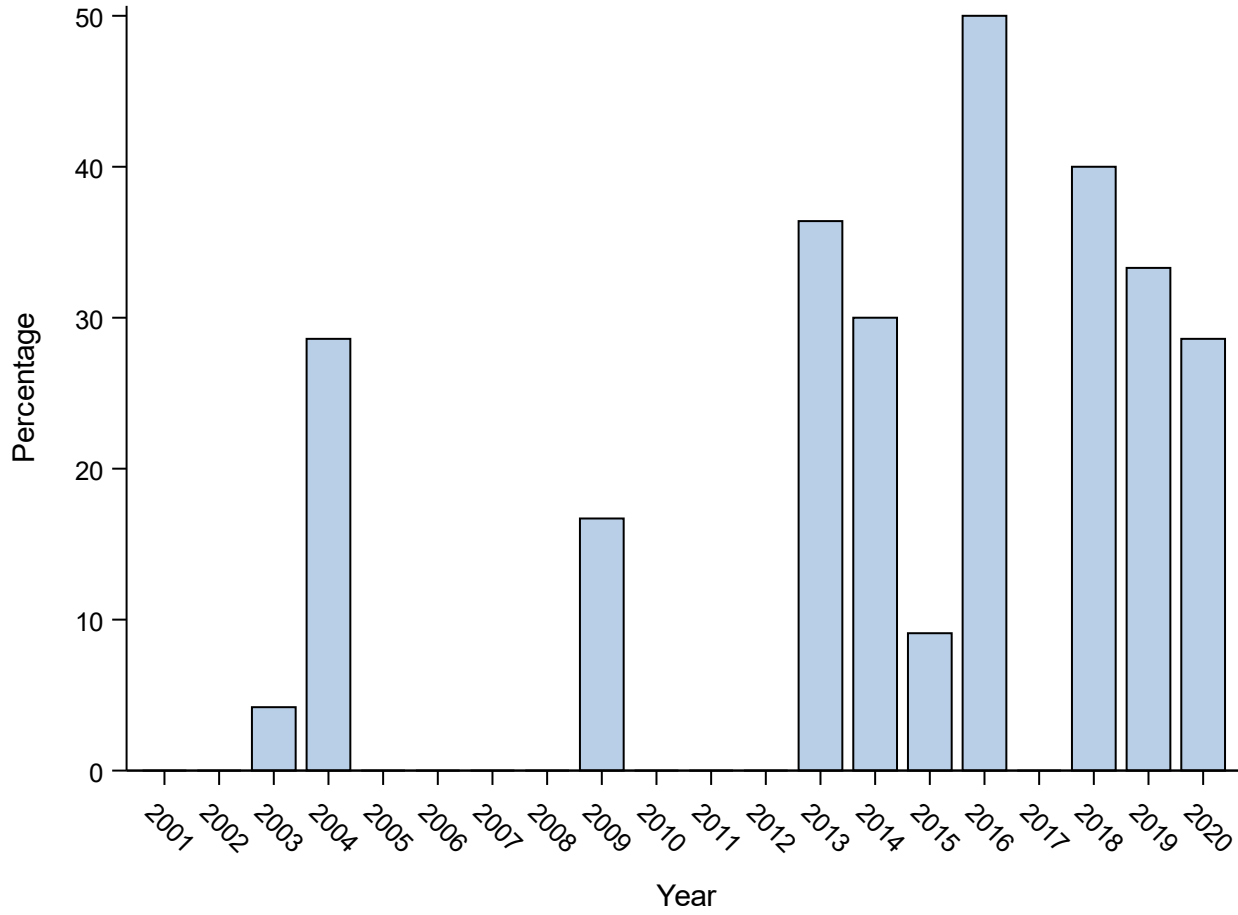


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Tripler Army Medical Center, Hawaii, 2001-2020

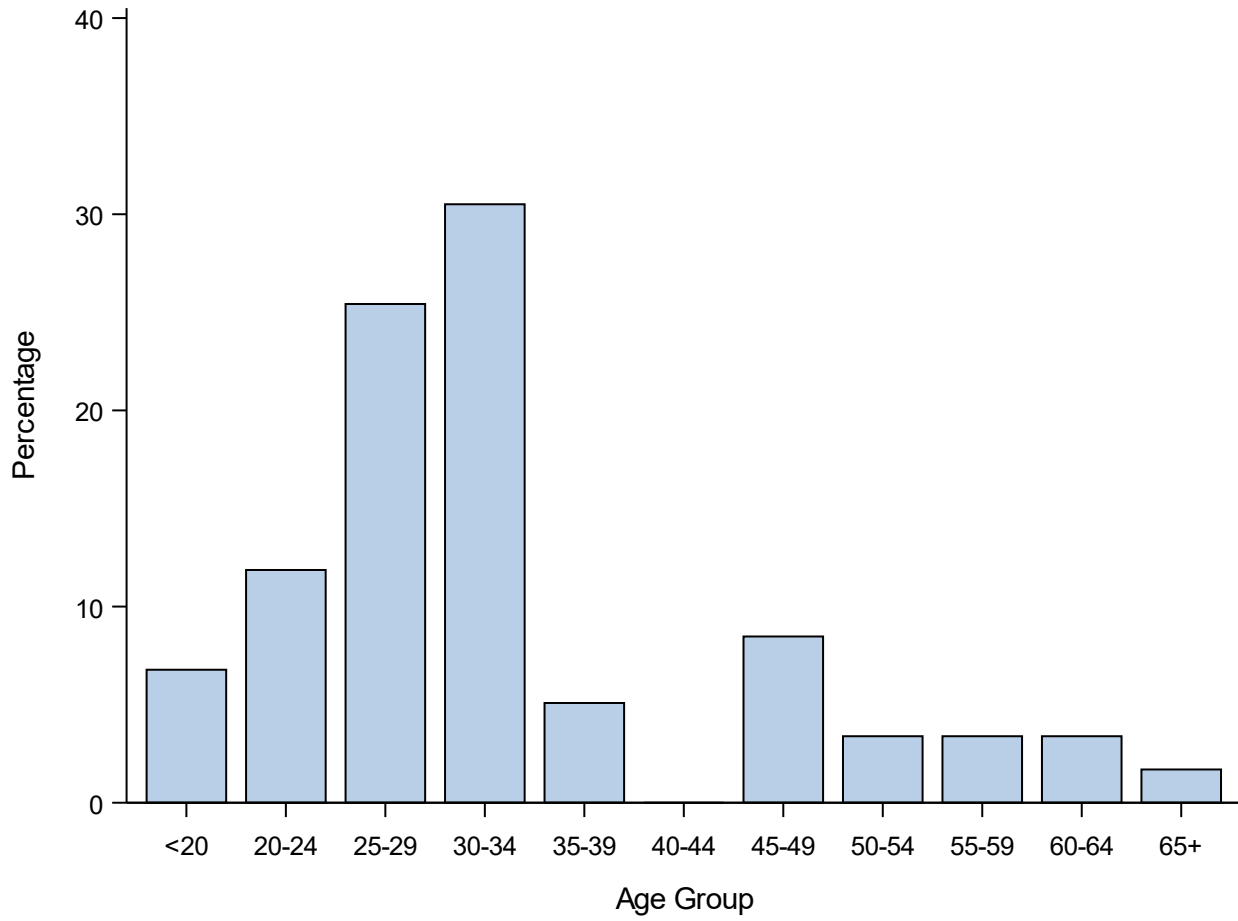


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	1 (4.2)	2 (28.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	4 (36.4)	3 (30.0)	1 (9.1)	1 (50.0)	0 (0.0)	2 (40.0)	2 (33.3)	2 (28.6)

Note: Ciprofloxacin resistance MICs \geq 1.0 μ g/ml.

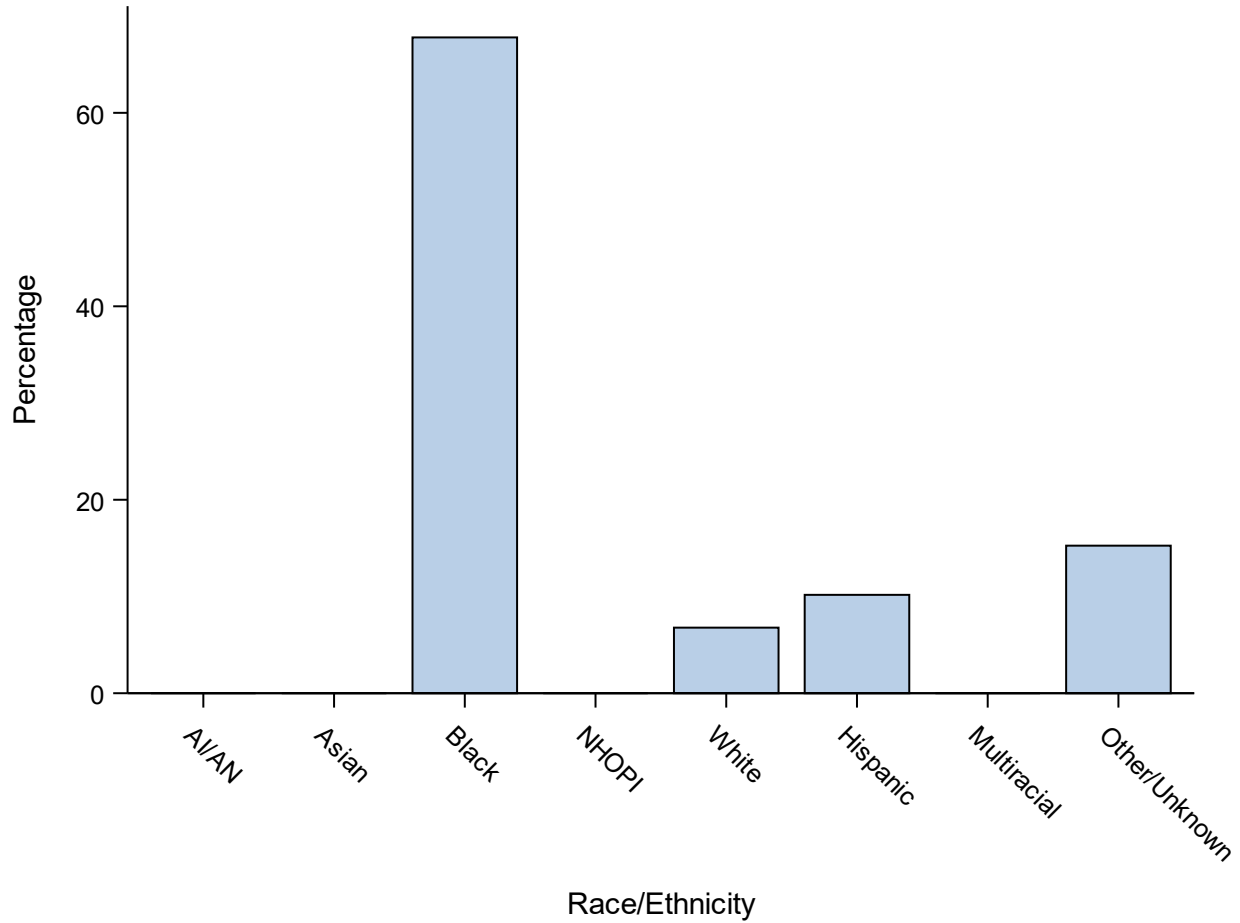
Figure A. Percentage of Participants by Age Group, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2020



<20 n (%)	20-24 n (%)	25-29 n (%)	30-34 n (%)	35-39 n (%)	40-44 n (%)	45-49 n (%)	50-54 n (%)	55-59 n (%)	60-64 n (%)	65+ n (%)	Total
4 (6.8)	7 (11.9)	15 (25.4)	18 (30.5)	3 (5.1)	0 (0.0)	5 (8.5)	2 (3.4)	2 (3.4)	2 (3.4)	1 (1.7)	59

Note: Cases with unknown age were excluded.

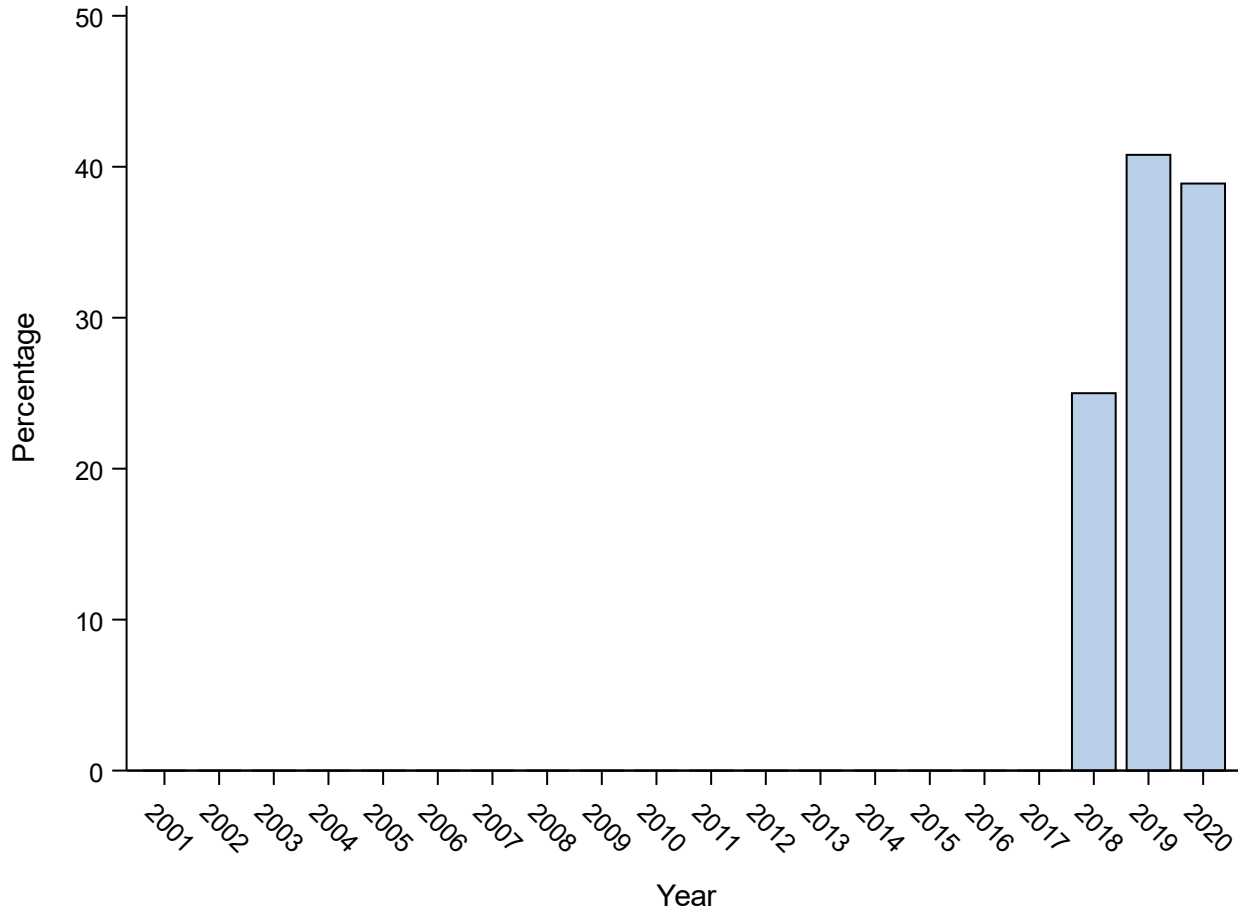
Figure B. Percentage of Participants by Race/Ethnicity, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2020



AI/AN n (%)	Asian n (%)	Black n (%)	NHOPI n (%)	White n (%)	Hispanic n (%)	Multiracial n (%)	Other/Unknown n (%)	Total
0 (0.0)	0 (0.0)	40 (67.8)	0 (0.0)	4 (6.8)	6 (10.2)	0 (0.0)	9 (15.3)	59

Note: Cases are reported using Office of Management and Budget (OMB) compliant race and ethnicity categories. AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Figure C. Percentage of Participants Identifying as Men who Have Sex with Men, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2001-2020

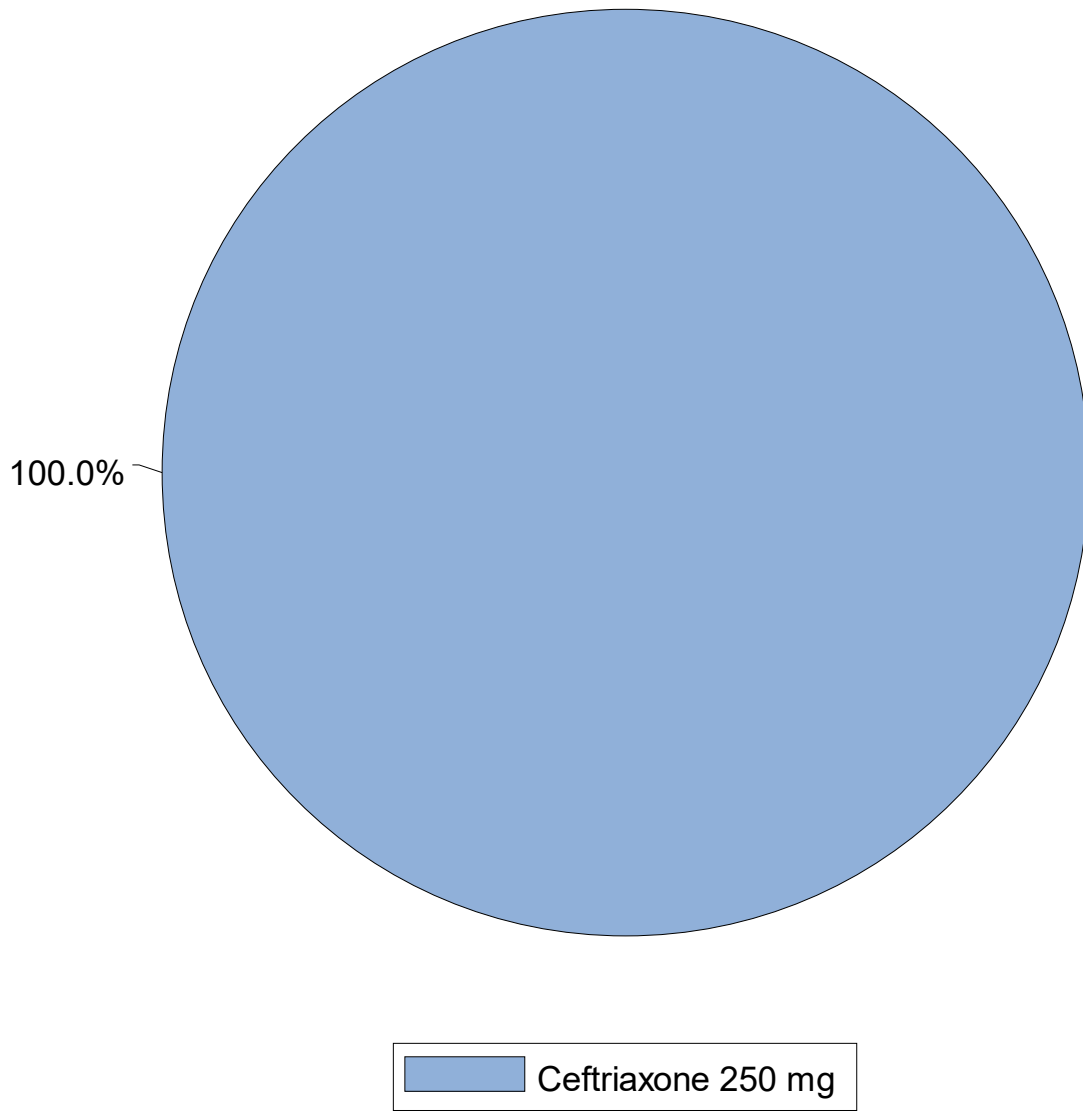


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	31 (40.8)	21 (38.9)

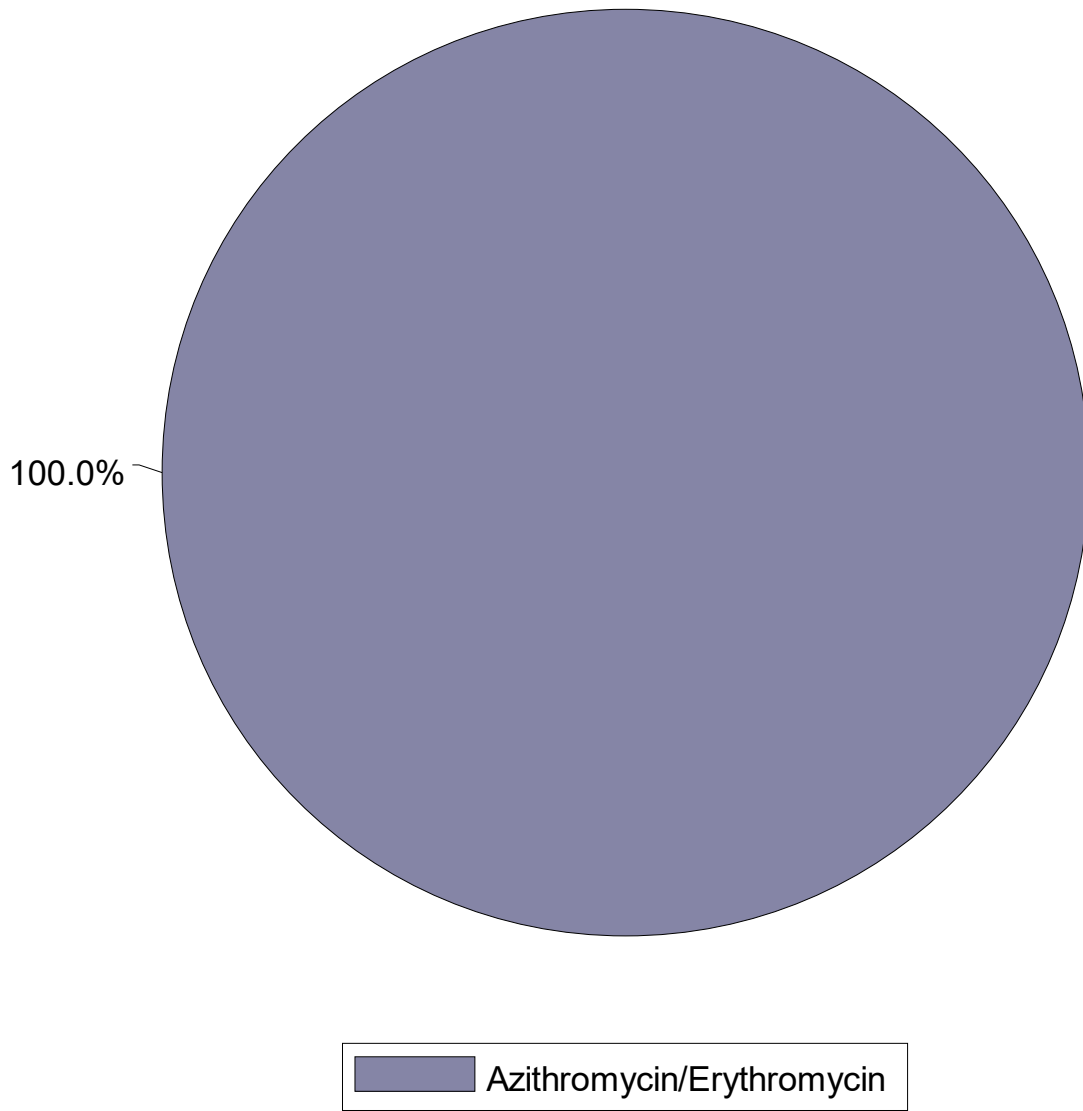
Note: Men who have sex with men = men who self-identified as gay or bisexual or reported recent male sex partners. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure D. Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2020



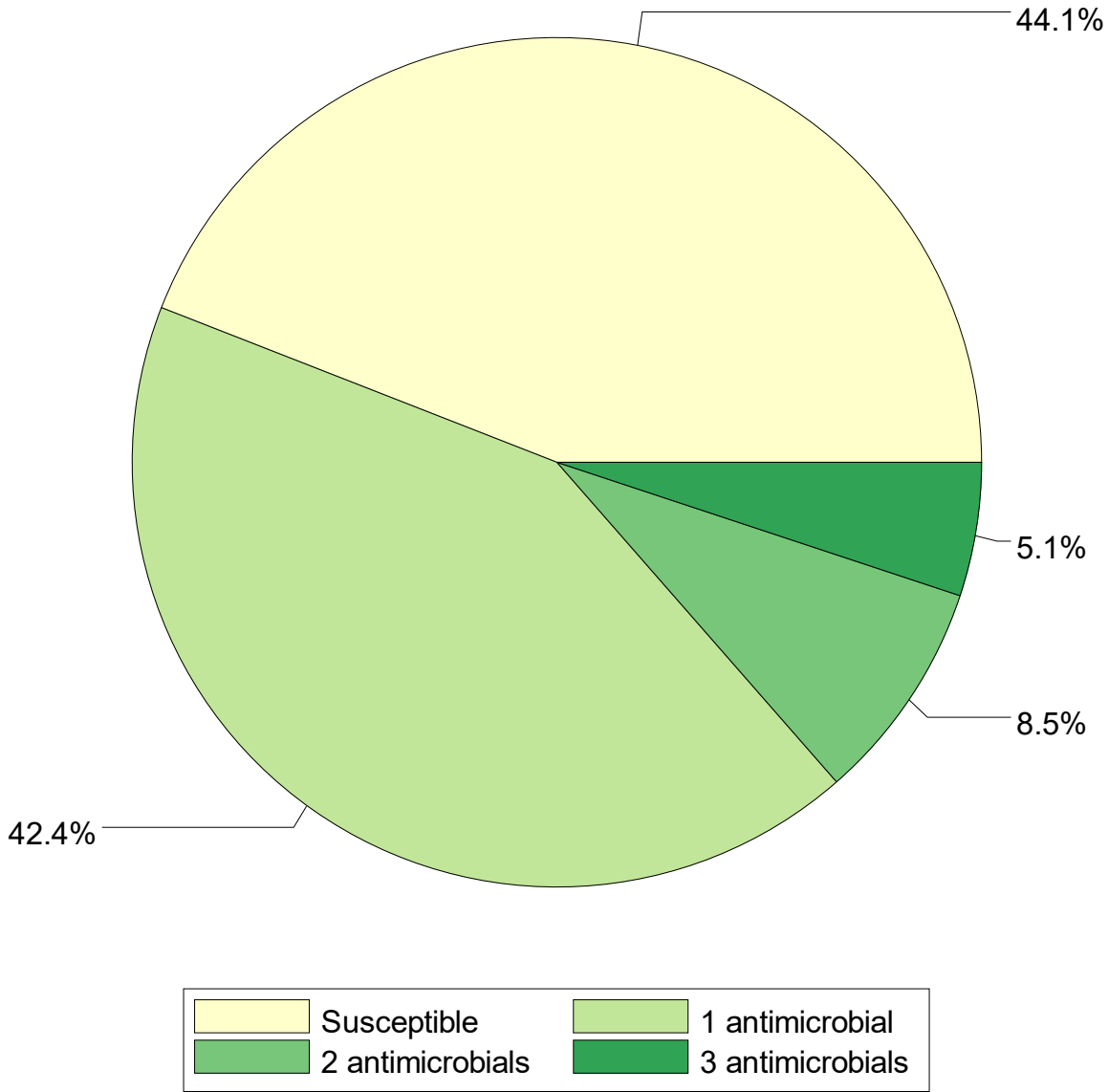
Primary Treatment	Count	Percentage
Ceftriaxone 250 mg	52	100.0

Figure E. Secondary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2020



Secondary Treatment	Count	Percentage
Azithromycin/Erythromycin	52	100.0

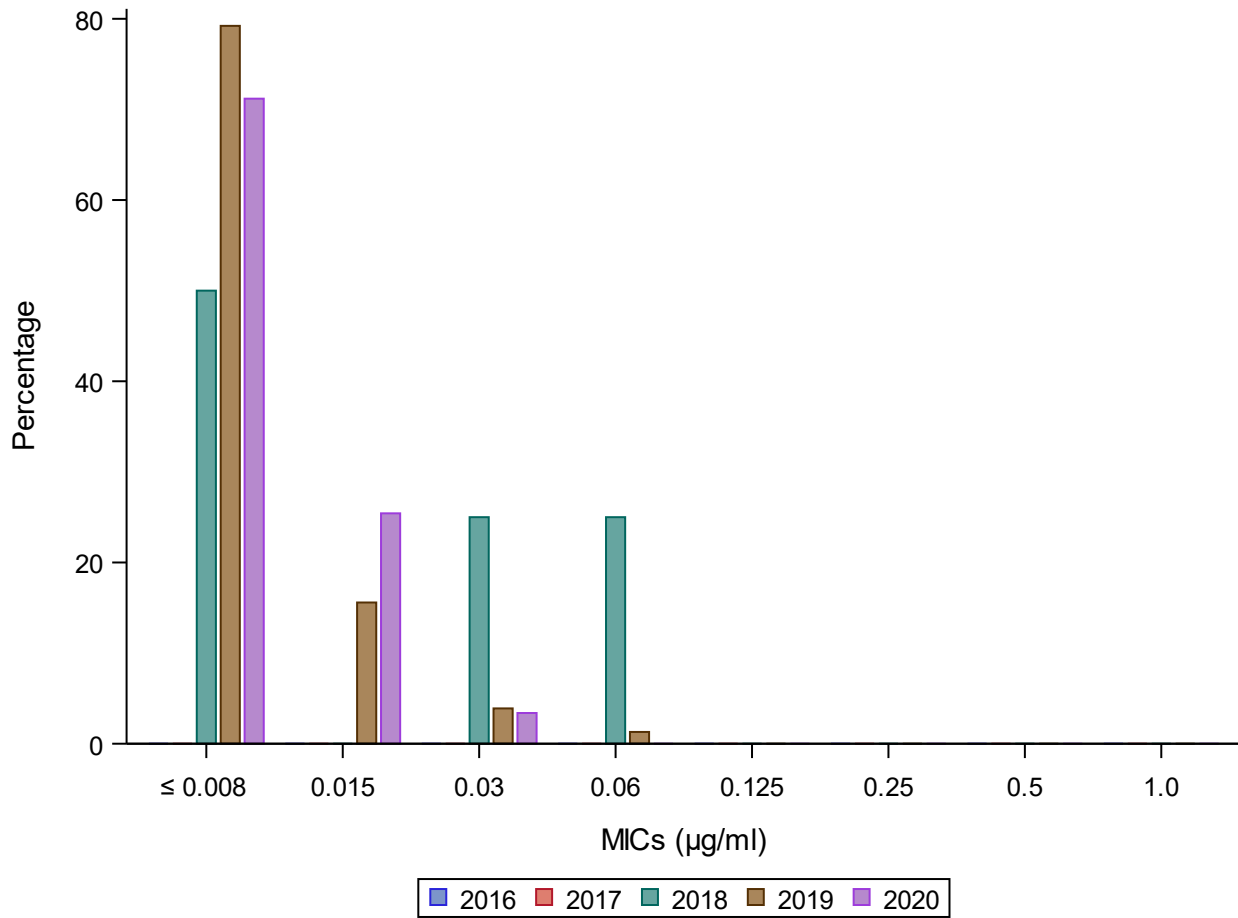
Figure F: Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns Among *Neisseria gonorrhoeae* Isolates by Number of Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2020



Number of Antimicrobials	Count	Percentage
Susceptible	26	44.1
1 antimicrobial	25	42.4
2 antimicrobials	5	8.5
3 antimicrobials	3	5.1
4+ antimicrobials	0	0.0

Note: Elevated = Ceftriaxone: MICs $\geq 0.125 \mu\text{g/mL}$; Cefixime: MICs $\geq 0.25 \mu\text{g/mL}$; Azithromycin: MICs $\geq 2.0 \mu\text{g/ml}$; Resistance = Tetracycline: MICs $\geq 2.0 \mu\text{g/mL}$; Ciprofloxacin: MICs $\geq 1.0 \mu\text{g/mL}$; Penicillin: MICs $\geq 2.0 \mu\text{g/mL}$ or Beta-lactamase positive.

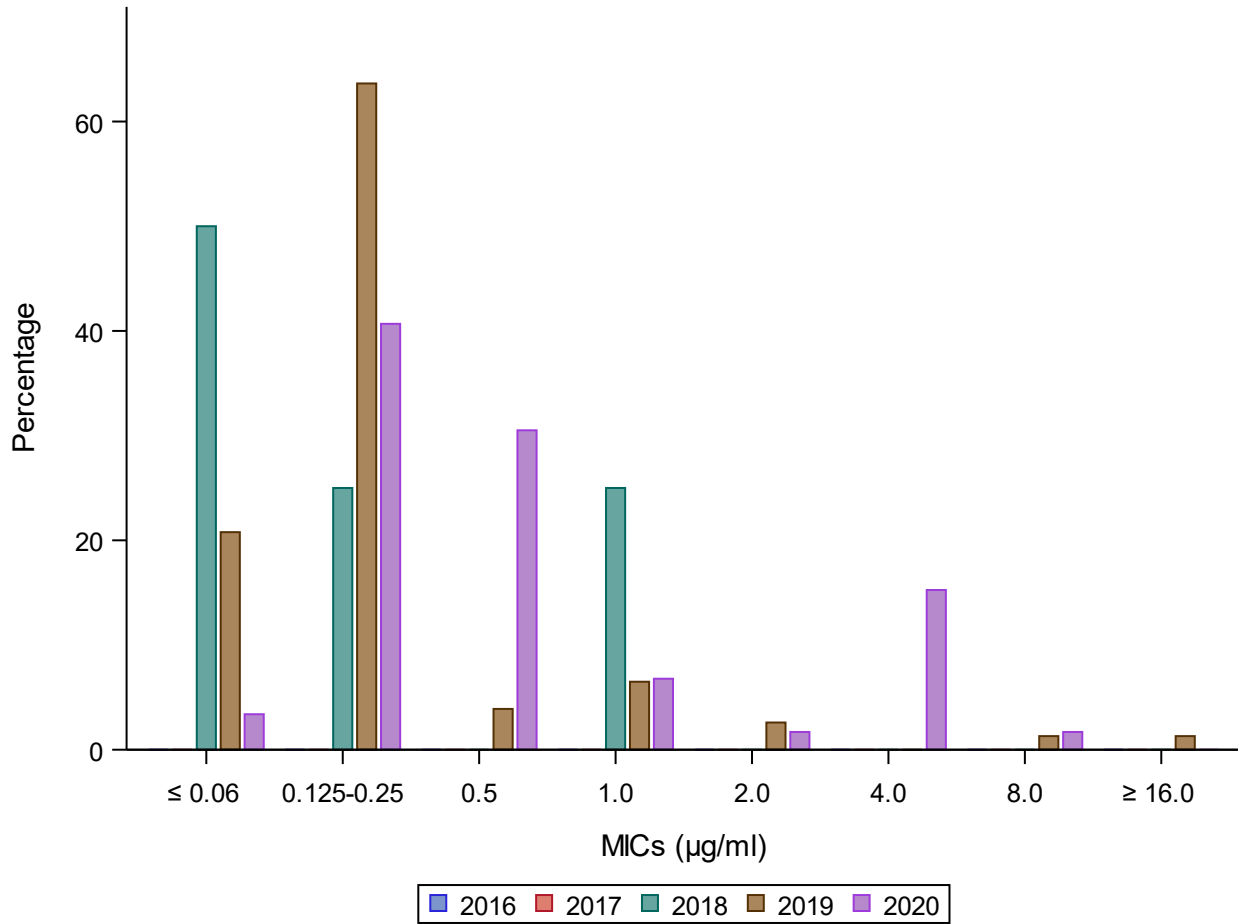
Figure G. Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2016-2020



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
2016	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
2017	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
2018	2 (50.0)	0 (0.0)	1 (25.0)	1 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4
2019	61 (79.2)	12 (15.6)	3 (3.9)	1 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	77
2020	42 (71.2)	15 (25.4)	2 (3.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	59

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

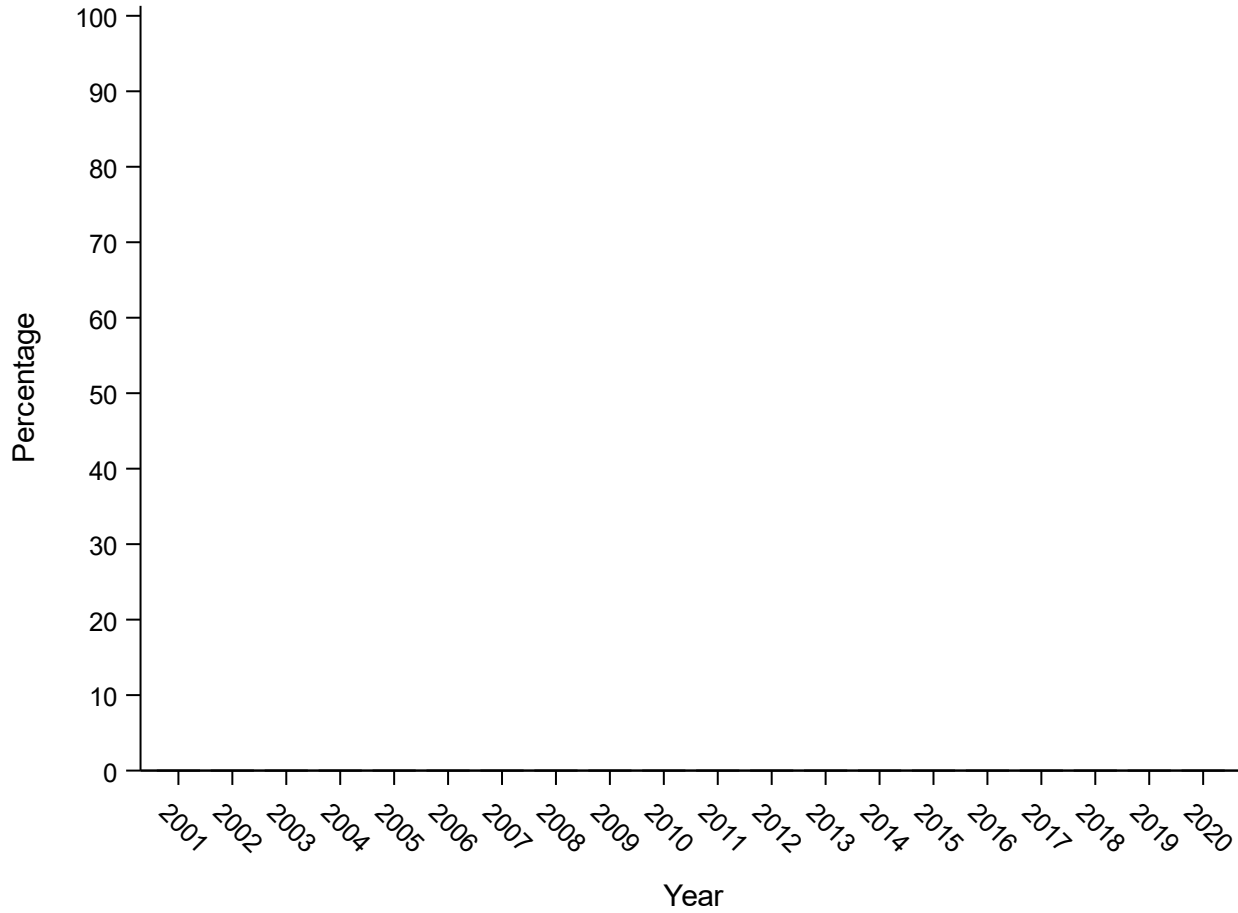
Figure H. Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2016-2020



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
2016	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
2017	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
2018	2 (50.0)	1 (25.0)	0 (0.0)	1 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4
2019	16 (20.8)	49 (63.6)	3 (3.9)	5 (6.5)	2 (2.6)	0 (0.0)	1 (1.3)	1 (1.3)	77
2020	2 (3.4)	24 (40.7)	18 (30.5)	4 (6.8)	1 (1.7)	9 (15.3)	1 (1.7)	0 (0.0)	59

Note: Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure I. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2001-2020

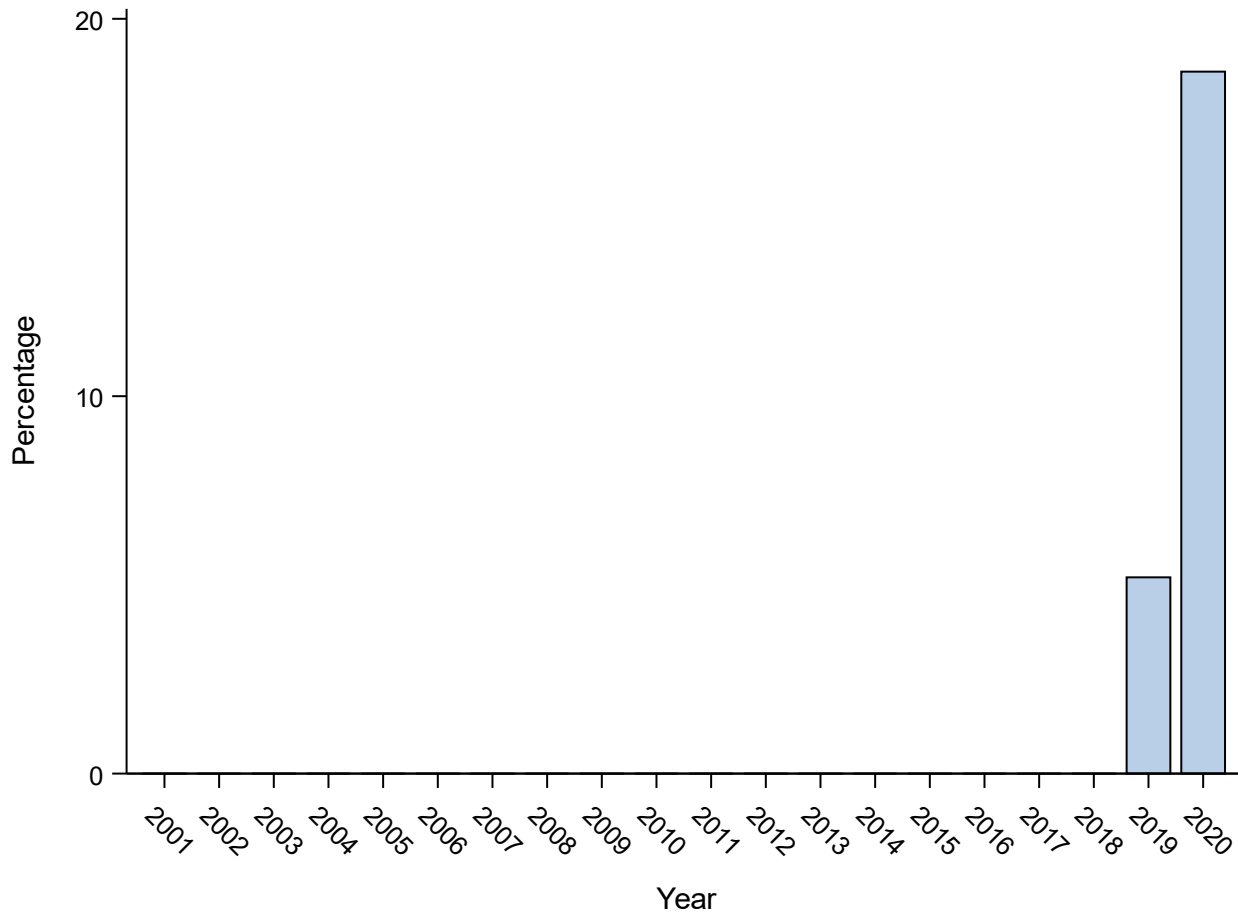


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
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 (0.0)	0 (0.0)

Note: Ceftriaxone elevated MICs ≥ 0.125 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure J. Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2001-2020

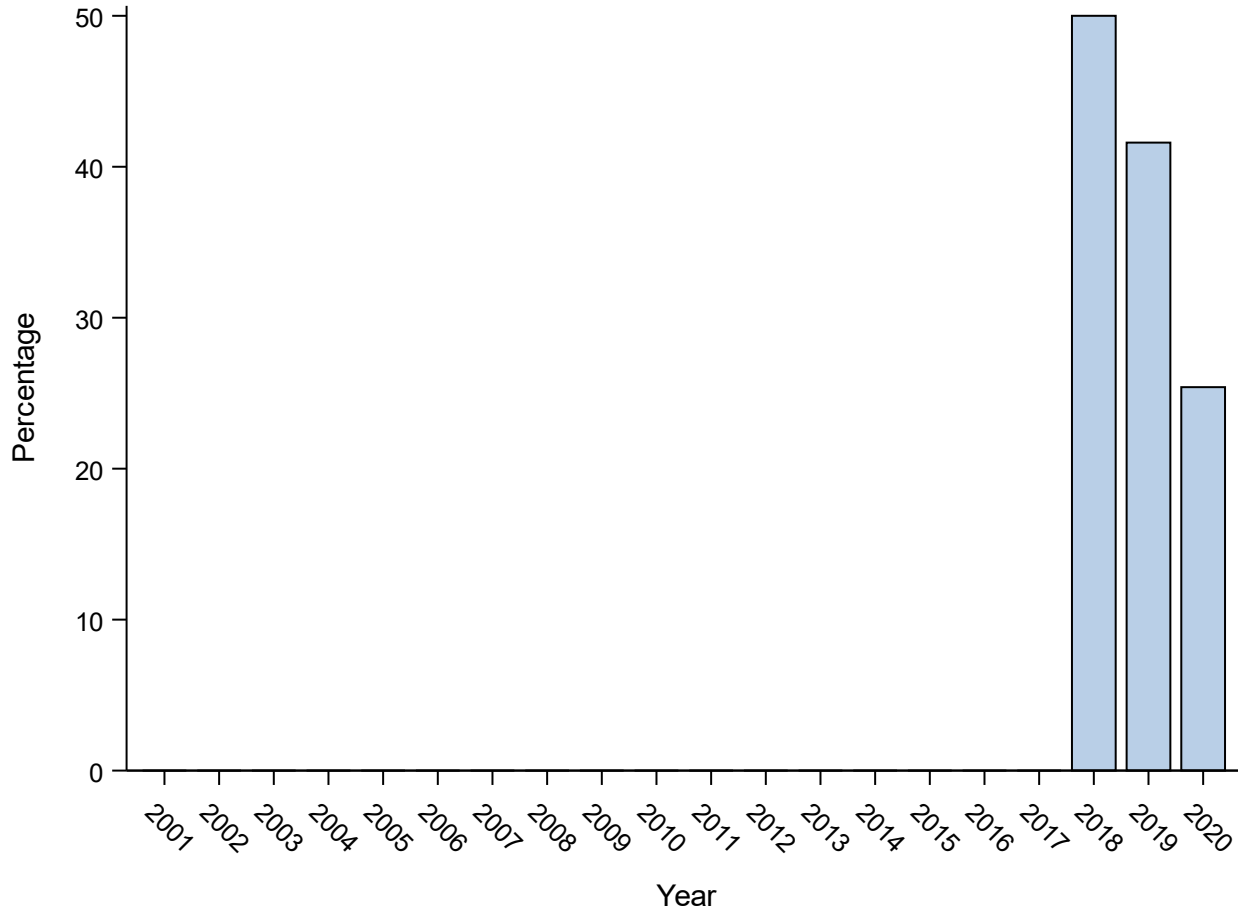


2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (5.2)	11 (18.6)

Note: Azithromycin elevated MICs ≥ 1.0 $\mu\text{g/ml}$ prior to 2005 and ≥ 2.0 $\mu\text{g/ml}$ during 2005-2020. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.

Figure K. Percentage of Isolates with Resistance to Ciprofloxacin, Gonococcal Isolate Surveillance Project (GISP), Washington, DC, 2001-2020



2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)
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 (0.0)	0 (0.0)

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)	2017 n (%)	2018 n (%)	2019 n (%)	2020 n (%)
0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (50.0)	32 (41.6)	15 (25.4)

Note: Ciprofloxacin resistance MICs ≥ 1.0 $\mu\text{g/ml}$. Site participated in GISP during 2018-2020. Where blanks exist on the graphs for years of participation, no data were available for the criteria presented.