



Health Advisory

Discontinuation of ciprofloxacin for invasive meningococcal disease (IMD) post-exposure prophylaxis (PEP), Bay Area and Sacramento regions

January 9, 2024

Key messages

- Due to the detection of ciprofloxacin-resistant strains of *Neisseria meningitidis*, local health jurisdictions (LHJs) in the Bay Area and Sacramento regions are recommended to discontinue the use of ciprofloxacin for invasive meningococcal disease (IMD) post-exposure prophylaxis (PEP).
- Rifampin, ceftriaxone or azithromycin are recommended options for IMD PEP in these LHJs.

Background

IMD is a rare and serious condition; during the 5-year period from 2016-2020, 24 to 80 cases occurred yearly in California. [Ciprofloxacin-resistant strains of *Neisseria meningitidis* have been increasing both nationally and internationally in recent years.](#) In the last 12 months, there have been two reported cases of ciprofloxacin-resistant IMD in Northern California, one in the Bay Area and one in the Sacramento region. Resistance to ceftriaxone, the first-line antibiotic recommended for IMD **treatment**, has not been detected.

CDC issued [public health guidance](#) in May 2023 to discontinue use of ciprofloxacin for IMD PEP in any geographic area where two criteria are met over a rolling 12 month period:

- (1) Two or more IMD cases caused by ciprofloxacin-resistant strains are reported, and
- (2) The cases caused by ciprofloxacin-resistant strains make up at least 20% of all reported IMD cases.

The Bay Area and Sacramento regions, as a combined geographic area, now meet these criteria.

Recommendations

Medical providers should report all suspected and laboratory confirmed cases of IMD (generally bacteremia and/or meningitis due to *Neisseria meningitidis*) [to their Local Health Jurisdictions \(LHJ\) immediately by telephone](#). The LHJ will assist with identification of close contacts to the case and provide post-exposure prophylaxis (PEP) recommendations to contacts of the case.

Ciprofloxacin should no longer be used for IMD PEP in: City of Berkeley, Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, San Francisco, Solano, Sonoma, Sacramento, El Dorado, Amador, Placer, San Joaquin, Sutter and Yolo counties. For IMD PEP, prescribe rifampin, ceftriaxone or azithromycin instead of ciprofloxacin. These recommendations (see table below and [CDPH Meningococcal Quick sheet, Appendix](#)) should be followed until updated public health guidance is issued.

No changes to empiric **treatment** of IMD are recommended at this time. Providers are encouraged to request antimicrobial susceptibility testing (AST) of *Neisseria meningitidis* isolates at their medical facility's laboratory to help guide clinical treatment, if such testing is available. The LHJ will assist with transfer of all meningococcal isolates to a public health lab for AST, but the results will not generally be available in time to guide treatment decisions.

Recommended chemoprophylaxis ciprofloxacin-resistant regimens

Age	Dose	Duration	Efficacy	Cautions/Notes
Rifampin^a				
<1 month	5 mg/kg, every 12 h, po	2 days		Discussion with an expert for infants <1 month of age.
≥1 month	10 mg/kg (maximum 600 mg), every 12 h, po	2 days	90–95%	Can interfere with efficacy of oral contraceptives and some seizure and anticoagulant medications; can stain soft contact lenses.
Adult	600 mg every 12 h, po	2 days	90–95%	
Ceftriaxone				
<15 years	125 mg, intramuscularly	Single dose	90–95%	To decrease pain at injection site, dilute with 1% lidocaine.
≥15 years – Adult	250 mg, intramuscularly	Single dose	90–95%	To decrease pain at injection site, dilute with 1% lidocaine.
Azithromycin				
Pediatric	10 mg/kg (maximum 500 mg), po	Single dose	90%	<u>Not</u> recommended routinely; may be recommended in jurisdictions with ciprofloxacin-resistant <i>N.meningitidis</i> strains. Equivalent to rifampin for eradication of <i>N.meningitidis</i> from nasopharynx in one study of young adults.
Adult	500 mg, po	Single dose	90%	

Note: Penicillin is often appropriate as treatment but is not appropriate for chemoprophylaxis.

^a Not recommended for use in pregnant women.

Resources

CDC Meningococcal Disease: <https://www.cdc.gov/meningococcal/index.html>

CDC Meningococcal Vaccines: <https://www.cdc.gov/vaccines/vpd/mening/index.html>

CDC Threshold for Changing Meningococcal Disease Prophylaxis Antibiotics in Areas with Ciprofloxacin Resistance: <https://www.cdc.gov/meningococcal/outbreaks/changing-prophylaxis-antibiotics.html>

CDPH Meningococcal Disease:

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/meningococcal.aspx>

CDPH Meningococcal Quicksheet:

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/IMM-MeningQuicksheet.pdf>