

# **Public Health Administration**

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To: Physicians and Advanced Practice Providers

From: Michael Sequeira, M.D.

Subject: Changes in Post-Exposure Prophylaxis for Invasive Meningococcal Disease

Public health guidance: Discontinuation of ciprofloxacin for invasive meningococcal disease (IMD) post-exposure prophylaxis (PEP) in Southern California

#### **Key Messages**

- Due to the detection of ciprofloxacin-resistant strains of Neisseria meningitidis, local health jurisdictions (LHJs) in Southern California 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. (See attached for dosing recommendations)
- No changes to empiric **treatment** of IMD are recommended at this time.
- There has been an increase in suspected meningococcal cases this year compared to previous years within San Bernardino County.
- Vaccination is the best way for prevention.
- Advisory Committee on Immunization Practices (ACIP) recommends all preteens and teens to receive routine meningococcal vaccines as well as adults who are at increased risk for meningococcal disease. See www.cdc.gov/vaccines/vpd/mening/index.html.

### **Background**

Invasive Meningococcal Disease (IMD) is a rare and serious condition. During the 5-year period from 2016 to 2020, 24 to 80 cases occurred annually in California. Ciprofloxacinresistant strains of Neisseria meningitidis have been increasing both nationally and internationally in recent years. In the past 12 months, there have been eight reported cases of ciprofloxacin-resistant IMD: two in Northern California, and six in Southern California. Resistance to ceftriaxone, the first-line antibiotic recommended for IMD treatment, has not been detected.

The CDC issued public health guidance in May 2023 to discontinue the use of ciprofloxacin for IMD post-exposure prophylaxis (PEP) in any geographic area where two criteria are met over a rolling 12-month period:

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- (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 Southern California region now meets these criteria. There has been an increase in suspected cases in 2024 in San Bernardino County, with 3 cases so far compared to only 1 case in 2022 and 1 in 2023. No epidemiological linkage has been identified so far.

#### 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 (LHJs) immediately by telephone. The LHJs 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 the following LHJs: Imperial, Kern, Long Beach, Los Angeles, Orange, Pasadena, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura.

For IMD PEP, prescribe rifampin, ceftriaxone or azithromycin instead of ciprofloxacin. These recommendations (see table below and <u>CDPH Meningococcal Quicksheet, Appendix</u>) 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 menigitidis isolates at their medical facility's laboratory to help guide clinical treatment if such testing is available.

Recommended chemoprophylaxis ciprofloxacin-resistant regimens.

Treatment	Age	Dose	Duration	Efficacy	Cautions/Notes
Rifampin*	<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%	

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

<sup>\*</sup>Not recommended for use in pregnant women.

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Recommended chemoprophylaxis ciprofloxacin-resistant regimens.

Treatment	Age	Dose	Duration	Efficacy	Cautions/Notes
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%	Not recommended routinely; may be recommended in jurisdictions with ciprofloxacinresistant N.meningitidis strains. Equivalent to rifampin for eradication of N.meningitidis 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.

## **Additional Resources**

- Centers for Disease Control and Prevention (CDC)
  - o Meningococcal Disease
  - o Meningococcal Vaccines
  - o <u>Threshold for Changing Meningococcal Disease Prophylaxis Antibiotics in Areas with Ciprofloxacin Resistance</u>
- California Department of Public Health (CDPH)
  - o Meningococcal Disease
  - o Meningococcal Quicksheet