Dentists can significantly impact the spread of antibiotic resistance. In Los Angeles County, dentists are the third highest prescribers of antibiotics following internal medicine and family practice physicians and the highest prescribers of clindamycin and amoxicillin.

Dentists in Los Angeles County should incorporate antibiotic stewardship with every decision to prescribe antibiotics by following best practices for treatment and prophylaxis of dental infections as well as prophylaxis of distal site infections. Unnecessary use of antibiotics accelerates the emergence and spread of resistant bacteria. Given that research and development of antibiotics has nearly halted, new antibiotics will not be available for several years, if at all. Antibiotics serve as an important supportive care measure throughout medicine and surgery and, the lack of availability of new antibiotics to treat evolving bacterial resistance is a serious public health threat. Dentists are responsible, as are all healthcare professionals, for practicing antibiotic stewardship and infection prevention and control, as effective strategies to control the emergence and spread of infections with antibiotic resistant pathogens.

## Los Angeles County Department of Public Health endorses the American Dental Association Guidelines for Antibiotic Prescribing in Dentistry

Do not prescribe antibiotic prophylaxis for prosthetic joint implants (PJI)\*.

• ADA Recommendation for PJI prophylaxis: Prophylactic antibiotics are not recommended prior to dental procedures to prevent prosthetic joint infection in patients with PJIs.

\*Consider in certain cases with severe immunodeficiency and either:

- a) history of prosthetic joint Infection or
- b) uncontrolled DM (A1c>8; BS >200)
- Do not use clindamycin for treatment or prophylaxis. Clindamycin, even after one dose, is a major cause of C. difficile associated diarrhea. C. difficile is easily transmissible to others, often difficult to treat and can cause severe morbidity and mortality.
  - ADA/AHA recommendation for prophylaxis of endocarditis in high-risk patients: Clindamycin is no longer recommended for antibiotic prophylaxis for a dental procedure. Alternatives for penicillin allergic patients include cephalexin, azithromycin, clarithromycin, or doxycycline depending on allergy history.
  - ADA recommendations for treatment of oral pain and swelling: Antibiotics are indicated only for apical
    abscess with symptoms of systemic involvement or if source control is not immediately available. Penicillin VK
    or amoxicillin is the preferred treatment. For patients with penicillin allergy cephalexin or azithromycin,
    depending on allergy history, is recommended.

 <u>Use shorter courses of antibiotics.</u> The ADA does not provide guidance for prophylaxis of surgical site infections for dental implants and tooth extractions. If administered, a single pre-operative dose is expected to be adequate. Post-operative doses are of limited benefit in healthy patients and may cause harm.

• ADA recommendations for treatment of apical abscess: Treat for 3 days, then stop antibiotics 24 hours after symptoms resolve. Do not treat beyond 7 days for penicillin, amoxicillin, and cephalexin (5 days for azithromycin).

Notes:

- Tools for implementing best practices for prescribing antibiotics in dental offices are available at OSAP (Organization for Safety, Asepsis and Prevention) <u>https://www.osap.org/antibiotic-stewardship</u>
- Additional resources will be available soon at a new LACDPH Antibiotic Stewardship Website (under development)
- For questions or additional information, contact us at <u>Stewardship@ph.lacounty.gov</u>

