County of Riverside
Department of Public Health

Susan D. Harrington, M.S., R.D., Director

Cameron Kaiser, M.D., Public Health Officer

Post-Exposure Chemoprophylaxis (PEP) – May 2014

- People with the highest priority for PEP include: close contacts in household, childcare, and healthcare settings; close contacts at high risk for severe disease and adverse outcomes; close contacts who may transmit disease to persons at high risk for severe disease; and close contacts in group settings where close interactions occur (e.g., after-school care groups, playgroups, groups of close friends, teammates, etc.).
- CDC and AAP recommend PEP for all close contacts, regardless of age or immunization status. However, clinicians may elect to recommend PEP for contacts other than those listed above on a case-by-case basis based on length of time from the onset of illness in the case, cough frequency and severity in the case, type of exposure to the contact, and the setting.
- Contacts who have not received PEP should be instructed to monitor themselves closely for catarrhal symptoms for 21 days after last exposure and notify public health if symptoms occur so that antimicrobial treatment/exclusion can be implemented immediately. Untreated contacts, such as healthcare or daycare workers who may transmit pertussis to high risk persons, should be actively monitored for symptoms for 21 days after last exposure. Exclusion from work may be indicated.
- *Chemoprophylaxis* of close contacts within 2-3 weeks of exposure to an infectious index case may limit transmission of pertussis in households and high risk settings (e.g., residential institutions, hospitals).
- Starting PEP ≥3 weeks after exposure to an infectious case is probably of no benefit to the contact.

RECOMMENDED TREATMENT AND POSTEXPOSURE PROPHYLAXIS, BY AGE GROUP

Age group	Azithromycin	Erythromycin*	Clarithromycin	Alternate agent: TMP-SMX†
<1 month	Recommended agent for infants <1 month; 10 mg/kg per day in a single dose x 5 days	Not preferred; associated with hypertrophic pyloric stenosis in infants <1 month. If azithromycin is unavailable use 40–50 mg/kg per day in 4 divided doses x 14 days	Not recommended	Contraindicated in infants <2 months (risk for kernicterus)
1–5 months	10 mg/kg per day in a single dose x 5 days	40–50 mg/kg per day in 4 divided doses x 14 days	15 mg/kg per day in 2 divided doses x 7 days	Contraindicated in infants <2 months For infants aged ≥ 2 months, TMP 8 mg/kg per day; SMX 40 mg/kg per day in 2 divided doses x 14 days.
Infants aged >6 months and children	10 mg/kg as a single dose on day 1 (maximum 500 mg); then 5 mg/kg per day as a single dose on days 2–5 (maximum 250 mg/day)	See above (maximum 2 g/day)	See above (maximum 1 g/day)	See above
Adolescents and adults	500 mg as a single dose on day 1 then 250 mg as a single dose on days 2–5	2 g/day in 4 divided doses x 14 days *Some experts prefer erythromycin estolate over erythromycin stearate or ethylsuccinate because it achieves higher serum levels with equal doses.	1 g/day in 2 divided doses x 7 days	TMP 320 mg/day, SMX 1600mg/day in 2 divided doses x 14 days †Trimethoprim-sulfamethoxazole (TMP-SMX) can be used as an alternative agent to macrolides in patients aged >2 months who are not pregnant or nursing and are allergic to, cannot tolerate, or are infected with a rare macrolide-resistant strain of *B. pertussis*.

More materials on pertussis are available at: http://www.rivco-diseasecontrol.org/ or http://cdph.ca.gov/HealthInfo/discond/Pages/Pertussis.aspx