



COUNTY OF ORANGE HEALTH CARE AGENCY

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Typhus in Orange County

In the past two weeks, Orange County Public Health received two reports of endemic (flea-borne) typhus acquired locally. Endemic (murine) typhus and typhus-like illness are caused by *Rickettsia typhi* and more recently *R. felis* and are transmitted by fleas. Cats and opossums are involved in the transmission cycle for *R. felis* and fleas taken in areas associated with recent human typhus cases have tested positive for *R. felis*. **Since cats and opossums are present throughout the County, human cases may occur in any area, even without previously reported human cases or positive fleas.**

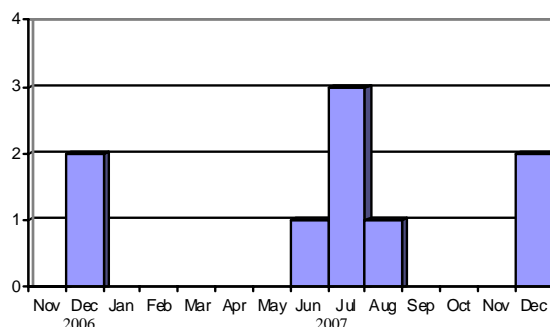
Review of the histories of our cases suggests that many had prolonged febrile illnesses before being diagnosed. We are providing you with a summary of the clinical findings of these cases to increase awareness of this disease in the County.

Summary of Orange County Endemic Typhus Cases, 2006-2007

- Before 2006, the last case in Orange County was reported in 1993.
- Nine cases of locally acquired typhus have been reported since 2006.
- Three cases were <18 years old, 3 were 18-64, and 3 were >65 years old. Five were male.
- Cities of residence were Huntington Beach for four cases, Westminster for four cases (all part of one cluster), and Los Alamitos for one.
- Nine (100%) had fever, eight (89%) headache, seven (78%) myalgia, and six (67%) had rash.
- Five (55.5%) had vomiting and six (67%) had elevated hepatic transaminases (AST, ALT). Some cases had thrombocytopenia and leukopenia. One case had altered mental status.
- Eight cases were hospitalized. Average length of stay was 5.8 days. Four (44%) tested negative for typhus in the first eight days of illness. Average number of days from onset of illness to positive serology drawn was 13.8 (range 7-27). No deaths were reported.

For more detailed information about endemic typhus, its treatment and prevention, see <http://www.ochealthinfo.com/epi/for-phys.htm#typhus>.

Endemic Typhus Cases by Month of Onset, Orange County, 2006-2007



Note: The three July and one August case were part of a cluster associated with an extended family with similar exposure.

Key Points

- **Consider endemic typhus in patients with compatible symptoms.**
- Send serology (*R. typhi* IgM and IgG) on suspect cases. Initial testing may be negative early in illness. Orange County Public Health can assist with testing and confirmation. Whole blood (5 cc in EDTA) for polymerase chain reaction testing may be requested on acute suspect cases.
- Empiric therapy with doxycycline should be started in suspect cases pending laboratory results.
- **Report all suspect and confirmed cases to Orange County Public Health at 714-834-8180.**