



**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**PUBLIC HEALTH
EPIDEMIOLOGY & ASSESSMENT**

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**Update: Mycobacterium Infections Associated
with a Local Dental Clinic**

To Orange County Medical Providers,

Mycobacterium abscessus dental infections have been reported in patients who have undergone pulpotomy procedures at the 2156 East Lincoln Avenue office of Children's Dental Group in Anaheim.

The facility's internal water system appears to have been the source of mycobacteria based on the Orange County Health Care Agency's facility assessment and laboratory testing. The facility discontinued performing pulpotomy procedures from September 6-November 7, 2016 in order to replace their water system and install appropriate infection control safeguards. On December 15, 2016, after the facility had restarted performing pulpotomies, OCHCA's Public Health Laboratory identified *Mycobacterium mucogenicum* growing from multiple clinical water samples obtained as part of follow up testing at the facility. Though *M. mucogenicum* is not known to pose the same risk to dental patients as *M. abscessus*, the identification of any mycobacterium (even at low levels) was of sufficient concern that the County Health Officer issued a second order requiring closure of the clinic pending further investigation of the situation.

Current Status of the Outbreak

67 children have been reported to have slowly progressive oral cellulitis consistent with mycobacterial infection following dental pulpotomy procedures at this facility. Additional potential cases are undergoing clinical assessment. 21 of the 67 cases have been identified by culture to have mycobacterial infection; 20 cases had *Mycobacterium abscessus* identified and one developed infection with *Mycobacterium chelonae*. Symptoms have begun a median of 71 days (range 15-305 days) after pulpotomy and progressed despite treatment with commonly used antibiotics such as amoxicillin, Augmentin (amoxicillin/clavulanate), or clindamycin. Infections have been identified in children who have received pulpotomies performed from February 4 to August 20, 2016.

Recommendations for Dental Care Follow Up

Because the incubation period for these infections has been as long as 10 months, and initial symptoms can be mild, dentists caring for these patients should conduct follow up exams for an extended period of time.

The Orange County Health Care Agency recommends that patients who have had a pulpotomy from the Children's Dental Group from January 1, 2016-December 15, 2016 have periodic follow-up dental examinations for one year after their procedure. Exams should occur monthly for the first 6 months after the procedure, then every two months for the second 6 months after pulpotomy.

Additional Notes

It is uncertain what additional risk, if any, exists for the 17 children who received pulpotomies after the facility reopened and *M. mucogenicum* was subsequently identified in the facility's water system. None have developed evidence of mycobacterial infection to this point. OCHCA is working to arrange dental follow up for these children to assure any necessary treatment is provided expeditiously.

Additional clinical characteristics in cases have frequently included some combination of the following:

- Dental abscess
- Cervical or submandibular lymphadenitis
- Granulomatous inflammation of affected tissue on pathology
- Cultures positive for acid fast bacilli from biopsy specimens of infected sites
- Multiple small pulmonary nodules identified on chest CT scan.

The facility has been working cooperatively with the Orange County Health Care Agency in the ongoing investigation. No suspect infections have been identified in other area dental practices, including other Children's Dental Group locations.

Information or questions about possible cases or the investigation should be referred to the Orange County Health Care Agency Epidemiology Program at 714-834-8180.