PUBLIC HEALTH ADVISORY

<table>
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<th>Subject:</th>
<th>Mycobacterium chimaera infections following open chest surgeries</th>
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<td>Date:</td>
<td>October 20, 2016</td>
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<td>Contact:</td>
<td>Santa Cruz County Public Health / Communicable Disease Unit (831) 454 - 4114</td>
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**SITUATION:**

The Centers for Disease Control (CDC) has issued a Health Alert stating that epidemiologic and laboratory evidence in the U.S. and Europe point to an association between invasive *Mycobacterium avium* complex (including *M. chimaera*) infections and exposure to contaminated Stöckert (or Sorin) 3T heater-cooler devices, used in many open-chest surgeries in California and nationwide. *M. chimaera* is a species of nontuberculous mycobacterium (NTM) commonly found in soil and water. The infected patients had undergone open-heart surgery that used contaminated heater-cooler devices during extracorporeal circulation.

These infections are difficult to treat and delays in diagnosis further complicate patients’ clinical management. Therefore, it is imperative that patients and providers are informed about the risk of infection associated with use of the 3T device and the need for appropriate diagnostic evaluation to facilitate timely diagnosis and treatment.

**RECOMMENDATIONS:**

- Internists, infectious disease specialists, cardiologists, cardiothoracic surgeons, and other clinicians should suspect NTM infections among patients who have signs of infection and a history of open-chest cardiac surgery.

- Infections can take months to cause symptoms. Physicians should consider the possibility of *M. chimaera* infection when evaluating patients who have had open chest surgery during the past 4 years.

- Patients with NTM infections following cardiac surgery have presented with a variety of clinical manifestations. Common examples are endocarditis, surgical site infection, or abscess and bacteremia. Other clinical manifestations have included hepatitis, renal insufficiency, splenomegaly, pancytopenia, and osteomyelitis.
• Diagnosis can be difficult due to the nonspecific presentation of illness and the slow growing nature of the bacteria.

• Physicians should consider consulting with an infectious disease specialist if caring for patients who have undergone an open-chest cardiac procedure and present with signs of infection.

• Cultures for acid fast bacilli (AFB) should be obtained as part of the evaluation.

• For AFB-positive cultures specialized testing to detect *M. chimaera* may be needed and further laboratory testing should be discussed and arranged in consultation with an infectious disease specialist and Santa Cruz County Communicable Disease Unit (CDU).

**INFORMATION:**

- [https://www.cdc.gov/mmwr/volumes/65/wr/mm6540a6.htm?s_cid=mm6540a6_w](https://www.cdc.gov/mmwr/volumes/65/wr/mm6540a6.htm?s_cid=mm6540a6_w)
- If you have questions please call the Communicable Disease Unit at (831) 454-4114.

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**Health Alert**: conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.

**Health Update**: provides updated information regarding an incident or situation; unlikely to require immediate action.