



RIGOBERTO VARGAS, MPH, DIRECTOR

ROBERT M. LEVIN, MD, HEALTH OFFICER  
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Please copy and distribute to ALL physicians at your location.

**Physicians: Be Alert for Patients at Risk from Contaminated  
Heater-Cooler Devices Used during Cardiac Surgery**

Stockert 3T heater-coolers used for open-heart (open-chest) surgery may be contaminated, possibly putting patients at risk for a life threatening infection. The CDC has advised hospitals to notify patients who underwent these surgeries that they may be at risk. The devices, manufactured by LivaNova PLC (formerly Sorin Group Deutschland GmbH), were likely contaminated with *Mycobacterium chimaera* during manufacture.

More than 250,000 heart bypass procedures using heater-cooler devices are performed in the United States every year; the 3T heater-cooler device linked to these infections represents about 60% of the heater-cooler devices in the country. The risk of infection is between about 1 in 100 and 1 in 1,000 patients. Initial information suggests that patients who had prosthetic material implanted are at highest risk for nontuberculous mycobacterium (NTM) infections.

These infections are difficult to treat and delays in diagnosis further complicate patients' clinical management. It is imperative that patients 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.

There have been no known cases of *M. chimaera* infection in Ventura County thus far. However, three facilities do open-heart surgeries, and all three use the Stockert 3T heater-coolers. Health care providers are encouraged to consider infection with *M. chimaera* in their patients who have had open heart surgery and experience symptoms such as night sweats, muscle aches, unexplained weight loss, fatigue, or unexplained fever.

## Recommendations

### Healthcare providers

1. Emergency room and ambulatory care physicians, infectious disease specialists, cardiologists, cardiothoracic surgeons, and other providers should suspect NTM infections among patients who have signs of infection and a history of open-chest cardiac surgery.
  - o Infections can take months to cause symptoms.
  - o 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.
2. Diagnosis can be difficult due to the nonspecific presentation of illness and the slow growing nature of the bacteria.
  - o 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.
  - o Cultures for acid fast bacilli (AFB) should be obtained as part of the evaluation.
  - o Other 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 or health department.

### Communicable Disease Office