Dear Healthcare Provider:

Your patient has undergone open-chest cardiac surgery at Children’s of Alabama and has been notified of a potential risk of a rare infection related to this surgery. In a letter to patients, we encourage them to discuss any symptoms with their primary healthcare provider. Heater-cooler devices used during certain open-chest cardiac surgeries that require the use of a heart/lung bypass machine have recently been linked to a rare bacterial infection caused by *Mycobacterium chimaera*, a slow-growing species of nontuberculous mycobacteria (NTM).

Investigations conducted by Centers for Disease Control and Prevention (CDC), in collaboration with National Jewish Health, assessed several clusters of infections that were linked to exposures to LivaNova PLC (formerly Sorin Group Deutschland GmbH) Stöckert 3T heater-cooler devices during cardiac surgery. It was determined that these devices were likely contaminated with *M. chimaera* during manufacturing. CDC is recommending that clinicians, including cardiologists and general practitioners who take care of cardiac surgery patients before and after their surgery, be aware of the risk and consider NTM as a potential cause of unexplained chronic illness. *M. chimaera* are slow-growing bacteria and infections may take months or even years to cause symptoms. Symptoms of an invasive NTM infection may include:

- night sweats
- muscle aches
- weight loss
- fatigue
- unexplained fever

Patients with NTM infections following cardiac surgery have presented with a variety of clinical manifestations. Common examples include endocarditis, surgical site infection, or abscess and bacteremia. Other clinical manifestations have included hepatitis, renal insufficiency, splenomegaly, pancytopenia, and osteomyelitis. Clinicians and patients may not immediately consider an NTM infection when symptoms present. Delayed diagnosis may make treating these infections even more challenging. There is no test to determine whether a person has been exposed to the bacteria. Infections can be diagnosed by detecting the bacteria by laboratory culture; the slow growing nature of the bacteria can require up to two months to rule out infection. When seeing patients with possible NTM infections and a history of cardiac surgery, clinicians should consider arranging consultation with an infectious disease specialist.

If an NTM infection is suspected, it is important to obtain acid fast bacilli (AFB) cultures from an infected wound and/or blood to increase the likelihood of identification of the organism and to obtain an AFB smear in order to have preliminary information while awaiting culture results. If you have a clinical question pertaining to one of your patients, or if you have a symptomatic patient who requires additional evaluation for potential NTM infection, please call 205-638-9100 and ask to speak to the infectious disease specialist on-call. If you have any questions about talking to your patients or anything else regarding this infection, please do not hesitate to contact us.

Sincerely,

Crayton A. Fargason, MD,
Chief Medical Officer