

## **NTM Clinic Patient Information Sheet**

- Nontuberculous Mycobacteria (NTM) are slow-growing bacteria found readily in the environment (water, air, soil, animals) worldwide. Most people come into contact with these bacteria on a regular basis via direct contact, inhalation, or ingestion. Despite frequent exposure to NTM in the environment, healthy people with intact immune systems have an extremely low likelihood of developing infection.
- Heater-cooler devices are used during cardiac surgeries to warm or cool a patient as part of their care. There is the potential for the bacteria to grow in a water reservoir in the heater-cooler units. It is important to note that the water in the heater-cooler unit never comes into contact with the patient's blood or body fluids. When the water evaporates, the bacteria escapes the device with the water. Once it hits the open air, the bacteria then becomes aerosolized and can then make contact with a patient's open wound during surgery.
- Despite potential exposure to NTM during open-heart surgery, the risk of developing infection is **extremely low** (approximately 1 percent or less). Because NTM are slow-growing organisms, signs and symptoms of infection may not occur for months to years after open-heart surgery.
- Signs and symptoms of NTM infection are nonspecific. They may include (but are not limited to) **unexplained** fevers, chills, night sweats, malaise, weight loss, weakness, fatigue, muscle/joint pain, and abnormalities with surgical incision (pain, redness, pus). Because these symptoms can be associated with numerous conditions unrelated to NTM infection, it is important to notify your clinician via the nurse call center (1-866-217-2970) to determine whether further work-up is warranted.
- There is no single test that is sensitive nor specific enough alone to diagnose NTM infection. NTM infection diagnosis is therefore based on detailed patient history, physical exam, blood work, imaging studies, and sometimes invasive procedures (i.e. biopsy). Your clinician will decide at your visit which blood work/testing is required. This may include a blood culture for NTM ("AFB blood culture"). NTM blood cultures are monitored in the lab **for approximately 8 weeks** until a final result is obtained. No test is perfect. As with most laboratory tests, there can be false-positive as well as false-negative results. All testing results (whether positive or negative) require clinician interpretation prior to making a determination on whether infection is present. Finally, although your laboratory testing may be negative for infection today, it does not rule out the possibility of developing infection in the future. Follow-up testing may be required.
- NTM infection is a treatable condition. Treatment is complex, consisting of 3 to 5 different antibiotics taken daily over a period of 1 to 2 years. Because these antibiotics can have significant side effects and drug-drug interactions, we generally do not treat potentially exposed patients as a preventive measure. Treatment is generally withheld until a diagnosis is made.
- If you have questions or develop new/worsening unexplained symptoms, please call the nurse call center at (866) 217-2970.