Health Advisory:
Nontuberculous Mycobacteria Cases Following Plastic Surgery in the Dominican Republic

August 22, 2017

This document will be updated as new information becomes available. The current version can always be viewed at http://www.health.mo.gov.

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

Health Alerts convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies, and/or the public.

Health Advisories provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

Health Guidances contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

Health Updates provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

The Missouri Department of Health and Senior Services (DHSS) has received multiple reports of nontuberculous Mycobacteria (NTM) infections in individuals who have undergone plastic surgery in the Dominican Republic. The Centers for Disease Control and Prevention (CDC) has received similar reports from other state and city health departments since January 2017. The purpose of this DHSS Health Advisory is to alert healthcare providers of the cluster of cases, request that similar cases be reported to DHSS, and provide guidance on laboratory testing.

Background

NTM are ubiquitous and found in water, soil, dust, food, and other environmental sources. The organism can enter the body through ingestion, aspiration, or inoculation from an environmental source. There is no evidence of person-to-person transmission. Clinical symptoms depend on the organism and the location of infection, but are usually chronic and progressive. Treatment of NTM infections typically requires strong antibiotics administered for an extended period of time.

Symptoms of surgical site infections caused by NTMs can include pain, redness and swelling at the incision site, drainage of fluid or pus, chills, fever, myalgia, and malaise. Symptom onset is most likely within one month of surgery. Mycobacterium species associated with plastic surgery in the Dominican Republic include M. abscessus and M. massiliense.

Laboratory Testing

Nontuberculous Mycobacteria are rapidly growing and typically grow well on routine bacterial culture media; however, recovery of the organism from patients on empiric antimicrobial therapy may be hindered. Some patients with these infections may have acid-fast bacilli (AFB) positive smears from pathology smears, but no organism recovered on culture.

Commonly used identification methods for NTM are HPLC, MALDI-TOF, and gene sequencing (16S, rpoB or hsp65). The Missouri State Public Health Laboratory (MSPHL) provides laboratory support for the speciation of NTM isolates recovered from processed clinical samples, and can facilitate submission of AFB-positive pathology samples to CDC for additional testing. It is possible that CDC may request isolates for further testing; consequently, clinical and reference laboratories are asked to retain these isolates from patients with a history of plastic surgery in the Dominican Republic.
Reporting
Healthcare providers are asked to report suspected NTM infections in patients who have undergone plastic surgery in the Dominican Republic to DHSS at 573/751-6113, or 800/392-0272 (24/7).

Additional Information
Nontuberculous Mycobacteria in Medical Tourists to the Dominican Republic (CDC)