

Fungal Meningitis Cases Resulting From Potentially Contaminated Steroid Injections

Target audience: Clinical laboratories

Update # 5 Wednesday, October 17, 2012

Investigation Widening: Additional NECC Product Implicated in Outbreak

FDA has advised that a patient with possible meningitis potentially associated with epidural injection of an additional NECC product, triamcinolone acetonide, has been identified. FDA advises healthcare professionals to follow-up with patients who were administered **any injectable medication from or produced by NECC**, including injectable ophthalmic drugs used in conjunction with eye surgery, or a cardioplegic solution purchased from or produced by NECC after May 21, 2012.

Changes to Case Definition

The CDC case definition has been updated to include instructions for calculating the white blood cell (WBC) count when red blood cells (RBC) are also present in a cerebrospinal fluid specimen (CSF). The WBC count should be adjusted by subtracting one WBC for every 500 RBC's. Please refer to the link below for the complete case definition.

http://www.cdc.gov/hai/outbreaks/clinicians/casedef_multistate_outbreak.html

Changes to Testing Recommendations

Diagnostic testing and specimen submission guidelines have also been updated and can be found here: http://www.cdc.gov/hai/outbreaks/clinicians/instructions_testingandsubmission.html.

If the laboratory is notified that specimens are from a patient who has received any injectable medication from NECC, the laboratory should perform fungal, aerobic and anaerobic cultures (and whatever else the physician requests). Please note that CDC is expanded this recommendation to include sites other than epidural injection. Any fungal isolate recovered from these patients should be forwarded to MDCH for identification.

Clinicians are instructed to send CSF only on patients with CSF results showing >5 white blood cells (use traumatic tap correction for WBC), regardless of glucose or protein levels. As instructed in Update #4, please do not send CSF specimens to MDCH laboratory for forwarding to the CDC unless the patient has been appropriately identified as a case and reported to the MDCH.

To date, three fungal species have been associated with this outbreak: *Exserohilum* species, *Aspergillus fumigatus*, and *Cladosporium* species. *Exserohilum* isolates are reportedly slow to sporulate. If a fungal isolate is recovered in your laboratory from a sterile site on a patient associated with this outbreak, please send a subculture of the isolate to MDCH laboratory immediately (i.e., without waiting for it to sporulate). A picture of sporulating *Exserohilum* can be found at

http://www.cdc.gov/hai/outbreaks/images/photo-exserohilum_960px.jpg.

Also please note that the *Aspergillus* galactomannan assay is no longer a specific recommendation in the outbreak testing algorithm.



Fungal Meningitis Resulting From Potentially Contaminated Steroid Injections

These instructions are meant to supplement routine laboratory and microbiologic test deemed necessary by the clinical team and should not replace existing diagnostic protocol.

Questions and Additional Information

For laboratory related questions, please contact

Dr. Jim Rudrik, Microbiology Section Manager

RudrikJ@michigan.gov

(517) 335-9641

For general questions regarding this outbreak or the information requested, please contact

Dr. Jennie Finks in the Bureau of Disease Control, Prevention and Epidemiology

FinksJ@michigan.gov

(517) 335-8165

Thank you for your assistance in this investigation.