

June 15, 2023

Health Update for District of Columbia Health Care Providers

Important Updates on Outbreak of Suspected Fungal Meningitis in U.S. Patients who Underwent Surgical Procedures under Epidural Anesthesia in Matamoros, Mexico

SUMMARY

The Centers for Disease Control and Prevention (CDC) issued a Health Advisory on May 17, 2023 and a follow up Health Update on June 1, 2023 about a fungal meningitis outbreak involving patients from the United States and Mexico who underwent cosmetic procedures under epidural anesthesia at two clinics in the city of Matamoros, Tamaulipas state, Mexico.

The first health advisory was released after CDC received multiple reports of U.S patients being hospitalized in Texas following cosmetic procedures. At that time, the causative organism was unknown, however one patient had elevated levels of (1,3)-beta-D-glucan detected in their cerebrospinal fluid (CSF), a marker of fungal infection. By June 1, 2023, three U.S. laboratories in collaboration with the Mexican national laboratory had detected fungal signals consistent with *Fusarium solani* species complex from the CSF of patients receiving follow-up care in Mexico or United States. More than 200 residents in 25 U.S. states and jurisdictions have been identified at risk for fungal meningitis because they received epidural anesthesia at the affected clinics in 2023. As of June 14, 4 US patients have died. There have been no confirmed cases to-date in the District of Columbia.

This health notice provides information about the ongoing fungal meningitis outbreak and highlights interim recommendations for diagnosis and treatment. **All patients who received procedures under epidural anesthesia at River Side Surgical Center or Clinica K-3 since January 1, 2023, regardless of symptoms, should be evaluated for fungal meningitis including a lumbar puncture +/- an MRI of the brain.**

BACKGROUND

On May 8, 2023, CDC and Texas public health officials were notified through the Emerging Infections Network of two people hospitalized in Texas with symptoms of meningitis about 2-4 weeks after receiving cosmetic procedures under epidural anesthesia at River Side Surgical Center in the city of Matamoros, Tamaulipas state, Mexico. Since that time, public health officials in the United States and Mexico have been responding to a meningitis outbreak associated with River Side Surgical Center and Clinica K-3. also located in Matamoros. These clinics were closed on May

13, 2023. During this outbreak, symptom onset has ranged from 3 days to 4 weeks after the date of exposure. The most updated information about the outbreak and case counts can be found on [CDC's website](#).

RECOMMENDATIONS FOR HEALTHCARE PROVIDERS

- All patients, *regardless of symptoms*, who received procedures under epidural anesthesia at River Side Surgical Center or Clinica K-3 in Mexico between January 1 and May 13, 2023 should be evaluated for fungal meningitis.
 - For full interim treatment and management recommendations in the setting of this outbreak, see funguseducationhub.org/interim-guidance-matamoros-fm-outbreak-5-20-23/.
 - Evaluation includes the following (unless contraindicated):
 - Diagnostic lumbar puncture (LP)
 - CSF studies should include beta-D-glucan (Fungitell®), a fungal infection marker. (For a complete list of recommended CSF tests see the full interim treatment and management recommendations linked above.)
 - The rationale for LPs on asymptomatic exposed patients is based on the high case fatality rate of central nervous system (CNS) *Fusarium* infections (>40%) during a recent healthcare-associated outbreak in Durango, Mexico along with the observation during this outbreak of individuals with few or no symptoms who were found to have fungal meningitis upon CSF evaluation. In addition, fungal meningitis may progress rapidly once symptoms start. Early detection and treatment of fungal meningitis is **critically** important for improving patient outcomes.
 - Clinicians can consider repeating LP at 2 weeks after the initial LP.
 - Brain MRI (to assess for meningeal enhancement, vasculitis, stenosis, hemorrhage, or ischemia)
 - **NOTE: Brain MRI is *not* required for asymptomatic patients with a normal LP.**
- Treatment should be started as soon as possible after obtaining a CSF specimen for any patient with suspected fungal meningitis. Empiric treatment should involve broad-spectrum antifungal medications that have adequate CNS penetration.
 - Empiric antifungal therapy is not recommended for asymptomatic or symptomatic patients with normal CSF profiles (i.e., 5 or fewer white blood cells [WBC]) in the CSF) at the time of diagnostic lumbar puncture.
 - If available, consultation with an Infectious Disease specialist and a Neurologist is recommended for all cases of suspected fungal meningitis.

- To be connected with infectious disease clinicians with experience in treating fungal meningitis, clinicians can contact CDC’s Mycotic Diseases Branch at fungaloutbreaks@cdc.gov.
- All patients, especially those with symptoms, should be closely monitored and re-evaluated for new or persistent symptoms for at least 4 weeks.
 - Symptoms to monitor for include fever, headache, stiff neck, nausea/vomiting, photophobia and altered mental status.
 - If meningitis symptoms appear, the patient should be instructed to go the ED immediately for re-evaluation, including an urgent repeat LP.
 - Clinicians may also consider a second diagnostic LP 2 weeks after an initial negative LP to reevaluate the CSF.

CASE DEFINITIONS FOR FUNGAL MENINGITIS (In patients who underwent a procedure with epidural anesthesia in Matamoros, Mexico between January 1 and May 13, 2023)

1. PERSON UNDER INVESTIGATION	No symptoms or symptomatology UNKNOWN AND LP results are not yet available
2. SUSPECTED	Patient has symptoms consistent with meningitis (e.g., fever, headache, stiff neck, nausea/vomiting, photophobia or altered mental status) AND LP results are not yet available
3. PROBABLE	CSF profile with >5 WBCs/mm ³ accounting for the presence of RBCs (i.e., subtracting 1 white cell for every 500 RBCs present) AND Fungus has not been detected from CSF or tissue by culture, PCR, or mNGS
4. CONFIRMED	Fungus has been detected by culture, PCR or mNGS testing of CSF or tissue

Abbreviations: LP = lumbar puncture; CNS = central nervous system; CSF = cerebrospinal fluid; WBC = white blood cell; RBC = red blood cell; PCR = polymerase chain reaction; mNGS = metagenomic next-generation sequencing.

REPORTING REQUIREMENTS

Healthcare providers should immediately report suspected fungal meningitis cases, including those possibly related to this outbreak, to DC Department of Health immediately by calling 202-442-9370 or 202-591-6868 or 844-493-2652(after-hours number) and submitting a Notifiable Disease and Condition Case Report Form online using the DC Reporting and Surveillance Center(DCRC) which can be found on our Infectious Diseases website: <https://dchealth.dc.gov/node/143092>

ADDITIONAL RESOURCES

- [Outbreak of Suspected Fungal Meningitis in U.S. Patients who Underwent Surgical Procedures under Epidural Anesthesia in Matamoros, Mexico \(5/17/23\)](#)
- [Important Updates on Outbreak of Fungal Meningitis in U.S. Patients Who Underwent Surgical Procedures under Epidural Anesthesia in Matamoros, Mexico \(6/1/23\)](#)
- [Fungal Meningitis Outbreak Associated with Procedures Performed under Epidural Anesthesia in Matamoros, Mexico \(updated 6/14/23\)](#)
- [Webinar Thursday, June 8, 2023 - Interim Recommendations for Diagnosing and Managing Suspected Fungal Meningitis Associated with Epidural Anesthesia Administered in Matamoros, Mexico \(cdc.gov\)](#)
- [Fungal Infections Following Surgical Procedures in Mexico – Alert – Level 2, Practice Enhanced Precautions – Travel Health Notices | Travelers' Health | CDC](#)
- [Mexico Traveler Health](#)
- [Medical Tourism CDC Yellow Book 2024](#)

Please visit the DC Health-Health Notices website (dchealth.dc.gov/page/health-notices) regularly for the most current information.

Please contact the Health Division of Epidemiology-Disease Surveillance and Investigation at: Phone: (202)-442-9370/202-591-6868(8:15 am-4:45pm) | 844-493-2652(after-hours calls) | Fax: 202-442-8060 | Email: doh.epi@dc.gov