

### Summary of the current situation

On November 4, 2022, the Mexico IHR National Focal Point (NFP) informed the Pan American Health Organization / World Health Organization (PAHO/WHO) about the detection of a cluster of 11 cases of aseptic meningitis of unknown etiology, including one death, all with a history of having undergone surgical procedures with the administration of spinal anesthesia in private hospitals in the city of Durango, Durango State, Mexico.

On November 11, the Mexico IHR NFP shared additional information, indicating that the Institute of Epidemiological Diagnosis and Reference (Instituto de Diagnóstico y Referencia Epidemiológicos, InDRE per its Spanish acronym) confirmed the presence of *Fusarium spp.* in cerebrospinal fluid samples in two of the cases under investigation.

On November 15, the Federal Commission for Protection Against Sanitary Risks (COFEPRIS per its Spanish acronym) imposed quarantine and preventive isolation on the investigational drugs Bupivacaina Heavy (two batches) and Bupivacaina (two batches). On November 24, a press release from Mexico's Ministry of Health<sup>1</sup> reported that in response to this event, authorities placed the following medications in preventive quarantine: bupivacaine/glucose (bupivacaine heavy) 5 mg/1 ml (three batches), bupivacaine (bupivacaine) 50 mg/10 ml (one batch), as well as morphine (graten) 2.5 mg/2.5 ml (one batch) and morphine (graten) 10 mg/10 ml (two batches), all made by the same laboratory.

On December 8, COFEPRIS<sup>2</sup> issued a statement informing that the batches of the analyzed drugs by the Laboratory of Analytical Control and Expansion of Coverage of COFEPRIS, did not detect the presence of *Fusarium solani*. According to the information provided by the CNE of Mexico, during the investigation, several lines of investigation have been established, so far, the origin of the outbreak has not been identified. The investigation is ongoing.

On November 30, the Government of the State of Durango<sup>3</sup> reported that the fungal agent *Fusarium solani* was identified in the identified cases.

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<sup>1</sup> Secretary of Health of Mexico- Press release: Research continues on causes of meningitis in Durango: Hugo López-Gatell Ramírez. Available at: <https://bit.ly/3ODmlMo>

<sup>2</sup> Federal Commission for the protection against sanitary risks COFEPRIS – Press release: Cofepri reports results of the analyzes delivered to the state of Durango on cases of meningitis. Available at: <https://bit.ly/3uEyKvD>

<sup>3</sup> Government of the State of Durango. Press Conference: Health Update. Available at: <https://bit.ly/3VEZBUu>

As of December 8, 2022, according to the daily technical report<sup>4</sup> of the meningitis outbreak in Durango, 1,787 people who underwent surgeries and received spinal anesthesia since May 2022 have been identified in the 4 private hospitals involved. Currently, COFEPRIS has analyzed seven batches of different drugs that may be related to this outbreak and the four hospitals in which the surgical interventions were performed on the cases have been closed due to serious failures detected during the investigation.

Since the notification of the first cases on 8 December 2022, a total of 71 cases of meningitis, including 23 deaths, related to this outbreak have been reported. According to the daily technical report, of the 71 cases, 9 had a severe clinical presentation, which are hospitalized in Intensive Care Units. Of the total cases, 96% (68) are women, 90% were women undergoing gynecological-obstetric procedures. The most affected age group is 25–29-year-olds, which accounts for 33% of cases. Regarding the fatal cases, the most affected age group is 25-29-year-olds, which represents 26% of deaths. Only 3 of the cases correspond to men, one of them under 18 years old. 67% of cases presented signs and symptoms between day 0 and day 10 after administration of spinal anesthesia, with a maximum of 90 days. The most common signs and symptoms are headache (96%), nausea (42%) and vomiting (34%), followed by neck stiffness (32%), visual disturbances (27%) and fever (27%).

## PAHO/WHO Note

The health authorities of the Ministry of Health of Mexico, COFEPRIS and the Ministry of Health of the State of Durango are working together to investigate this event, as well as monitoring people who underwent surgeries and received spinal anesthesia in the 4 private hospitals involved.

PAHO/WHO is following this event together with the health authorities of Mexico.

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<sup>4</sup> Ministry of Health of Mexico. Daily technical release meningitis – December 8, 2022. Available at: <https://bit.ly/3uBHMd5>