MISSISSIPPI STATE DEPARTMENT OF HEALTH

**This is an official**
**MS Health Alert Network (HAN) – Alert**

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| **MESSAGE ID:** | **MSHAN – 04222026– 00609 - ALT (Health Alert)** |
| **RECIPIENTS:** | **All Physicians, Hospitals, ERs, ICPs, NPs, PAs, and Healthcare Providers – Statewide** |
| | **Wednesday, April 22, 2026** |
| **SUBJECT:** | **Emerging Presence of Medetomidine in the Illicit Fentanyl Supply** |

An increased presence of medetomidine has been identified in the U.S. illicit fentanyl supply, increasing risk for overdose and severe withdrawal syndrome, according to the CDC Health Alert Network. Although not commonly found in Mississippi, medetomidine has been detected in approximately 23 toxicology reports over the past two years from March 2024 to March 2026.

**Background**: Medetomidine is a veterinary sedative not approved for human use, not scheduled under the Controlled Substances Act, and not included in standard toxicology testing. Medetomidine is replacing xylazine in the illicit fentanyl supply, is 100–200 times more potent, longer-acting, and does not appear to cause wounds.

**Clinical Effects**: Medetomidine's mechanism of action: alpha-2 adrenergic agonist sedative. Use may cause profound sedation, bradycardia, and hypotension.

**Naloxone reverses opioid effects but not medetomidine; sedation may persist.** Naloxone should be administered due to likely co-involvement with fentanyl or other illicit opioids. Because fentanyl is involved in most overdoses involving medetomidine, Opioid Overdose Reversal Medication (OORMs) should be administered in an attempt to restore normal breathing in suspected overdoses. OORMs like naloxone are effective in reversing opioid effects but are not effective in reversing the effects of medetomidine or other drugs that may have been consumed. Consequently, while apnea may be reversed with naloxone, sedation may not be reversed.

**Withdrawal**: Symptoms may occur within hours of last use and peak 18-36 hours later exhibiting symptoms of tachycardia, severe hypertension, fluctuating alertness, tremor, chest pain, and intractable nausea and vomiting and may require a high level of care in a hospital emergency department or intensive care.

**Emergency/Intensive Care** may include: opioid withdrawal management; Alpha-2 agonist therapy with clonidine and dexmedetomidine if needed; treatment of agitation as needed; hypertension management (preferably via withdrawal management). Severe withdrawal is less likely if there are no withdrawal symptoms within first 6-12 hours after use.

**Call to Action**: Clinicians should consider medetomidine in suspected opioid overdoses with prolonged sedation unresponsive to OORM administration, consult a toxicologist or the Mississippi Poison Control Center at 1-800-222-1222.

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*Alerting Message Specification Settings*

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| **Originating Agency:** | Mississippi State Department of Health |
| **Alerting Program:** | **MS Health Alert Network (MS HAN)** |
| **Message Identifier:** | MSHAN-04222026-00609-**ALT** |
| **Program (HAN) Type:** | **Health Alert** |
| **Status (Type):** | Actual () |
| **Message Type:** | Update |
| **Reference:** | MSHAN-00609 |
| **Severity:** | Unknown |
| **Acknowledgement:** | No |
| **Sensitive:** | Not Sensitive |
| **Message Expiration:** | Undetermined |
| **Urgency:** | Undetermined |
| **Delivery Time:** | 600 minutes |

## ***Definition of Alerting Vocabulary and Message Specification Settings***

**Originating Agency:** A unique identifier for the agency originating the alert.

**Alerting Program:** The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.

**Message Identifier:** A unique alert identifier that is generated upon alert activation (MSHAN-yyymmdd-hhmm-TTT **(ALT=Health Alert, ADV=Health Advisory, UPD=Health Update, MSG/INFO=Message/Info Service**).

**Program (HAN) Type:** Categories of Health Alert Messages**.**

**Health Alert**: Conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory**: Provides important information for a specific incident or situation; may not require immediate action.

**Health Update**: Provides updated information regarding an incident or situation; unlikely to require immediate action.

**Health Info Service**: Provides Message / Notification of general public health information; unlikely to require immediate action.

**Status (Type):**

- Actual: Communication or alert refers to a live event
- Exercise: Designated recipients must respond to the communication or alert
- Test: Communication or alert is related to a technical, system test and should be disregarded

**Message Type:**

- Alert: Indicates an original Alert
- Update: Indicates prior alert has been Updated and/or superseded
- Cancel: Indicates prior alert has been cancelled

**Reference:** For a communication or alert with a Message Type of "Update" or "Cancel", this attribute contains the unique Message Identifier of the original communication or alert being updated or cancelled. "n/a" = Not Applicable.

**Severity:**

Extreme: Extraordinary threat to life or property
Severe: Significant threat to life or property
Moderate: Possible threat to life or property
Minor: Minimal threat to life or property
Unknown: Unknown threat to life or property

**Acknowledgement:** Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the timeframe in which a response is required (Yes or No).

**Sensitive:**

Sensitive: Indicates the alert contains sensitive content
Not Sensitive: Indicates non-sensitive content

**Message Expiration:** Undetermined.

**Urgency:** Undetermined. Responsive action should be taken immediately.

**Delivery Time:** Indicates the timeframe for delivery of the alert (15, 60, 1440, 4320 minutes (.25, 1, 24, 72 hours)).