

MDHHS's Rapid, Drug Poisoning Surveillance System

Frequently Asked Questions

What is MiCelerity?

MiCelerity is a **real-time drug poisoning surveillance system** released by the Michigan Department of Health and Human Services (MDHHS) in 2020. MiCelerity functions as a repository for healthcare events deemed reportable to MDHHS under reporting rules 325.76, R 325.77, R 325.78, and R 325.79. MiCelerity additionally collects data on substance use-related deaths via the Electronic Death Reporting System (EDRS).

The **healthcare data** captured by MiCelerity are automated and are collected via Admission, Discharge, and Transfer (ADT) messages that are exchanged between healthcare facilities and the Michigan Health Information Network (MiHIN) following a healthcare event of interest. The diagnostic information in these messages is scanned for drug poisoning-related ICD-10-CM codes; relevant visits are routed into MiCelerity. For instances where data are not automatically captured, MiCelerity has a manual entry function to allow users to input drug poisoning events manually.

Death data captured by MiCelerity are automated and are collected via reporting to the EDRS. When a death is registered within EDRS, the underlying and related cause of death codes are scanned for drug poisoning-related ICD-10 codes; a copy of relevant death records are routed into MiCelerity. Deaths not captured in EDRS are not expected to be manually entered into MiCelerity.

What is an ADT message?

Admission, Discharge, and Transfer (ADT) messages are electronic messages that are sent within and between healthcare facilities, and between healthcare facilities and third-party entities such as payers and health information exchanges (HIEs). These electronic messages communicate information regarding a patient throughout the course of a healthcare event. ADT messages conform to HL7 standards for the exchange of healthcare information and are widely implemented across healthcare institutes across the world. The Blue Cross Blue Shield of Michigan (BCBSM) Pay-for-Performance (P4P) program incentivizes the sending of ADT messages between Michigan hospitals and the HIE Michigan Health Information Network (MiHIN). More information regarding ADT messages can be found here: https://www.hl7.org/implement/standards/product_brief.cfm?product_id=185.

What data are captured in MiCelerity?

Healthcare data in MiCelerity primarily come from hospital emergency departments (EDs). Data from these facilities are captured in MiCelerity if the facility exchanges information with MiHIN and participates in the BCBSM P4P program. Data from other types of facilities, such as long-term care or skilled nursing facilities, may be captured in MiCelerity if the facility exchanges ADTs with MiHIN, participates in the P4P program, and diagnoses a patient with a relevant drug-related ICD-10-CM code.

Death data in MiCelerity come from EDRS, a voluntary web-based application in which funeral directors, physicians, medical examiners, nursing homes, and hospitals can electronically register deaths in Michigan.

The scope of data captured in MiCelerity is **statewide**. Diagnostic codes from the following types of visits and deaths are captured in MiCelerity: drug poisonings (T36-50), drug-related mental and behavioral disorders (F11-F16, F18-F19), and skin, soft tissue, and vascular infections (SSTVI) related to substance use (A35, A40-41, A48, I26, I33, I38-39, I80, L02-03, L97-98, M00, M46, M72, M86). MiCelerity is a diagnosis-based system, with each drug-related ICD-10-CM/ICD-10 diagnosis code constituting one line of data (one healthcare visit or death can generate multiple diagnoses and therefore lines of data in MiCelerity). MiCelerity captures demographic, geographic, and personally identifiable information for each diagnosis.

Are historical data available for analysis?

Historical data are not available in MiCelerity; the system began capturing ADT (healthcare) data in October 2019 and EDRS (death) data in January 2021. ADT (healthcare) data received by the system prior to March 2020 may be incomplete due to system changes and updates, and EDRS (death) data received prior to January 2021 are considered incomplete; please take this into account as you view and analyze the data. When looking at trends in your jurisdiction, analyzing ADT data from March 2020 forward and EDRS data from January 2021 forward will give the most comprehensive and accurate results.

Who can access MiCelerity?

Access to MiCelerity is restricted to state and local health department users whose work is relevant to addressing the overdose crisis in Michigan and healthcare facilities that diagnose drug poisonings and are responsible for reporting them to MDHHS within 5 working days (primarily emergency departments). Due to the sensitive and confidential content of the data captured by MiCelerity, access to the system is currently limited to **3** personnel per local health jurisdiction. Examples of appropriate users at the local health jurisdiction level include: health officers, medical directors, public health nurses, or epidemiologists. Within reporting healthcare facilities, assigned healthcare provider (HCP) users can view all reported records from their facility and are responsible for ensuring that all drug poisoning events that occur at their facility are captured by MiCelerity.

How do I access MiCelerity?

Access to the system will be administered by MiCelerity users at MDHHS. MiCelerity is housed within the Michigan Disease Surveillance System (MDSS). If a user has existing access to MDSS, access to MiCelerity can be obtained by filling out the User Account Access Request Form and submitting the form to MDHHS-MODASurveillance@michigan.gov. Access is reviewed and granted by an administrative user.

If a user does not have an existing MDSS account, access can be obtained by (1) filling out the User Account Access Request Form, (2) submitting the form to MDHHS-MODASurveillance@michigan.gov, (3) requesting access to MDSS through MiLogin, and (4) checking "MiCelerity" under Systems Access Needed on the registration form. Users should register for MILogin using the Trusted 3rd Party MILogin website: https://milogintp.michigan.gov.

How should I use MiCelerity?

Multiple user roles exist within MiCelerity. **Local Health Jurisdiction** (**LHJ**) users should use the data to monitor drug poisoning events in their jurisdiction. These users can view individual line level data for diagnoses within their jurisdiction (e.g. the patient resided in their jurisdiction or sought care at a facility in their jurisdiction) and can export this line level data for analysis. LHJ users can also create aggregate reports in the system based on various drug categories, demographic breakdowns and time periods.

Healthcare provider (HCP) users at the facility level should use MiCelerity to ensure that all drug poisoning events from their facility are being reported to the system. If there are any events that are not automatically captured by MiCelerity, HCP users should report the events to the system via the manual entry function.

What is Manual Entry?

Manual Entry is available for drug poisoning healthcare events that are not automatically captured by MiCelerity. New records can be created via this function to ensure that the reporting rules regarding drug poisonings are fully met by a facility. This function is only necessary if a facility is unable to exchange information with MiHIN or if a facility discovers that any drug poisoning events that occurred at the facility are not in MiCelerity for any reason. It is anticipated that primarily HCP users will utilize this function. Deaths not captured by the system do not need to be manually entered.

How is this surveillance system different from other systems we may already use?

You may already use the **Michigan Syndromic Surveillance System** (MSSS) to analyze drug poisoning events in emergency departments. MiCelerity differs from MSSS in the following ways: it is drug poisoning specific; it provides a way for healthcare facilities to automatically report drug poisoning events from their facility, thus fulfilling the mandatory reporting requirements; it captures more detailed data including patient-identifying information, allowing for linkage projects and the identification of multiple drug poisoning events per individual; the scope is considered to be statewide without any unique facility onboarding; all records that are captured by the system include diagnostic information; EDRS data is captured in MiCelerity.

Who should we contact with questions or concerns?

If you have a question regarding how to use MiCelerity, please first reference the MiCelerity User Guide. If your question is not answered in the guide, you can reach out to the MDHHS Michigan Overdose Data to Action (MODA) team at MDHHS-MODASurveillance@michigan.gov.

If you encounter a technical issue in the system, please report the issue to MDHHS-MODASurveillance@michigan.gov.

Is there anything else I should be aware of before using the system?

The data captured within the system is sensitive and confidential as it includes personally identifiable information regarding substance use. While using MiCelerity, please exercise standard security precautions to protect the information captured by the system, such as not sending line level data via email, not leaving the system open on an unattended computer, only accessing the data on an

encrypted computer, and not reporting small numbers in any findings in accordance with MDHHS's and your agency's suppression standards (MDHHS requests suppression of case counts between 1 and 5).

Please be aware that as MiCelerity is a new surveillance system, on-going quality assurance (QA) will be performed during its initial period of use. Issues may arise and will be resolved as quickly as possible. If you encounter any issues in the system, please immediately report them to MDHHS- MODASurveillance@michigan.gov.

Suggested MiCelerity citation: Michigan Department of Health and Human Services. MiCelerity V2.2. Date of access.

Please see the MiCelerity User Guide for more specific information regarding how the system functions and how to use the system.