



STATE OF MONTANA
DEPARTMENT OF PUBLIC HEALTH AND HUMAN
SERVICES
Montana Epidemiology and Laboratory Capacity (ELC)
Data Management Plan

Introduction

Collecting, protecting, securing, and disseminating data is a priority across all public health programs of the Montana Department of Public Health and Human Services (DPHHS) ELC program. The DPHHS Communicable Disease Control and Prevention Bureau (CDCPB) and the Montana Public Health Laboratory (MTPHL) are bureaus in the Public Health and Safety Division (PHSD) of DPHHS. The programs ensure that all confidential information collected, used, and archived by programs within the ELC Program remains secure through compliance with the policy and guidance documents listed below. Complete MTPHHS data security guidance documents can be accessed at the [CDEpi website](#) in the Data Management and Security section. Relevant sections of these documents are summarized in this Data Management Plan.

CDCPB Data Security Policies and Guidance Documents

- 1) Communicable Disease Control and Prevention – *Communicable Disease Control and Prevention Bureau Security and Confidentiality Policy* (CDCPB S&C)
- 2) Montana State Information Technology Services Division (SITSD) – *POL – Information Security Policy*
- 3) Montana Department of Public Health and Human Services – *HIPAA and Confidentiality Training Policy*
- 4) Montana Department of Public Health and Human Services & Centers for Disease Control and Prevention – *Data Use Agreement between Montana and the Centers for Disease Control and Prevention (CDC), National Healthcare Safety Network (NHSN)*
- 5) Montana Public Health Laboratory – *Security of Data and Electronic Technology Systems*
- 6) Montana Infectious Disease Information System – *MIDIS Memorandum of Agreement*
- 7) Montana Office of Epidemiology and Scientific Support – *Guidelines for the Release of Public Health Data Derived from Personal Health Information*
- 8) Montana Office of Epidemiology and Scientific Support – *Montana Public Health Data Resource Guide*
- 9) Public Health and Safety Division – *Public Health and Safety Division Record Retention Policy*

DPHHS maintains all data associated with the ELC program and ensures the policies and procedures for the Division and Bureau comply with the Administrative Rules of Montana (ARM). [ARM 37.114.201](#) specifies that laboratories, physicians, and other health care providers are required to report communicable diseases specified by DPHHS ([ARM 37.114.203](#)). The Montana Code Annotated (MCA) Uniform Health Care Information Act ([MCA 50-16-530](#)) allows the release of public health information,

without patient authorization, to public health authorities when such information is required by law or needed to protect the public health. Once information is in possession of the local or state health department, subsequent release of the information is governed by the Government Health Care Information Act ([MCA 50-16-603](#)). This act outlines strict circumstances under which information may be released by a health department.

All provisions of this Data Management Plan are aligned with the CDC *Program Collaboration and Service Integration (PCSI) Standards to Facilitate Data Sharing and Use of Surveillance Data for Public Health Action*, available on CDC's [website](#).

Roles and Responsibilities

Detailed roles and responsibilities are addressed in the attached CDCPB S&C and the *Information Security Policy*. All employees are subject to the state statutes noted above and the confidentiality and security policies and procedures and the CDCPB S&C. The ELC governance committee comprises the State Deputy Laboratory Director as the Principal Investigator, the Communicable Disease Epidemiology Section Supervisor, the ELC program manager, the Health Information Systems program director, and the Healthcare Associated Infection (HAI) program director to oversee day-to-day implementation of program activities.

Description of ELC Data and Formats

ELC data are primarily housed in standardized disease reporting systems: the Montana Infectious Disease Information System (MIDIS) a National Electronic Disease Surveillance System Base System (NBS), the MTPHL Harvest Laboratory Information System (LIS), and the National Healthcare Safety Network (NHSN). ELC data comprises information derived from disease investigation and laboratory testing of individuals infected with reportable communicable diseases. ELC financial monitoring of program activities are also collected.

As outlined in the *Montana Public Health Data Resource Guide*, the MIDIS NBS database contains information detailing diagnosis and laboratory testing, geographic and demographic information, and details related to case investigations including risk factors for reportable communicable diseases. These data are utilized for surveillance, investigation, and mitigation, and are then compiled for the purposes of epidemiologic analysis, public dissemination, and program performance.

Outputs from the MIDIS NBS consist of limited datasets in a CSV format, and compiled reports for both internal and external dissemination contingent upon compliance with appropriate policies and procedures associated with data dissemination in the CDCPB S&C and outlined in the *DPHHS Guidelines for the Release of Public Health Data Derived from Personal Health Information* (summarized below).

In addition, MT DPHHS collects healthcare-associated infections data from healthcare facilities in the state of Montana and those facilities' ability to respond to public health threats in NHSN. The *Data Use Agreement between Montana and the Centers for Disease Control and Prevention (CDC)*, *National Healthcare Safety Network (NHSN)* specifies these data include individual- and institution-identifiable data received by CDC and NHSN, but not federal or tribal healthcare institutions.

Mechanisms for Data Dissemination

Complete detail surrounding the dissemination of ELC data is provided by the DPHHS *Guidelines for the Release of Public Health Data Derived from Personal Health Information* which provides, “Guidelines for the release of data derived from [personal health information (PHI)] for public health activities while protecting its confidentiality and integrity in compliance with state statutes and federal laws... [and specifies] that the information released be the minimum amount necessary to accomplish essential public health functions.” This document also specifies the minimum cell sizes and Criteria for Reporting Public Health Data Derived from Protected Health Information.

The *Montana Public Health Data Resource Guide* outlines suggested citations for CDEpi data extracts and specifies that, “Data are released in compliance with the Montana state law, specifically according to the Government Healthcare Information Act. In addition, DPHHS follows the integrated security and confidentiality guidelines for reportable communicable diseases as mandated by the CDC.” This document also specifies publication of CDEpi data in the following publicly available reports:

1. Aggregate data for all reportable conditions are released in the Communicable Disease Epidemiology (CDEpi) weekly disease report
2. Data are published in the CDEpi Annual Report
3. Aggregate data are released to the CDC for publication in the MMWR
4. HIV and STD data are published in quarterly and annual disease summaries

The CDCPB S&C outlines the following guidance for data requests and dissemination of all CDCPB data:

“M 1 a. All [data] requests must comply with the following criteria.

- i. The request must be routed through the Section Supervisor.
 - ii. The Section Supervisor must approve the request.
 - iii. Completed data requests must comply with the State of Montana’s Office of Epidemiology and Scientific Support’s (OESS) Guidelines for the *Release of Public Health Data Derived from Personal Health Information*, unless exempted by the [overall responsible party (ORP)].
- N 1. Outside the scope of regular public health duties to identify cases of reportable conditions and to implement control measures, the release of individual-level information, with or without identifiers, occurs in very limited circumstances. Generally, the circumstance is when individual-level information is released to the person or entity who provided the information or persons responsible for implementing the control measures as outlined in MCA 50.16.603.
- a. Responses to requests from providers (physicians, facilities, counseling/testing sites, Ryan White providers) for data with personal identifiers must be generated by CDCPB and may be released following these criteria.
- N 3. With the approval of the Section Supervisor and ORP, an individual’s personal records may be released directly to that individual, or their representative.
- a. S/he must sign a *Request for Personal Health Information* and a staff member must verify the individual’s identity. The Section Supervisor and ORP must approve the *Release of Information*.”

The *Data Use Agreement between Montana and the Centers for Disease Control and Prevention (CDC), National Healthcare Safety Network (NHSN)* specifies that data covered in the DUA are for surveillance and prevention purposes only.

Provisions for Protection of Privacy and Confidentiality

Provisions for the protection of privacy and confidentiality can be found in the *DPHHS Guidelines for the Release of Public Health Data Derived from Personal Health Information, DPHHS HIPAA and confidentiality Training Policy*, and the *MIDIS Memorandum of Agreement*.

The *DPHHS Guidelines for the Release of Public Health Data Derived from Personal Health Information* govern how personal health information (PHI) is treated by DPHSS. This policy stipulates that, "All identifying information is confidential and may not be released. Identifying information includes name, address, birth date, social security number, or any other information which, alone or in combination with other information, could be used to determine with reasonable accuracy the identity of an individual... In order to ensure confidentiality for Montana citizens whose PHI is collected and analyzed by the PHSD, it is necessary to suppress the reporting of small numbers of events (counts). Minimum cell sizes for reporting can be achieved by aggregating strata or several years of data." The minimum cell sizes and Criteria for Reporting Public Health Data Derived from Protected Health Information are specified in this document as well, providing a compromise between the need to use public health data to the fullest extent possible while protecting confidentiality and ensuring acceptable precision.

To ensure DPHHS employees properly protect any personally identifying information that is protected under the Health Information and Portability and Accountability Act (HIPAA), the *DPHHS HIPAA and Confidentiality Training Policy* requires that, "All employees of PHSD will participate in the HIPAA and Confidentiality Training provided as part of New Employee Orientation by the Office of Human Resources of the Department of Public Health and Human Services."

Additionally, all users who access MIDIS NBS must sign the *MIDIS Memorandum of Agreement*, which outlines the following privacy and confidentiality requirements to which all MIDIS users must agree:

1. "I, or my employer, will maintain the confidentiality and security of MIDIS information by notifying DPHHS if I discontinue employment, am terminated, or no longer need access to the registry. The keyfob will be promptly returned to DPHHS.
2. I will not access MIDIS for any use outside those required to enter or maintain a communicable disease report, view ELR and/or run reports for analysis.
3. I will handle information or documents obtained through MIDIS in a confidential manner and in accordance with Montana law (Government Healthcare Information Act, 50-16-603, MCA)."

Provisions for Data Security

In Section 2 of the *Information Security Policy*, SITSD dictates how to maintain secure access to all electronic data for the ELC program, and outlines requirements including: password requirements, multifactor authentication, account and certificate maintenance, assigning account managers, employing security controls, biannual access agreement reviews, and user audits.

The MTPHL Biosecurity Plan policy *Security of Data and Electronic Technology Systems* addresses security of specific laboratory data:

1. Network access and Laboratory Information Management Systems (LIS) is password protected.
2. MTPHL Data Coordinators and System Administrators for the LIS set security limits for each individual user in of the LIS.
3. Hard copies of electronic records are maintained and stored as a backup security measure for electronic storage of documents, including a hard copy of the Select Agent Inventory Form.
4. Paper data is stored in filing cabinets or boxes in the various sections of the [Laboratory Services Bureau] behind key card access doors, or in locked storage rooms.
5. Sensitive Select Agent paperwork is stored in the BSL-3 area where there is the highest level of security.
6. Laboratory personnel are expected to maintain confidentiality of all sensitive information, be it verbal, paper or electronic.

NSHN data is the property of the federal government and Montana use of those data are subject to the *Data Use Agreement Between Montana and the Centers for Disease Control and Prevention (CDC), National Healthcare Safety Network (NHSN)*. This document ensures Montana complies with the Federal Privacy Act and abides by the CDCPB S&C to safeguard NHSN and healthcare facility data.

As previously mentioned, all users of the MIDIS NBS are subject to the *MIDIS Memorandum of Agreement*, details that to maintain data security users must safeguard MIDIS access privileges (and passcode) by not permitting their use by any other person.

Provisions for Storage and Record Retention

Procedures for data storage and record retention may be found in the CDCPB S&C. In addition, the PHSD data system provisions for storage and backup of data fall under the *Public Health and Safety Division Record Retention Policy*. This document stipulates for all Communicable Disease Outbreak and Individual Investigation Records, and for Reportable Disease, Conditions and Reports and Forms: “DPHHS must retain physical copies for 5 years after case closed, then destroy physical copies. And DPHHS must maintain electronic data in infectious disease reporting and tracking systems until no longer useful.”

Additionally, the MTPHL Biosecurity Plan policy *Security of Data and Electronic Technology Systems* addresses record retention of laboratory data:

1. “Hard copies of electronic records are maintained and stored in a locked cabinet, known to the RO and ARO(s) for a minimum of three (3) years.
2. Paperwork not related to Select Agents will be maintained for a minimum of two (2) years; Select Agent paperwork will be maintained for a minimum of three (3) years.”

If you have additional questions regarding data management or data security of MTDPHHS communicable disease data, please contact the Communicable Disease Epidemiology Section at: 406-444-0273