



INVESTIGATION OF INFECTIOUS DISEASE CASES

August 2019

DISEASE CONTROL INVESTIGATION PROTOCOL
AND TRAINING MANUAL

NORTH
Dakota | Health
Be Legendary.™

Mission Statement

The North Dakota Department of Health (NDDoH) Division of Disease Control is a centralized state public health agency which is responsible for general communicable disease investigation and prevention around the state. This Division provides epidemiology for the 70+ reportable diseases that are required to be reported. Programs in this Division include: Immunization, Tuberculosis Control, Sexually Transmitted Diseases, HIV/AIDS, Hepatitis, Epidemiology and Laboratory Capacity and Field Investigations. The goals of this division include:

- *Identification and analysis of disease trends and implementation of appropriate intervention activities to reduce morbidity and mortality.*
- *Acting as a resource for health care providers and the public regarding public health questions and issues.*
- *Investigation of communicable disease illnesses and outbreaks and answering questions related to communicable disease issues.*
- *Working with the media to provide timely public education.*

Written and Approved by

- Tracy K. Miller, PhD, MPH, State Epidemiologist
- Molly Howell, MPH, Assistant Director, Division of Disease Control
- Michelle Dethloff, Epidemiology and Laboratory Capacity Program Manager, Division of Disease Control
- Lindsey VanderBusch, MPH, HIV/STD/Hepatitis/TB Program Manager, Division of Disease Control
- Brenton Nesesmeier, MPH, Field Epidemiologist Supervisor, Division of Disease Control
- Kirby Kruger, Section Chief, Medical Services Section

Date updated: 08-2019

Table of Contents

Mission Statement	2
Written and Approved by	2
Disease Reporting	6
Confidentiality	6
Confidentiality Oath	7
Physical, Electronic and Data Security	7
Termination of Employment	8
Records Retention	8
Responsibilities	8
North Dakota Department of Health (NDDoH)	8
Division of Disease Control	8
Division of Microbiology	9
Emergency Preparedness and Response (EPR) Section	9
Local Public Health Unit	9
Infection Control Practitioners	9
Private Providers	10
Tribal Partners	10

International Partners.....	10
Clinical Case Definitions	10
Clusters and Outbreaks.....	10
Surveillance Database and Case Management System.....	11
Maven 11	
Investigation.....	12
Case Investigation	12
Contact Investigation	13
Isolation and Quarantine	14
Minimum Period of Isolation of Cases:.....	14
Minimum Period of Quarantine of Contacts:	14
Multiple Ongoing Investigations	15
Case Close Out.....	16
Data Analysis and Distribution.....	17
Reporting.....	17
Analysis.....	17
Distribution	18

Quality Control18

Appendix A: Investigation Priorities.....19

Disease Reporting

North Dakota maintains a list of mandatory reportable conditions (MRC) which are required by law to be reported to the North Dakota Department of Health (NDDoH). These mandatory conditions and the required reporters can be found in [North Dakota Century Code, NDCC 23-07-01](#) and [Administrative Code, 33-06-01](#).

- Infectious MRC must be reported to the NDDoH Division of Disease Control. ([See current MRC list](#).)
- Depending on the transmissibility of the disease, severity of illness, and public health interventions available, there are a variety of ways these diseases can be reported.
 - For those highlighted in RED, results must be reported immediately by calling 701-328-2378 or toll-free 800-472-2180.
 - All other diseases should be reported via one of the following methods within seven days of identification:
 - Daytime phone number: 701-328-2378 or ND toll free 800-472-2180 (or is this from anywhere now?)
 - After-hours phone number: 701-220-0819 (available 24/7/365)
 - [After hours calling tree](#)
 - Confidential fax number: 701-328-0355
 - HIV Confidential fax number: 701-328-0356
 - Electronic lab reporting (Maven Coordinator maintains list of reporting labs)
 - [Online reporting](#)
 - [Field Epidemiologist](#): By phone, fax or mail.

Reporting is not required to occur all ways listed above, however all reporters should be reporting as they provide different information. For example, laboratories report diagnostic information such as lab tests, sample selections, etc., whereas healthcare providers report for clinical information. This allows the epidemiologists to determine if the lab testing and diagnostic information meets the required case definitions.

Confidentiality

General confidentiality and security measures for the mandatory reportable conditions are outlined below. These measures apply to all employees and visitors with access to protected health information (PHI). The NDDoH Health Insurance Portability and Accountability Act (HIPAA) and confidentiality

statement, along with the Disease Control, NDIIS, and HIV.STD.TB.Viral Hepatitis Security and Confidentiality statements must be signed by all employees. The HIV.STD.TB.Viral Hepatitis Security and Confidentiality statement is signed annually. These confidentiality statements are saved on the [Disease Control shared drive](#).

All data collected and maintained within Disease Control, for purposes of public health surveillance, public health practice, and case management is considered highly confidential. These data elements include but are not limited to: name, date of birth, street address, city, zip code, telephone number, test results, contacts, billing information, risk factors, treatment, etc.

Confidentiality Oath

All employees must sign all confidentiality statements within three days of employment; copies of these documents will be maintained in the employee's record. Any visitor, contractor, local health authority or other partner who will be granted access to confidential PHI will be provided a copy of the confidentiality policies and state statutes as noted in this document. [HIV.STD.TB.Viral Hepatitis Security and Confidentiality](#) signed statements must be retained as a record. These documents for employees must be reviewed and signed annually and placed in the employee's personnel file.

Physical, Electronic and Data Security

The Division of Disease Control uses the security protocols developed by HIV.STD.TB.Viral Hepatitis Program. The human immunodeficiency virus (HIV), at the federal level, has the most stringent security requirements. In an effort to maintain continuity in the division, the [HIV.STD.TB.Viral Hepatitis Security policies](#) will be retained and utilized for all of the infectious disease data collected, stored, and shared within and outside the Division. The NDDoH protects the privacy of individuals and confidentiality of information contained in the Department's electronic disease surveillance system called Maven. Maven confidentiality policy and user agreements are reviewed and signed by each user annually. Maven site administrator agreements are used for Maven users external to the NDDoH such as local public health personnel providing testing, counseling, and client education services. Copies of the agreements are located on the NDDoH Intranet under "Disease Control" and "Maven Documents." The Maven Coordinator keeps record of all the user agreements with the exception of the CTR Maven user sites. CTR site and user agreements are the responsibility of the HIV/STD/Viral Hepatitis Prevention Coordinator.

All other security requirements required by the NDDoH will be followed. The health department's HIPAA and security policies can be found on the [NDDoH intranet](#).

Field Offices will be required to follow all Physical and Confidentiality securities at their local individual offices. The Division of Disease Control Director and/or Assistant Director will work with local security personal at the local site if the office and site are unable to meet the state standard.

Termination of Employment

Upon termination of employment from the Division of Disease Control, employees must turn in keys to the secure building, their ID badge, and state identification card to the Administrative Lead. The keys to their files, desks, offices, etc. will be left in the top drawer of their desk. All security codes, computer passwords, phone passcodes, etc. will be given to their immediate supervisor. The data coordinator, along with the NDIIS and Maven Coordinators will change computer passwords known to the former employee immediately upon the day of termination and access to Maven and NDIIS will be removed. Termination of access to all other surveillance databases will be the responsibility of the immediate supervisor or program manager.

Records Retention

Records retention policy will follow the set standards of the State of North Dakota Information Technology Department, Records Management Division, Records Retention Program. These policies will be reviewed every other year for any needed changes or updates. A list of the current record retention policies is stored and maintained by the lead administrative support staff. A current listing of the state of North Dakota's general records retention schedule is located on the ITD website under [General Records Retention Schedule](#).

Responsibilities

North Dakota Department of Health (NDDoH)

Division of Disease Control

- Conduct case investigations, follow-up, identification of close contacts, provide recommendations for treatment, prophylaxis, disease monitoring, indicate if further testing is needed and implement measures to prevent further transmission.
 - The Division of Disease Control employs six regional field epidemiologists. Their primary responsibilities are case and contact investigations, provider and public education, liaison with local public and tribal health departments/units, case coordination, etc. [[See field epi regions](#)]
 - The Bismarck office's program staff are responsible for data quality, data analysis, media, education, coordination and reporting to the Centers for Disease Control and Prevention (CDC), providing outbreak and case information to local public health units (LPHU), etc.
 - Providing technical assistance to tribes and local public health departments while responding to disease outbreaks and other infectious disease issues.

Division of Microbiology

- Provide testing kits when needed, guidance for proper specimen collection, conduct testing, send samples to CDC or regional public health laboratories when needed, report positive MRC results to both the requesting provider and the Division of Disease Control.
- Testing availability and costs can be found [here](#).

Office of the State Epidemiologist

- When needed during routine and non-routine investigations, the State Epidemiologist will be updated for situational awareness and provide support as needed.
- During outbreaks or times of emergencies, the Office of the State Epidemiologist will provide additional epidemiology support for data collection and analysis, upon request of the Division of Disease Control.

Emergency Preparedness and Response (EPR) Section

- When needed, provide routine provisions such as sample transport or sample collection supplies during routine investigations.
- Distribute Health Alert notifications to healthcare providers.
- During outbreaks or times of emergencies, NDDoH will stand up the Department of Operation Center (DOC) in an effort to coordinate responses among various agencies.
 - Allows Disease Control to handle outbreak response only; media response, providing sample supplies, sample transport, travel, identification of isolation/quarantine holding areas, public question hot-lines, coordinate mass vaccination or medication dispensation, etc. are handled through the DOC.

Local Public Health Unit

- Conduct appropriate immunization services, tuberculosis case management and assist with outbreak case investigation, when requested by the NDDoH. Depending on disease and LPHU capacity, LPHU's may collect data, collect specimens, conduct contact investigations, work with local media and provide treatment. The NDDoH will coordinate with LPHU to determine state and local needs, capacity, and public education.

Infection Control Practitioners

- When necessary, identify health care workers and staff who may require preventive treatment for disease exposures (i.e. meningococcal, blood borne exposures, tuberculosis, healthcare-associated infections, etc). Recommend appropriate facility infection control practices to prevent further disease transmission within the facility.

Private Providers

- Promptly report all MRC cases to the NDDoH, provide appropriate care and treatment of cases, evaluate close contacts, recommend appropriate testing and prescribe preventive treatment.

Tribal Partners

- Currently, tribal agencies report MRC cases to the NDDoH for investigation and follow up. Depending on disease and tribal resources, they may collect data, conduct contact investigations, and conduct environmental assessments. They provide appropriate care and treatment of cases. The tribal/Indian Health Service (IHS) facilities are responsible for appropriate facility infection control practices to prevent further disease transmission within the facility.

International Partners

- Currently, international agencies report MRC cases to the NDDoH for investigation and follow up, if the case is a resident of North Dakota. However, if NDDoH receives information on a case that is a resident of Canada or another country, depending on disease, amount of time spent in the U.S., and nature of the disease; cases may be reported to their home country for follow up and investigation. That country will conduct any data collection, contact investigations, and environmental assessments. They will provide appropriate care and treatment of cases. If the case has been in North Dakota (U.S.) during onset or incubation, the NDDoH will work with the home country's public health to ensure proper follow and prevention occur in both countries.

Clinical Case Definitions

- This will be dependent upon disease. [Click here](#) for a list of case definitions and case classifications.

Clusters and Outbreaks

- **IN GENERAL, AN OUTBREAK IS DEFINED AS FOLLOWS:**
 - An increase in the number of cases of disease *over and above the expected number of cases*.
 - It will vary by disease
 - It may include a defined number of people who experience a similar illness following a common exposure and/or epidemiologic analysis implicates a common source.
 - Investigations will be considered on a case-by-case basis.
 - Laboratory testing should be done to identify the organism.

- An unexplained, unexpected increase of a similar illness (cluster).
 - Further investigation to identify the source of illness should be done.
 - For example:
 - An increased number of people testing positive for pertussis may suggest that an outbreak is occurring.
 - An increase number of people showing up at an emergency room with a rash may be a cluster that needs investigation to determine cause and source.

All outbreaks and clusters will be investigated. If it is determined that the situation needs a complete investigation, the investigation will be conducted by the appropriate program in Disease Control. If the situation is determined to be non-infectious or a single point in time illness with no further spread, the investigation will be written up in a single report and closed out.

Specific outbreak response plans are available for Anthrax, Hepatitis A, Measles, Meningococcal, Pertussis, Smallpox, and pandemic Influenza. These plans are posted on EPR's [HAN document library](#).

Surveillance Database and Case Management System

Maven

The Maven Electronic Disease Surveillance System is a commercial-off-the-shelf, web-based business rules engine. It provides interactive, automated information gathering and decision support processes for each reportable communicable disease and occupational disease. Disease Control manages all of the mandatory reportable conditions via Maven.

Maven allows the NDDoH to enter, manage, process, track and analyze data for disease trends, disease exposures and exposure events. Maven enables the immediate exchange of information between clinics, labs and state health departments. The Maven security environment displays only the data a user needs and is authorized to access. Through data analysis, Maven can then extract surveillance data for the identification of a possible public health/environmental emergency. Additional Maven functions include:

- Data exchange and flow of work between Disease Control personnel working on various disease management issues
- Ability for laboratory reports to be imported electronically, through an automated 24/7 routing mechanism.
- Disease alerting for cases requiring immediate attention, through a 24/7 alerting system.
- Line list level and aggregate reporting
- Case management, contact-tracing and outbreak management

- Reporting cases to the CDC
- Immunization histories and forecasts for vaccine preventable disease investigations by connecting to the NDIIIS

As cases are entered into the system, whether manually or electronically, they are automatically assigned to the regional field epidemiologist or surveillance personnel. These assignments are based off the county in which that case resides; if that is not available at the time of the report, it is based off the county code of the laboratory that did the testing.

Investigation

The Division of Disease Control is responsible for conducting investigations of infectious diseases and outbreaks that may impact the public. Disease Control staff also coordinates with employees of other state agencies, local health departments, tribal nations, the CDC and healthcare personnel when conducting these investigations. Disease Control has the capacity to conduct multiple investigations of specified infectious diseases and outbreaks simultaneously and each situation is analyzed on a case-by-case basis through situational awareness reporting and program management meetings.

Case Investigation

- NDDoH Division of Disease Control program staff are responsible for coordinating the investigation and case management of MRC cases.
- Critical information to be obtained includes demographic, clinical and other risk factor information from the attending physician, hospital/clinic personnel, and/or patient/parent.
- Each case should be entered into Maven
 - The clinical, demographic, vaccine, risk/exposure/control and prevention, and epi-linked/outbreak question packages should all be completed.
- The following guidelines are not all inclusive of all the MRC cases reported to the Division of Disease Control due to varied differences between diseases and the follow up needed for different disease. However, the basic case investigation steps are as follows:
 1. Upon receipt of reported MRC, refer to Appendix A to determine case investigation priorities.
 2. Every case reported will need demographic data collected. These demographics include, but are not limited to: name, full address, date of birth, race, ethnicity, sex, current employment and telephone number(s).
 3. Cases that are reported and need full investigations will be contacted by Disease Control personnel to obtain full clinical history, vaccination history (when needed) and risk factors (which will be disease dependent). These risk factors may include, but are not limited to, close

contacts or sexual partners, travel history, foods eaten, drug and alcohol use, animal contact, medical procedures and any large gatherings.

4. Completed case investigations will be entered into Maven. The login screen is located on the NDDoH Division of Disease Control's intranet site.

Contact Investigation

For diseases such as sexually transmitted diseases (STDs), vaccine preventable diseases (VPDs), hemorrhagic fevers, certain respiratory diseases, possible enteric illnesses and others, contact or partner investigations may be required.

- The NDDoH Division of Disease Control is responsible for identifying household members and other contacts of the index case through interviews with the index case or the case's parent/guardian. The information obtained should include name, gender, age, address, school or work location, immunization status (when necessary), and clinical status including any symptoms which may be indicative of disease. The circumstances of the contacts' exposure should be documented.
- NDDoH Division of Disease Control staff are responsible for notifying all contacts and making recommendations, for chemoprophylaxis, vaccination, exclusions from work or school, symptom watch, testing as necessary, etc. These recommendations will be disease dependent regarding any follow-up that should occur.
- When necessary, NDDoH will notify the appropriate local public health administrator/director of nursing or tribal liaison. Further updated information will be provided as necessary throughout the investigation.
- When necessary, the infection control nurse/practitioner, in both the public and tribal sectors, will be notified as soon as possible regarding the infectious disease case in their health care facility. The health care facility is responsible for identifying contact lists and administering treatment to staff. The NDDoH will assist the infection control practitioner if requested.
- Contacts will be referred to their primary care physician for follow-up and treatment when necessary. The NDDoH will attempt to contact the physician and facility infection control practitioner if applicable to explain the situation and the potential number of contacts which may require care.
 - The NDDoH will coordinate with a clinic/facility in the area for referrals of contacts that do not have a personal physician.
- The local public health units assist in contact investigations for TB. They may also be requested to assist in other contact investigations if Disease Control needs assistance.

Isolation and Quarantine

For certain diseases, there may be periods of isolation and quarantine to prevent spread of the disease to others. Both the State Health Officer and Local Health Officers have the authority to issue orders for isolation or quarantine.

The [CDC Quarantine Station](#) in Minneapolis will be notified of communicable disease cases that traveled between states or internationally while infectious on commercial conveyances (i.e., plane, cruise ship, etc.). The CDC Quarantine Station will also be notified of applicable communicable cases that plan to travel while infectious. This is in accordance with the [CDC Division of Global Migration and Quarantine policy](#).

Minimum Period of Isolation of Cases: This would be a minimum period where the patient is asked to isolate themselves until they are no longer contagious (cannot spread the disease to others). This prevention effort would be limited to diseases which are highly contagious or airborne.

These diseases include but are not limited to:

- Measles
- Tuberculosis
- Novel influenza
- Diphtheria
- Pertussis
- Chickenpox
- Smallpox
- Rubella
- Hemorrhagic Fevers

Minimum Period of Quarantine of Contacts: There may be several criteria to consider when determining if and when to quarantine susceptible contacts and when they can return to normal activities: Some of the things to consider are outlined below.

- *Discrete (one-time) exposure* — quarantine timeline will be based on the time of exposure through incubation period to ensure that contact does not become a case.
- *Continuous exposure* — quarantine will be based on last day of exposure through the incubation period.

- *Multiple exposures to multiple cases* — susceptible will need to be quarantined from the last day of exposure to the last case they encountered through the incubation period.

For large or statewide outbreaks and long term isolation and quarantine situations (such as those that would occur during a pandemic flu) see the All Hazards Operation Plan, [Isolation and Quarantine section](#).

Multiple Ongoing Investigations

Disease Control will provide disease surveillance, case and contact investigations, recommendations for prophylaxis, treatment and infection control for a variety of reportable conditions. Routine case investigations do not require any additional personnel beyond those in Disease Control as multiple ongoing case investigations are standard practice.

However, should it become known that an outbreak or cluster of cases are occurring, it will be reported to the program or field epidemiologist. At the beginning of any outbreak/cluster investigation, the follow-up would start with the field epidemiologist for the region in which the outbreak occurs along with program personnel that handles the specified disease (i.e., If it is a foodborne disease, the ELC program would take the lead; if it is a vaccine preventable disease the Immunization program would take the lead, etc.). If the outbreak become larger than the program and field epidemiologist can manage (including public calls, media requests, data collection, etc.) Additional personnel (both field epidemiologists and other program personnel) would be reassigned to assist with the investigation. If more than 50% of the Disease Control staff (field epidemiologist and program personnel) are working on the investigation, the Director and Assistant Director will meet with the State Epidemiologist and all Program Managers, to determine staff availability, concerns, and priorities. At this time, the Director and/or Assistant Director may consider requesting the assistance of the EPR section.

If during this outbreak another cluster or outbreak occurs; priorities will be used to determine how to manage the new outbreak. Some of the questions that will need to be answered to identify priorities will include, but are not limited to:

1. Is the new cluster/outbreak communicable? (i.e., person to person or spread by vectors)
2. Is it the same program being overtaxed? (i.e., two different foodborne outbreaks occurring)
3. What additional resources will be needed? (i.e., additional Disease Control personnel reassigned, sample collection kits, etc.)
4. Is the Disease Control capacity (> 65% of all staff) being utilized for these investigations?
5. What programs and disease investigations can be put on hold (i.e., non-communicable disease, lower priority) in order to divert staff to respond to outbreaks?

Should the Division determine that the capacity to conduct multiple investigations is exceeding the division's capacity, the Director or Assistant Director would request that the Emergency Preparedness and Response section stand up the DOC in an effort to reduce some of the burden handled by internal staff. This would then fall under the All Hazards Operation protocol and the health department would scale the DOC activation accordingly. Requests for help may come in various formats; such as asking the DOC to:

- Respond to all media requests

- Implement the hot line to receive calls from the public
- Identify resources (temporary housing, sample collection kits, personnel, etc.)
- Coordinate meetings with other agencies
- Coordinate points of dispensing (PODS)

While determining the capacity of staff will be handled on a case-by-case basis, a general rule of thumb for determination if EPR should be contacted may include:

- Coordinating multi-jurisdictional investigations within the state
- Collaborating with health departments that outside the state
- More than one outbreak occurring in a single program
- Outbreaks occurring across multiple programs

If at any time during an infectious disease outbreak, environmental factors such as possible contaminated water supply, need for environmental cleaning, soil or farming issues, etc. additional sections or other agencies would be called in to help in the response.

NOTE:

1. If the DOC has been utilized, an after-action report will be developed within two months of the completion of the outbreak. All agencies involved will gather to discuss and submit information to assess how well the response was conducted, what gaps were identified, what could be improved and the lessons learned.
2. If the DOC was not utilized during the response, a standard Disease Control outbreak report will be written within three months of completion of the outbreak. This report will include data collection methodology, analysis, response, collaborating agencies and outcome of the outbreak.

Case Close Out

- Once the case investigation has been completed by the field epidemiologist, including all data regarding risk history and contacts have been entered into Maven, the Bismarck program personnel will review all MRCs on a quarterly basis (or more often as necessary) for data quality.
- Any case with missing data or incomplete data will be returned to the case owner for follow-up and completeness.
- Each week, those diseases deemed nationally notifiable will be counted, aggregated and reported to the CDC. The list of diseases determined to be nationally notifiable can be found [here](#).
 - Annually, a complete close out of cases will occur. A final case count of all nationally notifiable for the year will be submitted to CDC for their year-end publication. This must be completed by May 15th of each year.
 - It is the responsibility of the Maven Coordinator to submit all weekly and year-end reports. Documentation on disease submission can be found in a binder in the Maven Coordinator’s office.

Data Analysis and Distribution

Reporting

- Each week, those diseases deemed of state-wide interest, such as influenza, West Nile virus and pertussis, will be counted, aggregated and reported via newsletters, website updates, etc.
- [Disease data](#) is posted monthly.
- Emailed reports consist of typical epidemiology information such as case counts, breakdown of cases by age and any highlights from the week. The weekly reports sent out by the division include:
 - Influenza weekly summary
 - West Nile virus weekly updates
 - One example of these weekly reports can be found at: www.ndflu.com/DataStats/InfluenzaSummaryArchives.aspx.
 - These reports are mailed to a variety of agencies such as hospital infection control, private providers, local public health unit directors, state veterinarians, North Dakota Game and Fish, USDA Wildlife Services, environmental health practitioners, food and lodging inspectors, etc.
- Aside from weekly reports, each program has 1-3 websites that store and provide data on disease specific indicators such as risks, case counts, comparison to national data, etc. Two examples of these websites can be found here:
 - www.ndhealth.gov/STD/Data/STDData.htm
 - www.ndhealth.gov/Disease/TB/Publications.htm
- For reasons of protecting confidentiality, Disease Control has developed a [small numbers release policy](#).

Analysis

- While not applicable to all disease websites, in general, routine data analysis for reports and web postings consists of :
 - Total case counts
 - break down of cases by:
 - age
 - gender
 - counts by county
 - Total hospitalizations (when provided)
 - And when necessary, a breakdown of cases by species (human or animal)

- Total number of samples tested and total number positive
- During outbreaks, more statistical measures, such as univariate and multivariate analysis, are used to determine risk, identify exposures, and determine if correlations exist.

Distribution

- Reports are made available to the public and to a variety of agencies, such as hospital infection control, private providers, local public health unit directors, state veterinarians, North Dakota Game and Fish, USDA Wildlife Services, environmental health practitioners, food and lodging inspectors, etc.
- Additionally, data is posted to the [Disease Control website](#) monthly.
- Quarterly, the [immunization newsletter](#) is posted to the website as well as mailed to a line list of VFC providers.
- Annually the Division provides an [Epidemiology Report](#) on a variety of topics, outbreaks, disease trends, etc. This newsletter is posted to the web for public viewing and the link is emailed to a subscribers email list which includes local public health, state epidemiologists from around the country, private providers, and other state government agencies.
- Monthly, the Division also provides a topics update of what is happening in the division called the [Pump Handle](#). This monthly update is posted to the web for public viewing and the link is emailed to a subscribers email list which includes local public health, state epidemiologists from around the country, private providers, and other state government agencies.

Quality Control

In an effort to ensure the quality of data, the Division will run various reports to check for:

- Timely reporting of notifiable diseases: This will be conducted monthly as part of our ongoing monitoring of ELR.
- Disease Specific reports: This will be conducted at a minimum monthly to ensure that certain high-volume disease reports are not falling off the ELR queue.
- Investigation completeness: Core elements will be tracked on a monthly basis (county, gender, onset date, race, address, etc.) to determine case completeness.

If a data set, unpublished data, or more detailed information than the summary is requested, the Disease Control contact person will inform the requestor that the request is outside the usual data release format and therefore requires a more formal approval process. [Click here](#) for the Disease Control data release policy.

Appendix A: Investigation Priorities

Investigation Priorities

Immediate Priority

- Anthrax*
- Botulism*
- Diphtheria*
- Glanders*
- Hepatitis A, acute*
- HIB
- Influenza, novel*
- Measles*
- Melioidosis*
- Meningococcal disease*
- Novel severe acute respiratory illness*
- Nipah virus infection
- Outbreaks/Clusters
- Plague*
- Poliomyelitis*
- Rabies, animal*
- Rabies, human*
- Rubella*
- Smallpox*
- Staphylococcus enterotoxin B, intoxication
- Typhoid Fever
- Viral Hemorrhagic Fevers*

First Priority (Daily)

- Carbapenem-resistant *Enterobacteriaceae* and *Pseudomonas aeruginosa* (CRO)*
- *E. coli* (shiga-toxin)
- Hantavirus
- Hepatitis B, acute
- Influenza Pediatric Death*
- Legionellosis
- Listeriosis
- Mumps
- Pertussis
- Salmonellosis
- Shigellosis
- Congenital Syphilis
- Tetanus
- Tuberculosis Disease*
- Vibriosis
- VRSA/VISA

Second Priority (Weekly)

- Brucellosis
- Campylobacter
- Cryptosporidiosis
- Giardiasis
- Hemolytic uremic syndrome (HUS)
- Hepatitis B, women 14-50
- Hepatitis C, acute
- HIV/AIDS
- Q Fever
- Syphilis
- Tularemia
- West Nile virus

Third Priority

- Anaplasmosis
- Arboviral infections (depending upon disease severity and agent)
- Babesiosis
- Chickenpox: Jennifer S. Only
- Chlamydia, complicated
- *Clostridium perfringens* intoxication
- Coccidioidomycosis
- Creutzfeldt-Jakob disease
- Ehrlichiosis
- Gonorrhea
- *H. influenzae*^
- Hepatitis B, chronic
- Hepatitis C, chronic*
- Hepatitis D
- Hepatitis E
- Influenza^*
- Lyme Disease
- Malaria
- Rocky Mountain Spotted Fever
- *S. Pneumo* <5
- *S. Pneumo*, invasive^
- Tickborne diseases
- Trichinosis
- Tuberculosis Infection*

Priority	Investigation Criteria
Immediate	Must begin immediately. Do not wait for access to medical record to start case. May need to call provider or patient. Need to work these cases on non-business days.
First (Daily)	Initiate investigation within one business day. Do not wait for access to medical record to start case. May need to call provider or patient.
Second (Weekly)	Initiate investigation within five business days.
Third	Initiate investigation within ten business days.
Note: In situations of clusters or outbreaks, the investigation status may change for that condition. For example, if there is an outbreak of Salmonellosis, those cases may become immediate priority as determined by the program.	
Metric: Case initiation may be measured using the MAVEN creation date and date investigation started in the administrative package of MAVEN. All case investigations, other than those that require demographics only, responsible party needs to be completing the 'Date Investigation Case Started' in MAVEN.	

[^]No case investigation.

Demographics only.

*Central office lead with coordination and/or notification to field epi.

Updated May 2019