Technical Section B: Epidemiology Surveillance

Executive Summary

During a pandemic, especially the early phases, the demand for "real-time" data will be high. Surveillance data will be critical for informing decision-makers and responding to questions and concerns from the public, including the media.

Because influenza viruses have constantly changing antigenic properties, both disease surveillance (in which the epidemiologic features and clinical impact of new variants are assessed) and virologic surveillance (in which influenza viruses are isolated for antigenic and genetic analysis) are vital for pandemic preparedness.

Disease surveillance will be conducted to:

1. Detect the introduction of the disease in the state and in specific communities and institutions,
2. Monitor disease activity including geographic and demographic distribution over time, and
3. Monitor disease severity by demographic factors and over time.

Virologic surveillance will be conducted to:

1. Confirm the arrival and spread of the influenza pandemic virus,
2. Monitor changes in the virus over time; and
3. Confirm disease in symptomatic persons aiding in the response

Surveillance will evolve over the phases of the pandemic to include monitoring for novel viruses, case-based surveillance, and population-based surveillance. The MDH has designated a small group of staff with clinical background and expertise (Clinical-Infection Control Team [C-ICT]) to conduct monitoring and case-based surveillance through the early stages of a pandemic. Suspect avian/novel influenza cases will be triaged to the C-ICT to assess the need for laboratory testing. The C-ICT will collect detailed case information on early suspect and confirmed avian or pandemic influenza cases, and will determine whether isolation and quarantine (IQ) are warranted. Case-based surveillance for AI, as well as IQ, will quickly become impractical if not impossible, at which time case-based surveillance will be discontinued. The MDH C-ICT will, however, continue to be available to assist healthcare providers with clinical issues as needed (see **Technical Section E**).

Pandemic disease surveillance data will need to address overall morbidity, hospitalized cases, and associated mortality. Surveillance is dependent upon disease reporting from healthcare providers who will likely be overwhelmed. Even during annual influenza seasons, case-based surveillance is not feasible. Routine statewide influenza surveillance therefore relies on a constellation of surveillance systems including voluntary sentinel reporting sites, school and long-term care outbreak reporting, MDH-PHL testing, critical case and death reporting, and retrospective mortality data assessment. Elements of this system will likely not be sustainable throughout a pandemic (e.g., school outbreak surveillance cannot be relied upon in the event of school closings).

To measure and define overall community-wide morbidity, the MDH will focus on sentinel surveillance sites while attempting to maintain other influenza surveillance components to the extent possible. Currently, sentinel sites are asked to report the percent of patients presenting

with influenza-like illness (ILI). The clinical presentation of influenza may be different during a pandemic; therefore, criteria may need to be modified by the CDC and the MDH.

The demand for medical evaluation and treatment will likely exceed clinic capacity, and sentinel clinics will likely need to triage patients to designated facilities. Thus, sentinel sites will reach a maximum capacity, at which point they will no longer be useful measures of overall morbidity. For that reason, the MDH does not plan to rely solely on sentinel surveillance sites.

Furthermore, because disease manifestation is expected to be severe to critical, case identification will shift from clinics to hospitals; surveillance needs to capture those cases. Critical influenza cases are currently reportable; however, the numbers will increase dramatically during a pandemic, necessitating a more efficient reporting mechanism. In order to consistently monitor trends over time, hospital-based pandemic influenza surveillance will need to be implemented as soon as sustained human-to-human transmission occurs and throughout the pandemic. The MDH will develop and implement an efficient mechanism for reporting all hospitalized influenza cases as soon as possible to ensure that the system is well entrenched prior to a pandemic, as well as to address increased interest in making all influenza-related hospitalizations reportable.

Virologic surveillance will be coordinated with the MDH-PHL. Currently, the MDH-PHL routinely forwards randomly selected, and any unusual, influenza isolates to the CDC to inform annual vaccine formulation and to characterize influenza strains with pandemic potential. In the event of a pandemic, influenza surveillance staff will need to prioritize suspect cases for testing to prevent exhausting limited resources. Avian influenza (AI) testing currently must be performed at a laboratory designate or certified at biosafety level (BSL) 3+. There are no Minnesota laboratories, including the MDH-PHL, which currently meet the BSL+3 criteria; therefore, viral culture of suspect AI cannot be performed in the state. However, the MDH-PHL is able to perform limited testing to distinguish human from avian viruses, and will forward possible AI specimens to the CDC. In a pandemic situation, laboratory certification criteria may be modified.

MDH surveillance staff will work closely with MDH-PHL staff to prioritize testing to avoid exhausting limited resources. Surveillance staff will also work closely with the C-ICT to collect and disseminate surveillance data on initial cases.

Health and Human Services (HHS) Recommendations

Overview

The HHS recommendations regarding surveillance are divided into five broad areas, based on the phases of the pandemic response:

1. Recommendations for the interpandemic period: Routine influenza surveillance
2. Recommendations for the pandemic alert period: Monitoring for novel strains
3. Recommendations for the pandemic period: Veterinary surveillance
4. Recommendations for the pandemic period: Pandemic virologic and disease surveillance preparedness
5. Overall planning for pandemic surveillance

1. Recommendations for the interpandemic period: Routine influenza surveillance

- Monitoring outpatient surveillance through the national sentinel provider network (SPN)
- Conducting hospital surveillance projects at selected facilities in selected states or cities
- Conducting mortality surveillance
- Providing state-level assessments based on state-specific surveillance initiatives

2. Recommendations for the pandemic alert period: Monitoring for novel strains

- Conducting enhanced surveillance to identify patients at increased likelihood of infection with a novel influenza virus, based on CDC guidance
- Reporting bona fide suspect novel influenza virus cases
- Submitting specimens to the CDC lab

3. Recommendations for the pandemic period: Veterinary surveillance

- Collaborating with the Minnesota Department of Agriculture and the poultry industry to identify and report AI outbreaks
- Submitting specimens from suspected avian outbreaks to the National Veterinary Services Laboratory in Ames, Iowa
- Monitoring for influenza in swine

4. Recommendations for the pandemic period: Pandemic virologic and disease surveillance preparedness

- Developing the capacity to test a large number of specimens at existing biosafety levels, including:
  - Being equipped and trained to use RT-PCR to differentiate human and AI viruses
  - Maintaining reagents and supplies for year-round influenza testing
  - Developing surge capacity
  - Assisting the CDC with electronic laboratory reporting
- Maintaining outpatient surveillance by:
  - Continuing to support and promote the sentinel provider network
  - Participating in other outpatient surveillance mechanisms as determined by the CDC
- Continuing and expanding hospital surveillance including:
  - Surveillance projects conducted by Emerging Infections Program (EIP) sites
  - Participating in other hospital surveillance mechanisms as determined by the CDC
- Conducting mortality surveillance, including:
  - National 122 Cities Mortality Reporting System
  - Exploring more timely mortality surveillance systems at the local and state level
- Continuing to assess statewide influenza activity and report to the CDC in accordance with CDC definitions (i.e., no activity, sporadic, local, regional, widespread)

5. Overall planning for pandemic surveillance

- Pandemic surveillance should evolve from case-specific, enhanced surveillance in the early stages of the pandemic, to scaled-back surveillance once case-specific surveillance is no longer feasible.
- Case-specific, enhanced surveillance includes:
  - Distributing to healthcare providers current CDC recommendations for detecting novel virus cases
  - Facilitating appropriate specimen collection and laboratory testing
  - Increased testing and reporting, particularly in the early stages of the pandemic
  - Determining testing priorities at the state level
  - Submitting a randomly selected subset of specimens to the CDC

- Additional enhanced surveillance measures include:
  - Communicating surveillance strategies and data with partners
  - Ensuring that sentinel providers are fully participating
  - Ensuring that hospital surveillance projects continue
  - Reporting state influenza activity to the CDC weekly
  - Facilitating timely death reporting (including 122 Cities Mortality Reporting System, and pediatric death reporting)
  - Implementing surveillance systems as developed by the CDC to ensure consistent, systematic surveillance nationally
- "Scaled-back" surveillance will, at the national level, resemble interpandemic/ pandemic alert phase surveillance. The return to interpandemic surveillance will be communicated via the CDC.

Planning Activities

Rationale

Influenza surveillance is conducted at the state, federal, and international levels. International influenza surveillance activities are coordinated by the World Health Organization (WHO) Collaborating Center for Influenza Reference and Research at the CDC. The CDC coordinates national surveillance including elements of both state-based and direct reporting. In Minnesota, influenza surveillance is centralized and will continue as such in the event of a pandemic.

Surveillance will evolve over the phases of the pandemic to include monitoring for novel viruses, case-based surveillance, and population-based surveillance. A novel virus may be imported to Minnesota by a person traveling from areas of the world affected by AI in birds and/or humans. A novel virus may also occur in an individual or persons exposed to local birds in the event of a high pathogenic AI outbreak. More likely, the pandemic would arrive in Minnesota as it circles the globe.

Public concern and anxiety is expected to create a demand for exact case counts, particularly early in the initial course of the pandemic. In addition, identification of early cases for IQ purposes may be of benefit in delaying the pandemic to the extent possible

This technical section mirrors the components of the federal HHS plan, described previously.

Triggers

Interpandemic/pandemic alert period

- During the interpandemic/pandemic alert period (phases 1-5), the following events or developments will serve as surveillance triggers:
- Report of (bona fide) suspect novel/AI case in MN
- Confirmation of novel/AI case in MN
- Notification that a pandemic is imminent

Pandemic period

In addition to the trigger points noted for the interpandemic/pandemic alert period, the following events will serve as trigger points during the pandemic period (phase 6):

- Cases exceeding capacity for case-based surveillance
- Epidemiologic trend (e.g., in incidence, demographics, disease severity) is detected
- Hospital capacity exceeded

Actions

Interpandemic period

The following surveillance actions are planned, anticipated, or already underway for the interpandemic period (phases 1 and 2):

Virologic Surveillance

The MDH-PHL receives influenza specimens from submitters statewide. Submitters include members of the sentinel provider network, long-term care facilities reporting influenza outbreaks, and other self-selected volunteer submitters. The MDH reports the number and strain typing of influenza viruses isolated each week. This information is updated and included in a weekly email to subscribers, and is available online. MDH-PHL also sends a representative subset as well as any unusual influenza virus isolates to the CDC for comparative antigenic and genetic analysis.

Disease Surveillance

The MDH, while participating in the National Surveillance System, will be engaged in the following four activities:

1. Outpatient surveillance
   - Currently, 27 Minnesota healthcare providers participate in the national Sentinel Provider Network (SPN). This voluntary, national network of approximately 1,400 sentinel providers report the number of patients presenting with influenza-like illness (ILI) and the total number of patient visits by age group each week. This information is updated weekly and is available online. Minnesota has surpassed the goal of one site per 250,000 population, with at least one site in each region of Minnesota. Many of the sentinel providers report year-round.
2. Hospital surveillance
   - MDH, in collaboration with the CDC and other Emerging Infections Program (EIP) sites in the U.S., is conducting ongoing hospital influenza surveillance in the Twin Cities metropolitan area.
3. Mortality surveillance
   - The cities of Minneapolis, St. Paul, and Duluth report to the MDH Vital Statistics Office, on a weekly basis, the percentage of total deaths caused by influenza and pneumonia.
4. State-level assessments
   - State-level assessments are based on the following influenza surveillance components:
     - Voluntary reporting of ILI outbreaks in long-term care facilities
     - Voluntary reporting of ILI outbreaks in schools
     - Reporting of MDH-PHL-confirmed cases
     - SPN reporting
   - MDH epidemiologists report influenza activity levels for the state each week based on the national categories. This information is updated weekly and is available online. The categories are as follows:
     - Widespread
     - Regional
     - Sporadic
     - No activity

Veterinary Surveillance

Minnesota has a very large poultry industry and is the top turkey-producing state. The Minnesota Board of Animal Health (BAH) is responsible for the health of the state's domestic animals, including poultry.

The MDH has established a working relationship with the BAH to assure timely notification of AI outbreaks, particularly high-pathogenic AI, in the state. Notification will enable the MDH to investigate potential human exposures and implement prevention and control measures, as well as respond to inquiries from the media and the general public, as such an outbreak would likely be considered newsworthy and possibly alarming (see **Technical Section I**).

Pandemic alert period

The following surveillance actions are planned, anticipated, or already underway, for the pandemic alert period (phases 3-5):

1. Conduct suspect case investigations.
2. Implement infection control and IQ.
3. Ensure preparedness for case-based surveillance.
4. Activate acute-care based (hospital-based/ sustainable, minimal) surveillance, if not previously in place.

Virologic Surveillance

Routine (i.e., interpandemic) virologic surveillance is sustained during the pandemic alert period. In addition, the MDH C-ICT receives reports of suspect avian/novel influenza and determines whether testing for AI is warranted. The MDH C-ICT serves as gatekeepers for the MDH-PHL to minimize unnecessary testing. As numbers of requests increase, protocols for systematic communication will be developed to ensure prioritization of testing and rapid communication of test results back to the C-ICT, surveillance staff, IQ staff, and treating physicians.

Because AI virus can only be cultured in a BSL 3+ laboratory, clinic and hospital laboratories should perform rapid influenza tests only for suspect avian/novel influenza. Viral culture specimens should be forwarded to MDH for polymerase chain reaction (PCR) testing to rule out know human influenza viruses and to be forwarded to the CDC for viral culture as deemed appropriate by the C-ICT.

Disease Surveillance

Minnesota is vulnerable to the introduction of novel influenza in several ways:

1. An influenza pandemic,
2. An avian or other novel influenza strain causing illness in a person recently arriving in Minnesota from an area of the world in which exposure to avian or other novel influenza may have occurred, or
3. A high-pathogenic AI outbreak in Minnesota birds resulting in exposure to Minnesota residents.

Influenza surveillance in Minnesota is designed to monitor for novel influenza strains despite the infeasibility of conducting universal case-based influenza surveillance. Because of the anticipated severity of influenza disease caused by an avian or other novel influenza virus - particularly in young, otherwise healthy individuals - a novel or AI case in Minnesota will likely be identified through case-based surveillance for critical influenza cases.

A. Avian/Novel Influenza Surveillance.

This will be done through**:**

- Case-based reporting of unusual or critical cases
  - The MDH influenza surveillance staff has defined "unusual and critical cases," and annually provides and disseminates guidance on influenza reporting (**Attachment K**).
  - MN Rule 4605.7040 requires case-based reporting of unusual and critical influenza cases.
  - MDH influenza case reporting criteria (Minnesota Statutes, Chapter 4605.7040) requires reporting of:
    - Critical cases or deaths related to influenza in otherwise healthy individuals of any age
    - Influenza-related deaths in children <18 years of age
    - Influenza-related encephalopathy/encephalitis in children <18 years of age
    - Influenza and staphylococcal co-infection
    - Hospitalized pregnant women with suspect or confirmed influenza
    - Influenza cases outside the typical influenza seasons
    - Suspect novel or AI
- Hospital surveillance
  - The MDH EIP conducts surveillance for pediatric and adult influenza cases at key hospitals in the Twin Cities metropolitan area (described above) deaths are reportable.
- Mortality surveillance
  - MDH conducts surveillance and case investigations surrounding unexplained deaths possibly due to an infectious cause, including influenza.
    - Direct communication between MDH and reporting entities
    - The MDH IDEPC Medical Director communicates routinely with healthcare providers regarding current infectious disease issues. In turn, providers frequently contact the MDH for clinical guidance and/or public health recommendations regarding patients with possible unusual or concerning infectious diseases.
    - The MDH Infection Control Unit staff has developed a strong working relationship with hospital infection control practitioners statewide, and communicates with them regularly on influenza pandemic preparedness issues. In turn, infection control practitioners frequently contact MDH Infection Control staff to report disease and/or to consult on infection control.

B. Case-based Surveillance.

- While influenza surveillance will be centralized throughout the pandemic, and inter-pandemic periods. Case-based surveillance will be centralized only during the early stages of the pandemic.

- During the early stages of the pandemic, the C-ICT will have primary responsibility for case-based surveillance due to the anticipated need for extensive clinical and infection control guidance. The C-ICT will be responsible for conducting or making recommendations on the following:
  - Data collection
  - Case status assessment
  - Laboratory testing (see **Technical Section H**)
  - Treatment
  - Infection control (see **Technical Section D**)
  - Case contact management
  - Recommendations regarding isolation and quarantine (see **Technical Section C**)
- Novel Influenza Case Tracking Database:
  - MDH staff will enter bona fide suspect cases (see **Attachment L**) into a tracking database with shared access among the C-ICT and influenza surveillance staff. The tracking database will include a case status field including the following options:
    - Suspect
    - Confirmed, laboratory
    - Confirmed, clinical
    - Ruled out

    Note: Early cases will need to be laboratory-confirmed. As the pandemic progresses, cases may be confirmed by meeting a clinical case definition.
  - MDH influenza surveillance staff will be responsible for summarizing and disseminating data as follows:
  - Using the Novel Influenza Case Tracking Database will be the primary current database.

Veterinary Surveillance

See interpandemic actions above.

Pandemic period

Many of the anticipated surveillance activities for the pandemic period (phase 6) will involve:

- Continuation of activities initiated during the interpandemic/pandemic alert period; or
- Application/activation/use of procedures and resources developed during the interpandemic/pandemic alert period.

Electronic reporting will also be important during the pandemic period (see **Attachment M**).

The MDH will conduct the following surveillance activities during the pandemic period with a tiered approach:

1. Conduct case investigation and maintain hospital-based surveillance.
2. Implement case-based surveillance and containment recommendations and utilize the novel influenza-tracking database. Include information on influenza data in a summary on the MDH website, and disseminate via GovDelivery.

3. Discontinue case-based surveillance. Maintain acute-care based surveillance. Discontinue reliance on routine surveillance and implement mortality and worksite surveillance.
4. Implement work-site surveillance (at large employers) to measure community-wide impact, and mortality surveillance to measure disease severity.
5. Notify MDH regional planners. Prepare tables, graphs, and/or maps depicting trend.
6. Expand acute-care based surveillance to surge capacity sites.

Virologic Surveillance

The MDH-PHL will not be able to test all suspect influenza cases during a pandemic. Assuming limited resources, decision makers will need to prioritize groups for laboratory testing.

Priority will likely be given to laboratory testing to confirm disease in persons otherwise eligible for treatment, in symptomatic emergency response persons (e.g., healthcare workers, first responders, correctional staff, high level public health officials), in unusual cases, and in cases of potential treatment failures (monitoring for oseltamivir resistance). A mechanism for assuring appropriate prioritization of testing will be developed (e.g., the laboratory specimen submission form will request information regarding reason for testing, based on MDH determined criteria).

Disease Surveillance

Surveillance will evolve with the pandemic. The anticipated impact of the pandemic on current influenza surveillance systems is as follows:

- SPN will likely be sustainable.
- MDH-PHL testing will continue; however, testing criteria will be established and adhered to in order to conserve limited resources.
- School-based reporting will not be sustainable and will be of little value if schools are closed.
- Long-term care facility reporting will not be sustainable and will be of limited value in monitoring the pandemic.
- Hospital surveillance conducted by EIP likely will not be sustainable due to the large numbers of hospitalized cases, the somewhat cumbersome reporting mechanisms (e.g., email), and the competing demands on hospital staff time.
- Reporting of critical cases will likely increase if there is an increased severity of influenza disease.

A. Enhanced Case-Based Surveillance

Initially, case-based surveillance will be conducted for the following reasons:

- Early cases will be of greatest interest clinically
- The demand for case counts and other case-specific data will be greatest early in the pandemic.
- Isolation of cases, and possible quarantine of case contacts, may be effective strategies early on to reduce the overall impact of the pandemic

Critical cases of influenza are currently reportable; therefore, enhanced case-based surveillance in the early stages of the pandemic will not require a change in reporting criteria. The pandemic influenza case definition may, however, differ from the suspect avian case definition.

B. Sustainable Minimal Critical Case Surveillance

Collecting data similarly and systematically throughout the pandemic will be important in describing trends over time. Reporting of hospitalized cases will provide the most consistent and useful data in terms of the distribution, clinical aspects, and impact of disease. Reporting of all hospitalized cases is not currently established outside of EIP projects, but would be a valuable routine influenza surveillance component.

As soon as the pandemic is declared imminent (i.e., sustained human-to-human transmission occurs anywhere in the world) if not before then, the MDH will implement statewide surveillance at all Minnesota hospitals. This surveillance will be independent of the case-based surveillance described above; however, data collected through both surveillance systems will be compared and summarized collectively.

Pandemic Influenza Surveillance Strategies		
	Case-Based	**Acute-Care Based**
Purpose	Identifying, quantifying, and analyzing the geographic and demographic distribution of cases and the clinical virologic aspects of pre and early pandemic cases of avian or other novel influenza.	Quantifying and analyzing trends in the geographic and demographic distribution of cases and the clinical and virologic aspects of influenza throughout the pandemic.
When Implemented	Currently implemented. Utilized upon receipt of a bona fide suspect avian or novel influenza case.	When pandemic is declared imminent.
When Discontinued	When deemed no longer feasible by MDH Medical Director and C-ICT	At the end of the pandemic.
Timing/Frequency of Reports	Immediate reporting of suspected or confirmed cases	Weekly
MDH Staff Responsible	C-ICT	Influenza surveillance staff

Post-pandemic period

The goals of post-pandemic surveillance are to provide a detailed retrospective characterization of the pandemic and to evaluate the efficacy of protective action recommendations and emergency management strategies. These surveillance activities may include:

1. Review death certificates statewide for influenza-related pneumonia and influenza deaths.
2. Review hospital data.
3. Conduct retrospective studies of vaccine efficacy.
4. Conduct validation studies of influenza illness reporting.
5. Conduct retrospective studies of protective action recommendations.
6. Discontinue work-site and mortality surveillance.
7. Reinstate routine influenza surveillance.

Roles and Responsibilities

State and local roles and responsibilities are identified below. Regional roles are also identified when applicable. This is not an exhaustive list. Furthermore, although roles and responsibilities are listed, the MDH recognizes that the infrastructure to support these planning efforts is evolving and may not yet be in place.

State			
	Roles and responsibilities	**Coordinating entity**	**Explanation**
Routine Influenza Surveillance	Maintain Sentinel Provider Network (SPN)	**Primary** MDH ITIH **Contributor** MDH ADIC MDH PHL	
Routine Influenza Surveillance	Maintain outbreak surveillance in schools and long-term care facilities.	**Primary** MDH ITIH **Contributor** MDH ADIC MDH PHL	

State			
	Roles and responsibilities	**Coordinating entity**	**Explanation**
Routine Influenza Surveillance	Maintain hospital-based surveillance of pediatric and adult cases.	**Primary** MDH ADIC **Contributor** MDH ITIH MDH PHL	
Laboratory Results	Compile MDH PHL influenza test results and notify the MDH C-ICT of reported unusual or critical influenza cases.	**Primary** MDH ITIH **Contributor** MDH ADIC MDH PHL	
Monitoring	Receive reports of suspect avian or novel influenza cases and assess whether cases meet suspect case definition.	**Primary** MDH C-ICT MDH ADIC **Contributor** MDH PHL	
Data Collection	Track unusual or critical influenza case reports using the Novel Influenza Case Tracking Database and determine the case status and continually enter data as information becomes available (e.g., laboratory testing, case status changes).	**Primary** MDH C-ICT **Contributor** MDH ITIH	

State			
	Roles and responsibilities	**Coordinating entity**	**Explanation**
Case Reporting	Develop a sustainable minimal critical case-reporting tool.	**Primary** MDH ITIH **Contributor** MDH ADIC	
Case Reporting	Communicate with hospitals and LPH regarding reporting requirements. Review and summarize the data reported.	**Primary** MDH ITIH **Contributor** MDH ADIC	
Testing	Determine criteria for testing early cases and cases throughout the pandemic.	**Primary** MDH C-ICT MDH ITIH MDH PHL	
Testing	Develop a system for testing suspect and early cases and for use during the pandemic.	**Primary** MDH C-ICT MDH ITIH MDH PHL	

State			
	Roles and responsibilities	**Coordinating entity**	**Explanation**
Communication	Keep decision makers aware of significant findings during a pandemic.	**Primary** MDH ITIH **Contributor** MDH ADIC MDH ECC Incident Manager (if open) MDH HEPACT MDH Communications Office	
Communication	Maintain influenza updates on the MDH Intra and Internet and report any findings to the CDC via NETSS or other reporting tools as they are developed and implemented.	**Primary** MDH ITIH **Contributor** MDH ADIC MDH ECC Incident Manager (if open) MDH HEPACT MDH Communications Office	
Communication	Send report to the CDC via NETSS or other reporting tools as they are developed and implemented.	**Primary** MDH ITIH **Contributor** MDH ADIC MDH ECC Incident Manager (if open) MDH HEPACT MDH Communications Office	

Local			
	Roles and responsibilities	**Coordinating entity**	**Explanation**
Surveillance	Be aware of influenza surveillance activities (coordinated by the MDH) and the rationale sufficient to respond to questions and concerns about them.	**Primary** LPH **Contributor** MDH EFS MDH ITIH	Act as a resource to partners and the general public for surveillance activity.
Surveillance	Encourage hospitals and clinics within jurisdiction to participate in surveillance activities.	**Primary** LPH Local Hospitals **Contributor** MDH EFS MDH ITIH	Recruit sentinel surveillance sites and encourage surveillance reporting.
Communication	Access surveillance data by subscribing to and reading influenza updates disseminated via GovDelivery.	**Primary** LPH Local Hospitals **Contributor** MDH EFS MDH ITIH	
Consultation	Provide interpretation of epidemiologic data upon request from local hospitals, clinics, and other partners.	**Primary** LPH **Contributor** MDH EFS MDH ITIH	Utilize MDH talking points as provided

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