2018 Reportable Disease Changes

NATIONAL AND MICHIGAN 2018 CHANGES

Background

- The National Notifiable Disease Surveillance System (NNDSS) offers surveillance case definitions with a set of uniform criteria used to define diseases for public health surveillance
- While the list of reportable conditions varies by state, the Council of State and Territorial Epidemiologists (CSTE) has recommended that state health departments report cases of selected diseases to CDC's National Notifiable Diseases Surveillance System (NNDSS). Every year, case definitions are updated using CSTE's Position Statements
- In Michigan, reporting of conditions is mandated by the Michigan Public Health Code [Public Act 368 of 1978, 333.5111]. Section 333.5111 mandates that MDHHS annually review, update, and publish the list on the department's website
- Michigan's reportable disease requirements are updated yearly to reflect changes in national reporting guidance from the Centers for Disease Control and Prevention and CSTE. Changes to the Michigan requirements may also reflect updated laboratory testing capabilities, requests for epidemiologic data, and contacts for local health departments and laboratories

New Nationally Reportable Condition: Carbapenamase Producing Carbapenem-Resistant *Enterobacteriaceae* (CP-CRE)

- CP-CRE are an emerging public health problem in the US
- CRE are a group of gram-negative enteric bacteria resistant to carbapenem-class antibiotics
  - Most common genera are *Klebsiella* spp., *Escherichia coli*, and *Enterobacter* spp.
  - CP-CRE differs from CRE in that it has been confirmed by phenotypic and/or molecular testing to have a carbapenemase or other novel resistance mechanism, which allows the organism to break down carbapenem antibiotics making them ineffective
- CP-CRE will now be routinely reportable through MDSS – a new condition and case detail form are available in the system
- Current MDHHS guidance documents are posted at www.michigan.gov/cdinfo and www.michigan.gov/hai

CP-CRE Case Definition

- **Confirmed Case:**

E. coli, *Klebsiella* spp., or *Enterobacter* spp. from any isolate that is:

- Positive for known carbapenemase resistance mechanism (e.g. KPC, NDM, VIM, IMP, OSA-48) demonstrated by a recognized test (e.g. PCR, Xpert Carba-R);

OR

- Positive on a phenotypic test for carbapenemase production (e.g., metallo-ß-lactamase test, modified Hodge test, Carba NP, Carbapenem Inactivation Method [CIM], or modified CIM)

- The complete case definition can be found at: https://wwwn.cdc.gov/nndss/conditions/carbapenemase-producing-carbapenem-resistant-enterobacteriaceae/case-definition/2018/

New Nationally Notifiable Condition: Perinatal Hepatitis C Virus Infection

- A standardized case definition would assist in quantifying the scope of the increase in perinatal HCV transmission, ensure appropriate classification of perinatally exposed cases, and support identification of cases which require additional follow-up and investigation
- There are no changes in requirements for laboratories – all positive HCV antibody, RNA, and genotype tests are still required to be reported
- A new condition and case detail form for perinatal HCV are available in the MDSS
  - The perinatal HCV case definition will be used for patients less than 36 months of age
  - Existing acute and chronic HCV case definitions should be used for any patient over 36 months of age
- The MDHHS viral Hepatitis Unit developed a Perinatal HCV Toolkit to assist LHDs in case classification, de-duplication, and follow-up of cases
  - The **Perinatal HCV Toolkit** is available at: www.mi.gov/hepatitis or www.mi.gov/cdinfo

Perinatal Hepatitis C Virus Infection Case Definition

- **Laboratory Criteria for Diagnosis**
  - HCV RNA positive test results for infants between 2 to 36 months of age; **OR**
  - HCV genotype test results for infants between 2 to 36 months of age or greater; **OR**
  - HCV antigen test results for infants between 2 to 36 months of age or greater
- **Epidemiologic Linkage**: Maternal infection with HCV of any duration, if known. Not known to have been exposed to HCV via a mechanism other than perinatal (e.g. not acquired via healthcare)
- **Confirmed**: An infant who has a positive test for HCV RNA nucleic acid amplification test (NAAT), HCV antigen, or detectable HCV genotype at ≥2 months and ≤36 months of age and is not known to have been exposed to HCV via a mechanism other than perinatal
- The complete case definition can be found at: https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-perinatal-infection/case-definition/2018/

New Reportable Condition in Michigan: Coccidioidomycosis

- Was previously reportable prior to 2017
- **Clinical Criteria:** Infection may be asymptomatic or may produce an acute or chronic disease. Although the disease initially resembles an influenza-like or pneumonia-like febrile illness primarily involving the bronchopulmonary system, dissemination can occur to multiple organ systems. An illness is typically characterized by one or more of the following:
  - Influenza-like signs and symptoms (e.g., fever, chest pain, cough, myalgia, arthralgia, and headache)
  - Pneumonia or other pulmonary lesion, diagnosed by chest radiograph
  - Erythema nodosum or erythema multiforme rash
  - Involvement of bones, joints, or skin by dissemination
  - Meningitis
  - Involvement of viscera and lymph nodes
- **Laboratory Criteria for Diagnosis**
  - Cultural, histopathologic, or molecular evidence of presence of *Coccidioides* species, **OR**
  - Positive serologic test for coccidioidal antibodies in serum, cerebrospinal fluid, or other body fluids by:
    - Detection of coccidioidal immunoglobulin M (IgM) by immunodiffusion, enzyme immunoassay (EIA), latex agglutination, or tube precipitin, **OR**
    - Detection of coccidioidal immunoglobulin G (IgG) by immunodiffusion, EIA, or complement fixation, **OR**
    - Coccidioidal skin-test conversion from negative to positive after onset of clinical signs and symptoms
- **Confirmed Case:** a case that meets the clinical criteria and is laboratory confirmed

Revised Case Definition: Anthrax

- Revised laboratory diagnostics criteria
- Improvements in the consistency in terms used for the types of anthrax
- Refinements to the symptoms and signs
- Addition of infections with *Bacillus cereus* strains that express anthrax toxin genes
- The 2018 Anthrax case definition can be found at: https://wwwn.cdc.gov/nndss/conditions/anthrax/case-definition/2018/

Revised Case Definition: Shiga Toxin-Producing *Escherichia coli* (STEC)

- Updates current case definition to prevent an increase in underreporting of STEC infection cases and to make case definitions for enteric bacterial pathogens more consistent
- Revises case definition to include detections of STEC by culture-independent diagnostic testing (CIDT)
  - Detection of STEC by CIDT without culture-confirmation in a clinically compatible person may be classified as **probable**
  - Illnesses among person who are epi-linked to a confirmed or laboratory-diagnosed probable case may be classified as **probable** epi-linked cases
  - Detection of STEC by CIDT without culture-confirmation with no known clinical compatibility may be classified as **suspect**
- The 2018 STEC case definition can be found at: https://wwwn.cdc.gov/nndss/conditions/shiga-toxin-producing-escherichia-coli/case-definition/2018/

Revised Case Definition: Syphilis

- Changes to nomenclature for the different stages of syphilis:
  - Rename “Syphilis, early latent” to “Syphilis, early non-primary, non-secondary”
  - Create new category, “Syphilis, unknown duration or late”;
    - Comprises cases previously categorized as “Syphilis, late latent” and “Syphilis, late with clinical manifestations”
  - Retire “Syphilis, late latent”
  - Retire “Syphilis, late with clinical manifestations”
- The 2018 Syphilis case definition can be found at https://wwwn.cdc.gov/nndss/conditions/syphilis/case-definition/2018/

Revised Case Definition: Histoplasmosis

- Histoplasmosis is a reportable condition in Michigan but is not reportable at the federal level
- Michigan is adopting the standardized case definition that was recently developed by a CSTE working group
- The case definition along with new case investigation guidance can be found at www.michigan.gov/cdinfo under “Communicable Diseases A-Z” and then under “Histoplasmosis”

Revised Case Definition: Lyme Disease

- According to the 2017 CSTE Case Definition, a case may be classified as 'Suspect' if a case has evidence of infection but no clinical information available (e.g. a laboratory report). However, contrary to this case definition, the MDHHS EZID Section does not support the completion of cases with no clinical information as 'Suspect.'
- Therefore, even if a case has confirmatory lab report(s) indicating infection, if clinical information cannot be obtained then this case would be classified as 'Not a Case.'
- MDHHS updated the Lyme Disease Reporting Guidelines document. It can be found at www.michigan.gov/cdinfo under "Communicable Diseases A-Z" and then under "Lyme Disease"

New Condition Under Standardized Surveillance But Not Added to the NNDSS: Acute Flaccid Myelitis

- Revised case definition provides clarification by separating laboratory criteria from clinical criteria
- **Confirmed case**: clinically compatible and has confirmatory laboratory evidence (MRI showing spinal cord lesion largely restricted to gray matter and spanning one or more spinal segments)
- **Probable case**: clinically compatible and has supportive laboratory evidence (CSF showing pleocytosis)
- The full case definition can be found at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2017PS/2017PSFinal/17-ID-01.pdf
- Cases may be reported using the Acute Flaccid Myelitis case detail form in MDSS

New Condition Under Standardized Surveillance But Not Added to the NNDSS: *Candida auris*

- *Candida auris* is an emerging multidrug-resistant (MDR) yeast that can cause invasive infections and is associated with high mortality
- **Laboratory Criteria**:
  - Confirmatory: culture of *Candida auris* from any body site, including blood, wound, skin, ear, urine, rectum, respiratory secretions, or other body fluids
  - Supportive: detection of *Candida haemulonii* from urine, respiratory tract, or normally sterile site by a lab instrument not equipped to detect *C. auris*
- **Epidemiologic linkage**: isolate from a person who is within same household/healthcare facility, with another person with confirmatory lab evidence
- The case definition can be found at: https://wwwn.cdc.gov/nndss/conditions/candida-auris/case-definition/2018/
- Cases should be reported using the 'Unusual Outbreak or Occurrence' form in MDSS

New Condition Under Standardized Surveillance: Extrapulmonary Non-Tuberculosis Mycobacterium (NTM)

- Laboratories are not required, but may voluntarily choose to report these cases into MDSS
- While the condition is not nationally notifiable or reportable, there is a new standardized case definition
- A modified NTM case detail form is available in MDSS
  - LHDs are not required to investigate NTM cases but if they choose to follow-up on them, use the CSTE case definition and MDSS case detail form
- Additional information and case definition can be found at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2017PS/2017PSFinal/17-ID-07.pdf

New Condition Under Standardized Surveillance: Latent Tuberculosis Infection (LTBI)

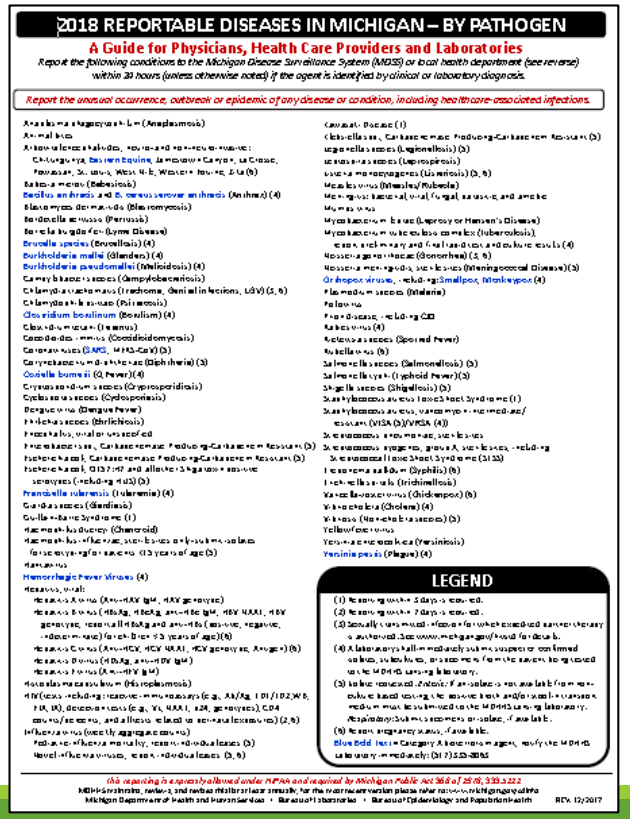
- There are no changes to reporting requirements for LTBI
- MDHHS requires the reporting of any positive preliminary or final TB nucleic acid tests, TB genetic probes, and chromatographic or rapid tests
- While the condition is not nationally notifiable or reportable, there is a new standardized case definition
- A new condition and case detail form for LTBI is available in MDSS
  - Surveillance for these infections is being encouraged in an effort to promote the elimination of TB
  - LHDs are not required, but are encouraged, to investigate LTBI cases. Use the case definition and MDSS form to collect information
- Additional information and case definition can be found at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2017PS/2017PSFinal/17-ID-09.pdf

Michigan 2018 Additional Changes

- Removed rheumatic fever from the list of diseases or conditions required to be reported
- Removed the footnote (4) designation from HIV infection. Isolates, subcultures, or specimens are no longer required to be submitted to the MDHHS Lansing laboratory for HIV infections
- Added *Bacillus cereus serovar anthracis* under the anthrax category as required to be reported and as a designated category A bioterrorism agent
- Modified *Coxiella burnetii* (Q Fever) to be a designated category A bioterrorism agent
- Modified Eastern Equine Encephalitis to be a designated category A bioterrorism agent
- Modified Severe Acute Respiratory Syndrome (SARS) to be a designated category A bioterrorism agent
- Added Hepatitis A Virus genotype testing as a reportable lab result

Michigan 2018 Updated Documents

- Updated reportable disease lists (by pathogen and by condition), as well as the Healthcare Professional's Guide (Brick Book) are available for download at www.michigan.gov/cdinfo



Resources

- The full National update can be found at https://wwwn.cdc.gov/nndss/downloads.html
- MDHHS tip sheets and guidance documents can be found at www.michigan.gov/cdinfo