MDCH 2009–2010 Guidelines for Clinicians on Influenza Testing

Michigan Department of Community Health
August 14, 2009

Intended audience: Physicians, infection control providers, laboratorians, local health departments

Purpose: To communicate to clinicians the MDCH Bureau of Laboratories (BOL) 2009–2010 guidelines on pandemic (formerly known as swine or novel) influenza A H1N1 testing for targeted groups

1. Case Investigation Influenza Testing at MDCH BOL

Due to capacity limitations, MDCH BOL will not be conducting influenza testing (RT-PCR) for every suspect pandemic H1N1 case within Michigan. Similar to traditional influenza seasons, influenza testing at BOL during 2009–2010 will focus on outbreak investigations and public health-directed case investigations (see next paragraph). Testing of these groups provides information on the severity of circulating influenza viruses and vaccine efficacy. Test results are expected to take 1–2 days once the specimen is received at BOL. Clinicians should note that test results should not be the only criteria used for determination of clinical therapy. Due to unavoidable lag time involved in transport and processing, results will not be available in the time frame needed to make therapeutic decisions.

Case investigation influenza testing at MDCH BOL will be limited to the following groups:

- Hospitalized patients with severe influenza-like illness (i.e., ICU patients)
- Patients with an influenza-like illness of an unusual presentation (e.g., encephalopathy, cardiac complications)
- Pregnant women with severe influenza-like illness
- Outbreaks or clusters of influenza-like illness in congregate settings (e.g., schools, camps, long-term care facilities, daycares, etc), as requested by local or state public health
- Influenza-related deaths of individuals of any age

Note: Sentinel Network Providers will receive separate instructions on specimens to be submitted.

2. Pre-Approval Process for Specimen Testing

Depending on the volume of specimens received at BOL for influenza testing, **a pre-approval process may be instituted. Please visit www.michigan.gov/flu for the current status of any approval processes in effect.** Regardless of the approval process status, an MDCH BOL test request form must accompany each specimen. Test request forms and specimen collection guidance can be found online at www.michigan.gov/mdchlab by clicking on "Test Request Forms" and "Microbiology/Virology DCH-0583" for test request forms and "Specimen Submission" for specimen collection guidance. Notification of an approval process requirement

will occur via the MIHAN, MI FluFocus listserve and on www.michigan.gov/flu. Further details can be found on the accompanying testing algorithm.

Clinicians needing diagnostic testing are encouraged to use private or hospital labs offering influenza testing. The BOL is working with several Michigan clinical laboratories interested in developing pandemic flu specific PCR assays to assure their assays are sufficiently sensitive and specific to be useful in diagnostic testing.

3. Role of Rapid Flu Testing

FDA-approved rapid diagnostic tests for influenza are increasingly available to clinicians. The results obtained from such tests should be used with caution. A recent report issued by the CDC (MMWR 58(30):826–829, 2009) confirms earlier reports that these devices have a wide range of test sensitivities (40–83%) for detecting either the seasonal or novel influenza A subtypes when compared with PCR or viral culture. Therefore, a negative test result by itself does not rule out influenza infection. A positive rapid test result coupled with appropriate clinical signs and symptoms and knowledge of currently circulating influenza strains may be useful for making clinical diagnosis.

4. Influenza Surveillance Testing

Since this influenza pandemic began in April 2009, the virus has spread throughout all areas of the state of Michigan, as demonstrated by influenza surveillance methods. Therefore, the focus of MDCH surveillance for this virus has shifted from individual case confirmations to surveillance for overall influenza activity. MDCH has preexisting sentinel healthcare provider and laboratory networks that provide both epidemiologic and laboratory data on influenza virus circulation in Michigan.

5. Reporting of Cases

At this time, aggregate counts of influenza, influenza outbreaks in congregate settings, and individual case reports for severely ill persons or fatal cases of influenza (as listed in Section 1 above) are reportable to your local health department. **Influenza reporting may change in the future depending on the epidemiology of the virus; please refer to your local health department for current influenza reporting requirements.** Local health directories can be found online at http://www.malph.org/page.cfm/18/.

Any questions regarding this guidance or influenza activity can be directed to the MDCH Division of Communicable Disease at 517-335-8165. Laboratory-specific questions can be directed to Dr. Anthony Muyombwe at the MDCH Bureau of Laboratories at 517-335-8067.

Influenza Testing Algorithm for Cases and Outbreaks – Fall 2009
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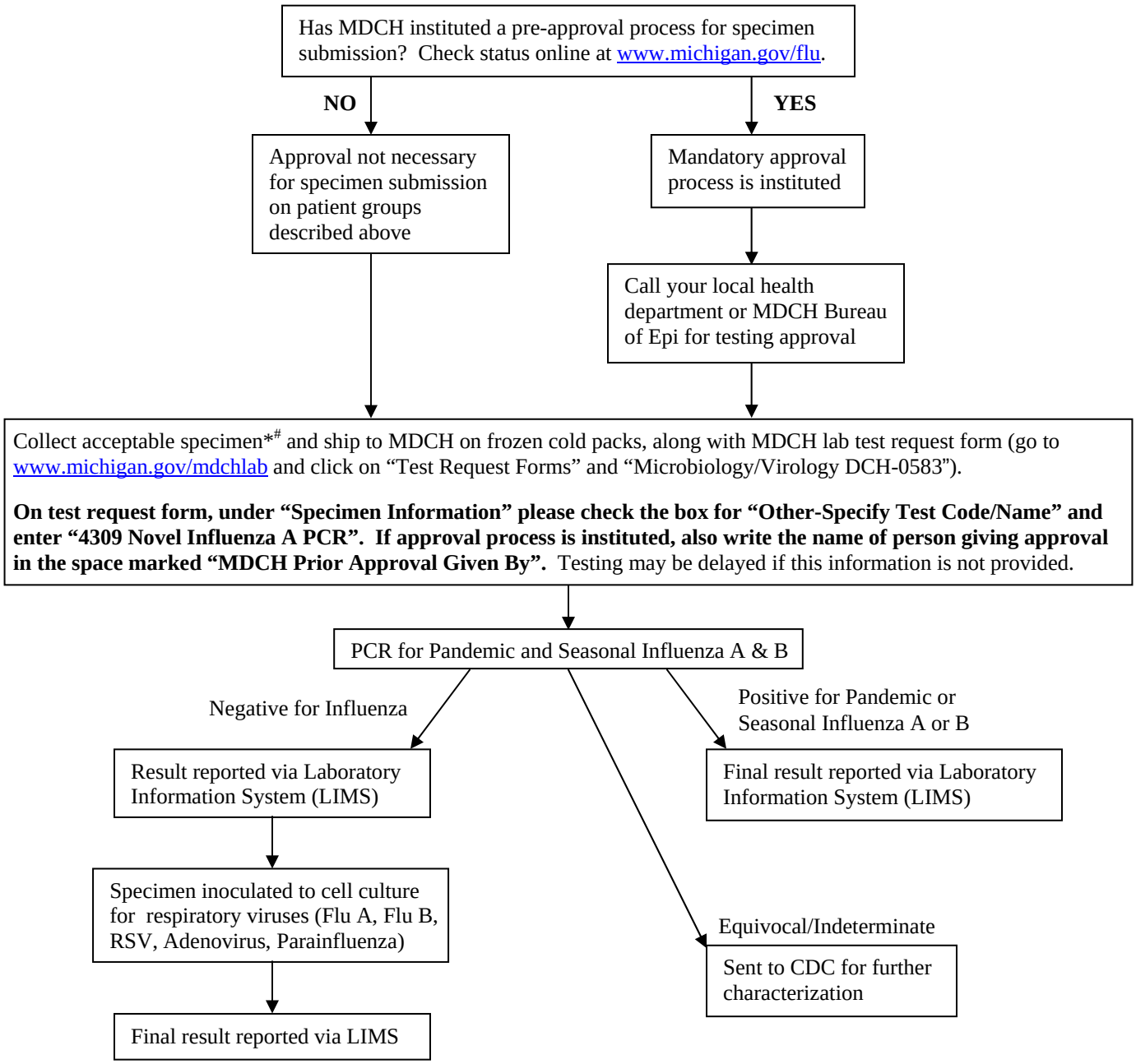
Questions regarding case and outbreak influenza testing should be directed to the MDCH Bureau of Epidemiology at 517-335-8165 during normal business hours or 517-335-9030 after hours.

MDCH influenza testing will only be conducted for public health case investigations **(ICU hospitalizations, severely ill pregnant women, patients with unusual and severe presentations, and deaths)** and for **congregate setting outbreak/cluster investigations**. See "MDCH 2009-2010 Guidelines for Clinicians on Influenza Testing," available on the MIHAN and at www.michigan.gov/flu, for more information and for reporting requirements.



* Acceptable specimens: NP swab in viral transport medium (VTM) or saline (PBS); Nasal swab in VTM or PBS; Dual NP/OP swabs in VTM or PBS; Nasal aspirates; Viral isolates. DO **NOT** SUBMIT MULTIPLE SAMPLES ON THE SAME PATIENT.
# Swabs used in influenza rapid diagnostic tests **cannot** be reused for MDCH testing. Consider collecting two swabs so that one may be reserved for MDCH confirmatory testing if needed. Alternatively, an aliquot of the original specimen may be submitted.

Rev. 8/14/2009. Please visit the MDCH websites at www.michigan.gov/flu and www.michigan.gov/mdchlab and the MIHAN for updates.

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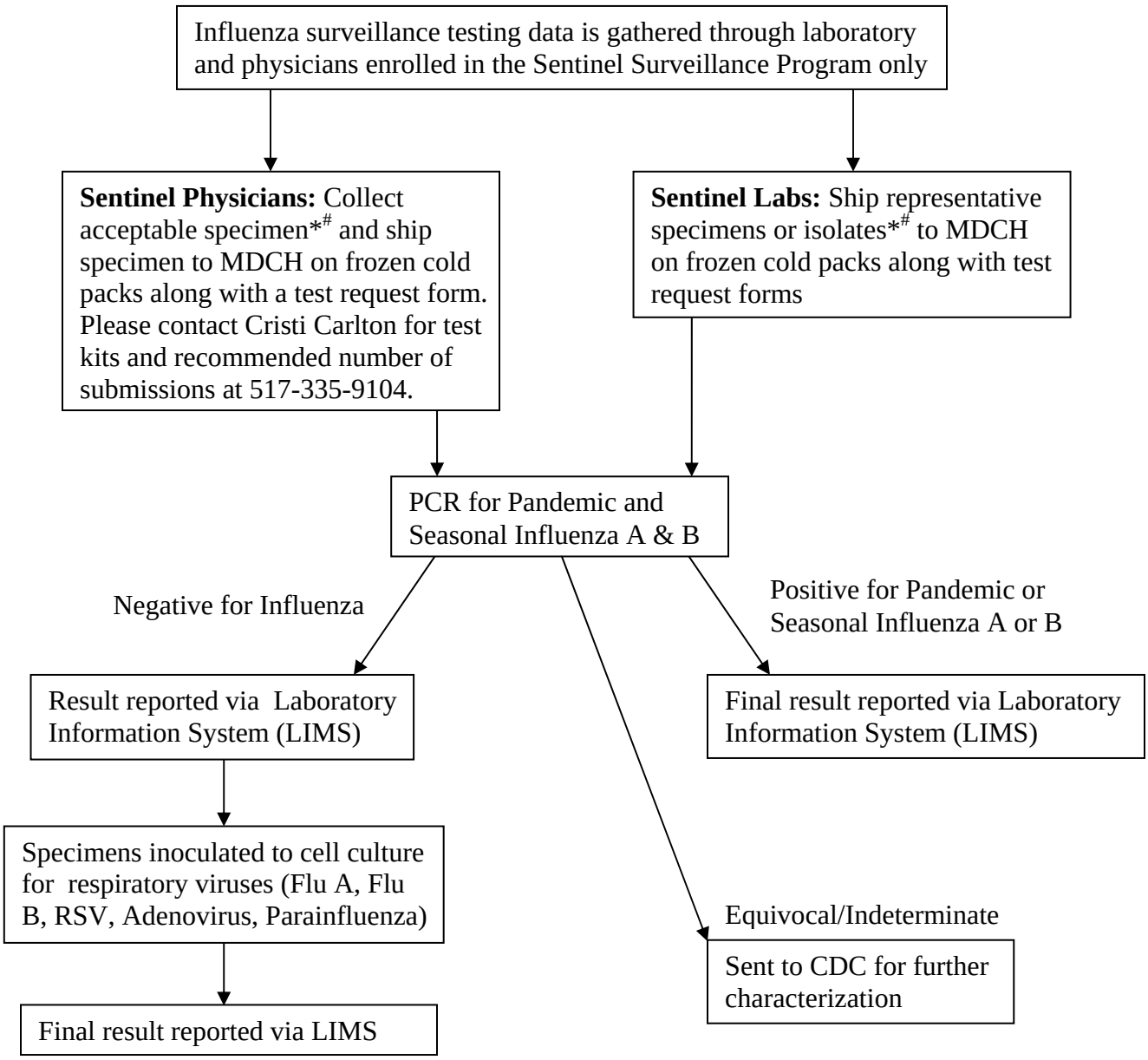
NOTE: Surveillance samples should only be submitted by physicians and laboratories enrolled in the statewide Sentinel Surveillance Program. If you are unsure whether you are enrolled or if you would like to enroll in this program, please consult your local health department or MDCH (517-335-9104 for physicians; 517-335-8165 for labs).

Surveillance Testing



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