

Influenza Activity in Michigan 2002-2003 Season

Influenza Surveillance Data Bureau of Laboratories Bureau of Epidemiology

I. 2002-2003 Influenza Season Report - Weekly Summary

Summary Statement for the Week Ending 3/22/2003.

The MDCH Bureau of Epidemiology is reporting regional influenza activity in Michigan at this time, a decline from more widespread circulation seen during late February and early March. These assessments are based on data from sentinel influenza sites, school-based reporting, and laboratory-based surveillance.

Both influenza type A and type B are confirmed to be circulating in Michigan, with influenza A predominating.

There has been 1 nursing home outbreak of laboratory-confirmed influenza A reported to MDCH. This outbreak occurred in early February; the facility is located in the West Central part of the state. In addition, there has been 1 reported school outbreak of confirmed influenza B in mid-February in a school system in the Western UP. No other apparent or confirmed outbreaks in institutional or facility settings have been reported to MDCH at this time.

Statewide, Michigan Sentinel Physician sites are currently reporting an average of 2%-3% influenza-like illnesses (ILI) among their patient visits. In Northern Michigan, Sentinel Physician sites are reporting higher average levels of about 5% ILI. Until late December, reported ILI levels had remained relatively constant at about 1% throughout all of Michigan.

Further information may be found at:

- [Michigan Influenza Activity Update](#)
- [Michigan Experiences Increase in Influenza Illness](#)

National influenza surveillance summary information for the current week is available at: [CDC Weekly Influenza Surveillance page.](#)

The CDC Influenza page can be accessed at: [CDC Influenza page.](#)

II. Summary of Sentinel Physician Data by Geographic Location

There are 40 medical provider sites from a variety of geographic locations throughout Michigan enrolled in the sentinel surveillance program. These providers represent private practice for adult and pediatric patients, as well as urgent and emergency care facilities, nursing homes and university health services. MDCH requests submission of three specimens for influenza A and B viral antigen detection and viral culture three times during the winter season: early, when influenza virus is beginning to circulate; middle, during the peak of influenza activity; late, as influenza activity diminishes. Participation in this program is voluntary. The data shown here are the results obtained by the MDCH Viral Isolation Unit from specimens submitted by participating sentinel

surveillance sites.

The MDCH Virology Laboratory has received a total of 101 specimens from sentinel surveillance sites.

Data for the week ending 3/22/2003.

To locate your Health Jurisdiction, see the county listing at the end of this page.

| Health Jurisdiction | # A Pos. | # A Cum. | # B Pos. | # B Cum. | # RSV/Para Pos. | # RSV/Para Cum. | # Adeno Pos. | # Adeno Cum. |
|---------------------|----------|----------|----------|----------|-----------------|-----------------|--------------|--------------|
| SE | 0 | 6 | 0 | 1 | 0/0 | 0/0 | 0 | 0 |
| SW | 0 | 1 | 0 | 0 | 0/0 | 0/0 | 0 | 0 |
| Central | 0 | 13 | 0 | 3 | 0/0 | 2/3 | 0 | 0 |
| Northern/UP | 0 | 6 | 0 | 1 | 0/0 | 0/1 | 0 | 0 |

III. Laboratory Surveillance Data

Several clinical hospital laboratories from around the state collect lab-based respiratory virus data on a weekly basis providing MDCH with information on laboratory-confirmed positive specimens. NOTE: Denominator data (# of total submissions to hospital labs) is incomplete.

Data for the week ending 3/22/2003.

| Health Jurisdiction | # A Pos. | # A Cum. | # B Pos. | # B Cum. | # Flu Untyped | # RSV/Para Pos. | # RSV/Para Cum. | # Adeno Pos. | # Adeno Cum. |
|---------------------|----------|----------|----------|----------|---------------|-----------------|-----------------|--------------|--------------|
| SE | 1 | 775 | 2 | 34 | 0 | 19/4 | 980/77 | 3 | 83 |
| SW | 0 | 32 | 3 | 13 | 9 | 3/0 | 54/20 | 0 | 13 |
| Central | 4 | 61 | 1 | 16 | 0 | 14/2 | 197/21 | 0 | 8 |
| Northern/UP | 0 | 39 | 0 | 0 | 0 | 0/0 | 29/0 | 0 | 0 |

V. Serologic Relativity of Isolates to the Current Year's Vaccine Components

The MDCH Viral Isolation Unit is a WHO-collaborating influenza surveillance laboratory. As such, the laboratory is provided with reagents for sub-typing of influenza virus isolates. Reagents provided by WHO/CDC will determine the relatedness of Michigan influenza isolates to the components of the 2002-2003 vaccine: A/Moscow/10/99-like (H3N2), A/New Caledonia/20/99-like (H1N1), and B/Hong Kong/330/01-like viruses.

As of 3/22/2003:

So far this year, all influenza specimens received at MDCH have been antigenically similar to the components in this year's influenza vaccine. Most influenza type A specimens have been subtyped as A/New Caledonia/20/99-like which is similar to the A (H1N1) component in this year's vaccine. Two influenza type A specimens were subtyped as A/Panama/2007/99-like which is similar to the A (H3N2) component in this year's vaccine. All influenza type B specimens were B/Hong Kong/330/01-like viruses which is similar to the B component in this year's vaccine.