2019-2020 Influenza Update for Long-term Care and Assisted Living Partners

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January 7, 2020
INFLUENZA ACTIVITY UPDATE
Karen Martin, MPH
Weekly Influenza & Respiratory Illness Activity Report

A summary of influenza surveillance indicators prepared by the Division of Infectious Disease Epidemiology Prevention & Control

Week Ending December 28, 2019 | WEEK 52

All data are preliminary and may change as more information is received

Minnesota Influenza Geographic Spread

During the week ending December 28, 2019 (Week 52), surveillance indicators showed widespread geographic spread of influenza (based on CDC's Activity Estimates Definitions).

Since the start of the influenza season, no pediatric influenza-related deaths have been reported.

Minnesota Influenza Surveillance (http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/)
World Health Organization (WHO) Surveillance (http://www.who.int/influenza/surveillance_monitoring/updates/en/)

Neighboring states' influenza information:
Iowa: Iowa Flu Reports (http://idph.idaho.gov/influenza/reports)
Wisconsin: Influenza (Flu) (http://www.dhs.wisconsin.gov/communicable/influenza/)
North Dakota: Reported Seasonal Influenza Activity in North Dakota (http://www.ndflu.com/default.aspx)
South Dakota: South Dakota Influenza Information (http://doh.sd.gov/diseases/infectious/flu/)
Hospitalized Influenza Surveillance

Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. Due to the need to confirm reports and reporting delays, consider current week data preliminary.

**Hospitalized Influenza Cases by Type, Minnesota (FluSurv-NET*)**

- B (no genotype)
- B (Yamagata)
- B (Victoria)
- A (not subtyped)
- A H3
- A H1 (unspecified)
- A (H1N1)pdm09
- A (H1N2v)
- A (H3N2v)
- A&B
- Unknown

**Hospitalized Influenza Cases by Season, Minnesota (FluSurv-NET*)**

<table>
<thead>
<tr>
<th>Season</th>
<th>Total hospitalizations (historic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>4,081</td>
</tr>
<tr>
<td>2015-2016</td>
<td>1,538</td>
</tr>
<tr>
<td>2016-2017</td>
<td>3,695</td>
</tr>
<tr>
<td>2017-2018</td>
<td>6,446</td>
</tr>
<tr>
<td>2018-2019</td>
<td>2,543</td>
</tr>
<tr>
<td>2019-2020</td>
<td>505 (to date)</td>
</tr>
</tbody>
</table>

*Influenza Surveillance Network*
### Number of Influenza Hospitalizations and Incidence by Region, Minnesota
September 29, 2019 – December 28, 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Hospitalizations this week</th>
<th>Total (to date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>18 (15%)</td>
<td>62 (12%)</td>
</tr>
<tr>
<td>Metro</td>
<td>72 (62%)</td>
<td>359 (71%)</td>
</tr>
<tr>
<td>Northeast</td>
<td>10 (9%)</td>
<td>17 (3%)</td>
</tr>
<tr>
<td>Northwest</td>
<td>1 (1%)</td>
<td>11 (2%)</td>
</tr>
<tr>
<td>South Central</td>
<td>6 (5%)</td>
<td>15 (3%)</td>
</tr>
<tr>
<td>Southeast</td>
<td>7 (6%)</td>
<td>23 (5%)</td>
</tr>
<tr>
<td>Southwest</td>
<td>2 (2%)</td>
<td>11 (2%)</td>
</tr>
<tr>
<td>West Central</td>
<td>1 (1%)</td>
<td>7 (1%)</td>
</tr>
</tbody>
</table>

### Median age (years) at time of admission
50.0

### Number of Influenza Hospitalizations and Incidence by Age, Minnesota
September 29, 2019 – December 28, 2019

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>Hospitalizations per 100,000 Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>8.1</td>
</tr>
<tr>
<td>5-24</td>
<td>11.6</td>
</tr>
<tr>
<td>25-49</td>
<td>6.9</td>
</tr>
<tr>
<td>50-64</td>
<td>5.1</td>
</tr>
<tr>
<td>65+</td>
<td>4.5</td>
</tr>
</tbody>
</table>

- Median age (years) at time of admission: 50.0
Influenza-Associated Death Surveillance

Influenza deaths are collected via reports from Minnesota’s death certificate database, hospitals, and long-term care facilities. Decedents with influenza listed as a cause of or contributor to death, have recent laboratory confirmation of influenza, or are part of an ongoing influenza outbreak at a long-term care facility are reported to influenza surveillance. Due to the need to confirm reports and reporting delays, consider current week data preliminary.

Deaths Associated with Influenza by Season, Minnesota

<table>
<thead>
<tr>
<th>Season</th>
<th>Total deaths (historic)</th>
<th>Total pediatric (&lt;18 years) deaths (historic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>368</td>
<td>10</td>
</tr>
<tr>
<td>2015-2016</td>
<td>76</td>
<td>3</td>
</tr>
<tr>
<td>2016-2017</td>
<td>273</td>
<td>2</td>
</tr>
<tr>
<td>2017-2018</td>
<td>440</td>
<td>6</td>
</tr>
<tr>
<td>2018-2019</td>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>2019-2020</td>
<td>8 (to date)</td>
<td>0 (to date)</td>
</tr>
</tbody>
</table>

Deaths Associated with Influenza by Age Group and Season, Minnesota

<table>
<thead>
<tr>
<th>Season</th>
<th>Median age (years) at time of death</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>85</td>
</tr>
<tr>
<td>2015-2016</td>
<td>68</td>
</tr>
<tr>
<td>2016-2017</td>
<td>86</td>
</tr>
<tr>
<td>2017-2018</td>
<td>85</td>
</tr>
<tr>
<td>2018-2019</td>
<td>75</td>
</tr>
<tr>
<td>2019-2020</td>
<td>81.5 (to date)</td>
</tr>
</tbody>
</table>

*Influenza Surveillance Network*
Respiratory Disease Outbreak Surveillance

School Outbreaks

K-12 schools report an outbreak of influenza-like illness (ILI) when the number of students absent with ILI reaches 5% of total enrollment or three or more students with ILI are absent from the same elementary classroom.

Influenza-like Illness (ILI) in Schools by Season

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

New school outbreaks this week | New school outbreaks last week | Total this season (to date) |
--- | --- | --- |
0 | 173 | 299 |
Long-Term Care (LTC) Outbreaks

LTC facilities report to MDH when they suspect an outbreak of influenza in their facility. Laboratory-confirmed outbreaks are reported here.

### Confirmed Influenza Outbreaks in LTC by Season

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New LTC outbreaks this week</th>
<th>New LTC outbreaks last week</th>
<th>Total this season (to date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Current week
MDH collaborates with healthcare providers who report the total number of patients seen and the total number of those patients presenting to outpatient clinics with influenza-like illness.

**Sentinel Provider Surveillance (Outpatients)**

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**Percentage of Persons Presenting to Outpatient Clinics with Influenza-Like Illness (ILI)**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.8%</td>
<td>5.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Indicates current week-data may be delayed by 1 or more weeks.
Laboratory Surveillance

The MN Lab System (MLS) Laboratory Influenza Surveillance Program is made up of more than 310 clinic- and hospital-based laboratories, voluntarily submitting testing data weekly. These laboratories perform rapid testing for influenza and Respiratory Syncytial Virus (RSV). Significantly fewer labs perform PCR testing for influenza and three also perform PCR testing for other respiratory viruses. MDH-PHL provides further characterization of submitted influenza isolates to determine the hemagglutinin serotype to indicate vaccine coverage. Tracking the laboratory results assists healthcare providers with patient diagnosis of influenza-like illness and provides an indicator of the progression of the influenza season as well as prevalence of disease in the community.

Specimens Positive for Influenza by Molecular Testing*, by Week

<table>
<thead>
<tr>
<th>MMWR Week</th>
<th>% molecular tests positive this week</th>
<th>% molecular tests positive last week</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>30.5%</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

* Beginning in 2016-17, laboratories report results for rapid molecular influenza tests in addition to RT-PCR results.
### Laboratory Surveillance (continued)

#### MLS Laboratories – Influenza Testing

**Specimens Positive by Influenza Rapid Antigen Test, by Week**

![Graph showing Specimens Positive by Influenza Rapid Antigen Test, by Week]

**Table: Region % rapid antigen influenza tests + (current week)**

<table>
<thead>
<tr>
<th>Region</th>
<th>% rapid antigen influenza tests + (current week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>32%</td>
</tr>
<tr>
<td>Metro</td>
<td>33%</td>
</tr>
<tr>
<td>Northeast</td>
<td>27%</td>
</tr>
<tr>
<td>Northwest</td>
<td>35%</td>
</tr>
<tr>
<td>South Central</td>
<td>16%</td>
</tr>
<tr>
<td>Southeast</td>
<td>34%</td>
</tr>
<tr>
<td>Southwest</td>
<td>33%</td>
</tr>
<tr>
<td>West Central</td>
<td>---</td>
</tr>
<tr>
<td>State (overall)</td>
<td>32%</td>
</tr>
</tbody>
</table>

#### MLS Laboratories – RSV Testing

**Specimens Positive by RSV Rapid Antigen Test, by Week**

![Graph showing Specimens Positive by RSV Rapid Antigen Test, by Week]

**Table: Region % rapid antigen RSV tests + (current week)**

<table>
<thead>
<tr>
<th>Region</th>
<th>% rapid antigen RSV tests + (current week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>29%</td>
</tr>
<tr>
<td>Metro</td>
<td>25%</td>
</tr>
<tr>
<td>Northeast</td>
<td>28%</td>
</tr>
<tr>
<td>Northwest</td>
<td>14%</td>
</tr>
<tr>
<td>South Central</td>
<td>43%</td>
</tr>
<tr>
<td>Southeast</td>
<td>47%</td>
</tr>
<tr>
<td>Southwest</td>
<td>28%</td>
</tr>
<tr>
<td>West Central</td>
<td>67%</td>
</tr>
<tr>
<td>State (overall)</td>
<td>29%</td>
</tr>
</tbody>
</table>
Identifying and Reporting Influenza Outbreaks

Identifying an Outbreak

- Outbreak definition: at least two residents with onset of influenza-like illnesses within 72 hours of each other AND at least one resident has laboratory-confirmed influenza.

Reporting an Outbreak to MDH

- Submit a Long-Term Care Facility Influenza and RSV Report Form, 2019-20 (https://www.health.state.mn.us/diseases/flu/ltc/ltcreport.pdf) to MDH by email or fax when an influenza outbreak is identified in your LTC facility. Please call 651-201-5924 if you have questions regarding reporting or influenza outbreak control measures.
Sign Up for Weekly Influenza Updates

Weekly Influenza & Respiratory Activity: Statistics

Weekly influenza statistics
Updated 1/2/2020
- Weekly Influenza & Respiratory Illness Activity Report - Week 52 (PDF)
  Current: Week Ending December 28, 2019 | WEEK 52
- Influenza-like Illness (ILI) Outbreaks in Schools and Influenza Outbreaks in Long-term Care Facilities by County in Minnesota, 2019-20 (PDF)

Subscribe to Weekly Influenza Activity
Get an email alert every week during the flu season when the influenza report is posted.

2019-2020 Weekly Influenza Activity
About influenza Statistics

INFLUENZA INFECTION PREVENTION – ICAR PROGRAM
Mary Ellen Bennett, MPH, RN, CIC
Infection Prevention

- Influenza characteristics
- Surveillance
- Isolation
- Prevention
- Tools for management
- References
Disease Presentation

- Influenza-like illness (ILI) in elderly persons may be atypical
- New onset of cough, sore throat, nasal congestion or rhinorrhea, or a temperature 100° F or greater; however, fever may be absent
- Atypical complaints: anorexia, mental status changes, and unexplained fever may be the presenting symptoms

Disease Presentation in General Population

- Fever or feeling feverish/chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue (tiredness)
Influenza in the Elderly: Complications and Transmission

Complications:

- Worsening respiratory status: (residents with COPD or CHF)
- Primary viral pneumonia and bacterial suprainfection (leading to tracheobronchitis or pneumonia)

Transmission

- Large respiratory droplets (particles >5 µ in diameter) expelled from resp. tract
- Close contact (< 3 feet) usually is required for transmission
- Direct contact with respiratory droplets or secretions
- Touching the nose or mouth
Influenza in the Elderly: Incubation and Duration

Incubation

▪ 1 to 4 days, usually 2 days

Contagiousness (or Infectious Period)

▪ 24 hours prior to onset of illness to at least 5 days after onset of symptoms
▪ Immunocompromised shed virus for 7 days or more after onset of symptoms

Duration

▪ 1-2 weeks with severe symptoms in the first few days
Residents are monitored for illness on a routine basis

Clusters of illness or infection can be detected by this type of monitoring

A log of illnesses and infection is kept by nursing staff

Influenza and influenza-like illness can be kept on the routine tracking forms or the facility can use a special influenza tracking form from MDH
# Infection and Antibiotic Use Tracking Tool (Appendix L)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Resident Information</strong></td>
<td></td>
<td><strong>Classification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unit Name</strong></td>
<td><strong>Resident Name</strong></td>
<td><strong>Room #</strong></td>
<td><strong>Admit Date</strong></td>
<td><strong>Existing Infection from Previous Month(s)? Y/N</strong></td>
<td><strong>Infection type</strong></td>
<td><strong>Body System of Infection</strong></td>
<td><strong>Surveillance definition met? Y/N</strong></td>
<td><strong>Symptom(s)</strong></td>
<td><strong>Onset Date</strong></td>
<td><strong>Device Type(s)</strong></td>
<td><strong>Date(s) of Insertion</strong></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
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</tr>
</tbody>
</table>

- **Resident Information**
- **Classification**

**Minnesota Antimicrobial Stewardship Program Toolkit for Long-term Care Facilities**

[https://www.health.state.mn.us/diseases/antibioticresistance/hcp/asp/ltc/index.html](https://www.health.state.mn.us/diseases/antibioticresistance/hcp/asp/ltc/index.html)
Influenza-like Illness (ILI) Line List – Do not submit to MDH

<table>
<thead>
<tr>
<th>Name</th>
<th>Room No.</th>
<th>Age</th>
<th>Sex (M/F)</th>
<th>Vaccine Status (date)</th>
<th>Onset Date of ILI Symptoms</th>
<th>Duration (days)</th>
<th>Highest Temp</th>
<th>Symptoms (Y/N/U)</th>
<th>Lab Results</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ILI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Minnesota Antimicrobial Stewardship Program Toolkit for Long-term Care Facilities
([https://www.health.state.mn.us/diseases/antibioticresistance/hcp/asp/ltc/index.html](https://www.health.state.mn.us/diseases/antibioticresistance/hcp/asp/ltc/index.html))
Isolation for Influenza and Influenza-Like Illness (ILI)

- A resident should be put into isolation presumptively when symptoms present, because it may take a couple of days for test results to come back. This action will limit spread of the virus to others in the facility.

- A resident with influenza symptoms should wear a simple face mask when they leave their room for care. This is in accordance with the recommendations from CDC for Droplet Precautions.
Standard and Droplet Precautions

- **Standard precautions**: use for all patients
- **Droplet precautions**: use with standard precautions for residents with known or suspected influenza or influenza-like illness
- Precautions should be in place for the duration of the symptoms of illness
  - Best to have a private room if available – can cohort ill persons
  - Post sign
  - Procedure mask: correct don/doff procedure
  - Care of patient care equipment – clean all equipment going in and out of room
  - Hand hygiene

[ CDC: Isolation Precautions (https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html) ]
Transmission-Based Precautions

- Identify the type of precautions and the appropriate PPE to be used.
- Place signage in a conspicuous place outside the resident’s room such as the door or on the wall next to the doorway. Ensure that signage also complies with residents’ rights to confidentiality and privacy.
- Make PPE readily available near the entrance to the resident’s room.
- Don appropriate PPE upon entry into the room of resident on Droplet Precautions.
Enforce Correct Mask Use

- Hand hygiene before and after touching (masks are contaminated)
- Follow instructions for donning and removal by type of mask (i.e., ear loops, ties)
- Do not wear around the neck, on an ear, on top of the head, or re-use between residents
- Provide easy access to masks, alcohol hand sanitizer, and waste receptacles

Prevention – Employee Illness

- Offer vaccination to all employees throughout the season
- Vaccinate new employees who start during the season
- Staff should know the symptoms of influenza so they can recognize it in themselves and the residents
- Enforce staff not working when they are sick
- Staff should know that they can be infectious 1 day before they exhibit classic symptoms of influenza
- Encourage staff to notify managers if they do develop an influenza-like illness
Prevention – Visitors Entering the Facility

- Post signs at entry to restrict ill visitors
- Publish visitor restriction notices to the local community
- Limit visitor movement in facility
- Alcohol hand rubs at entry with signage
- Cover your cough signs
  - Stop! Help Protect Our Residents Poster (https://www.health.state.mn.us/people/cyc/stopres.html)
- Encourage visitors to get a flu shot
Prevention – Visiting the Ill Resident

- Limit visiting to persons necessary for the resident’s well-being and care
- Hand hygiene before entering, after leaving the resident’s room
- Instruct visitors how to wear and dispose of PPE as per facility policy
- Instruct visitors to not visit other residents before removing PPE (if worn) and perform hand hygiene
Prevention – Visiting Restrictions

- Stronger measures can be implemented at the digression of the facility during an influenza outbreak

- For instance:
  - Alerting visitors about the outbreak
  - Restricting visiting for children
  - Screening all visitors for illness before visiting
Before an Outbreak Occurs
Identifying an Outbreak
Reporting an Outbreak to MDH
Testing
Monitor
Control
Additional Control Measures to Consider
Treatment
Chemoprophylaxis

Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities (PDF)
(https://www.health.state.mn.us/diseases/flu/ltc/intguide.pdf)
Tools – Signs: Droplet Precautions

- New CDC Droplet Precaution isolation sign

CDC: Droplet Precautions (PDF) (https://www.cdc.gov/infectioncontrol/pdf/droplet-precautions-sign-P.pdf)
▪ MDH: Influenza (Flu) (www.mdhflu.com)

▪ MDH: Minnesota Immunization Information Connection (MIIC) (https://www.health.state.mn.us/miic)

▪ CDC: Influenza (Flu) (www.cdc.gov/flu/)
Storage and Handling of Flu Vaccine

- Maintenance of temperature is critical to the vaccine’s viability and effectiveness
  - Loss of inventory, thousands of dollars even with a modest amount of vaccine
- Colder is not better
  - Especially vulnerable to freezing temperatures
  - CDC’s guidance recently changed, ideal temperature is 40F or 4.4C
- Temperature monitoring
  - Several options for monitoring
  - Temps recorded by a human twice per day
  - Utilize MDH’s resources linked in the Fall Flu Guide.
Vaccine Information Statements (VIS)

- Must be presented to all patients
  - Interim published 8/15/2019
  - Can use up old stock
  - Give English along with other languages

- Immunization Action Coalition: Vaccine Information Statements (https://www.immunize.org/vis)
Documenting Flu Vaccine

Required by Federal Law:

- Published date of the VIS
- The date the VIS was given to the patient
- Name, address (office address) and title of the person who administers the vaccine
- The date the vaccine is administered
- The vaccine manufacturer and lot number of each dose administered

Good Practice:

- Site
- Route
Influenza Screening Form

- Available in Microsoft Word
- Modify to your own policy
- Contains required documentation elements
Vaccination of Residents

- Continue to vaccinate
  - Vaccine protects against 3 or 4 strains
  - Second doses not recommended
  - Standard, high-dose, or adjuvanted—no preference
- Be mindful of proper administration techniques
  - Frail patients may require “bunching” or a shorter needle length for IM administration
  - Obese patients may require a longer needle length
- Use the Minnesota Immunization Information Connection (MIIC) (https://www.health.state.mn.us/miic)
Vaccination of Health Care Personnel (HCP)

- Continue to vaccinate
  - New employees, former decliners
  - If you cannot provide vaccine refer employees to other sources: pharmacy, clinic, community vaccinator
  - Vaccination Clinics Serving Uninsured and Underinsured Adults ([https://www.health.state.mn.us/people/immunize/basics/uuavsearch.html](https://www.health.state.mn.us/people/immunize/basics/uuavsearch.html))

- Consider your educational resources
  - Tailor to a lay audience
  - Seek out translations (or interpreters)— even if proficient in English

- Use the Minnesota Immunization Information Connection (MIIC) ([https://www.health.state.mn.us/miic](https://www.health.state.mn.us/miic))
CDC MMWR: Influenza Vaccination Coverage Among Health Care Personnel – United States 2017-18 Influenza Season (https://www.cdc.gov/mmwr/volumes/67/wr/mm6738a2.htm)
Approximately 40% of the U.S. population chose to get a flu vaccine during the 2017-2018 flu season, and this prevented an estimated:

- **6.2 million** flu illnesses
- **91,000** flu hospitalizations
- **5,700** flu deaths

More than twice the number of registered nurses in the U.S.

About the number of people who can fit in the Rose Bowl stadium in Pasadena, CA.

More than the number of children born in the U.S. every 12 hours.

**get vaccinated**

[www.cdc.gov/flu](http://www.cdc.gov/flu)
Flu Vaccine Works!

- Reduces hospitalization and death
  - By 51% for children with underlying medical conditions and by 65% for healthy children (Flannery et al, 2017)

- Reduces the severity of illness in hospitalized individuals
  - Keeps patients out of ICU (Thompson et al, 2018)

- Reduces loss of independence in adults
  - Influenza can cause “catastrophic disability”

- Protects pregnant women and their babies
  - Reduces illness by 50%, very high risk group (Thompson et al, 2019)
How can we be more compelling?

- Keep it simple
- The risks of flu are significant:
  - Loss of independence for the elderly
  - Danger for infants, children, and pregnant women
  - Healthy adults are impacted as well
- Acknowledge that not every case will be prevented
- Protecting our patients and each other against flu is a standard of care
Finding the Flu and Vaccine Materials

Influenza (Flu)  
www.mdhflu.com
Influenza Vaccine Information For Health Professionals
(https://www.health.state.mn.us/diseases/flu/hcp/vaccine/index.html)
### FluSafe Facilities

**Vaccinating Staff, Protecting Patients**

The facilities listed below have shown their commitment to protecting patient health by achieving 90% or higher flu vaccination rates among health care personnel and reporting on work to address a barrier to vaccination in the 2018-19 season.

#### 2018-19 FluSafe facilities

<table>
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<tr>
<th>Hospitals</th>
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<tr>
<td>Becker County</td>
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<td>Essentia Health Oak Crossing - Detroit Lakes</td>
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<th>Nursing homes</th>
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<tr>
<td>Big Stone County</td>
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<tr>
<td>Fairway View Senior Community</td>
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Antiviral medications reduce illness and severe outcomes of influenza based on evidence from randomized controlled trials, meta-analyses of randomized controlled trials, and observational studies.

CDC: Influenza Antiviral Medications (https://www.cdc.gov/flu/professionals/antivirals/index.htm)
Antiviral Medications for the 2019-20 Influenza Season

- Four FDA-approved influenza antiviral drugs recommended by CDC this season to treat influenza:
  - oseltamivir (available as a generic version or under the trade name Tamiflu®),
  - zanamivir (trade name Relenza®), and
  - peramivir (trade name Rapivab®)
  - Baloxavir (trade name Xofluza®).

- Oseltamivir (Tamiflu®) is the most common antiviral used in LTC facilities.
  - Circulating strains are sensitive to oseltamivir at this time.
Antiviral Shortage?

- Antiviral shortage not anticipated for current season
- In the event of real or perceived shortage
  - Call pharmacy in advance
  - Call multiple pharmacies if needed
  - Remember to ask for generic and brand-name oseltamivir
Treatment with Antiviral Medications

- Treat residents with confirmed or suspected influenza with antivirals immediately.
  - Treatment should not wait for laboratory confirmation of flu.
- Antiviral treatment works best when started within the first 2 days of symptoms, but can be beneficial after that period.
Oseltamivir (Tamiflu®) antiviral treatment is 75 mg twice daily for 5 days.

- Longer treatment courses for patients who remain severely ill after 5 days of treatment can be considered.
- Always consult the resident’s physician for dosing guidance.
- Patients with renal impairment may require lower doses.
Chemoprophylaxis with Antiviral Medications

- All eligible well residents in affected wards should promptly receive antiviral chemoprophylaxis as soon as an influenza outbreak is determined.
  - Priority should be given to residents living in the same ward/unit as ill resident(s).
  - Assess risk of transmission to other wards/units
  - At minimum, do active surveillance in all wards/units
  - Once transmission is detected outside of initial ward/unit, consider facility-wide chemoprophylaxis
- Consider offering prophylaxis to staff in the facility. Alternatively, have staff contact their primary care provider to discuss prophylaxis.
Oseltamivir (Tamiflu®) antiviral chemoprophylaxis is 75 mg once daily for a minimum of 14 days, continuing for 7 days after the last known case was identified.

- Always consult the resident’s physician for dosing guidance.
- Patients with renal impairment may require lower doses.
▪ **MDH: Long-Term Care: Influenza**
  (https://www.health.state.mn.us/diseases/flu/ltc/index.html)

▪ **CDC: Influenza Antiviral Medications**
  (https://www.cdc.gov/flu/professionals/antivirals/index.htm)

▪ **IDSA: Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza (PDF)**
QUESTIONS?
Thank you

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