Influenza Surveillance
MDPH and LBOH

Putting It All Together

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October 25, 2022
Outline:

• Influenza
  • Background, Clinical Presentation, and Epidemiology of Flu
  • Influenza Reporting and Surveillance in MA
  • Role of Local Health in Influenza-like illness (ILI) Clusters and Follow-up
  • General (State and CDC) Resources and Information on Influenza Prevention, including Vaccination
Influenza (Flu) Viruses

There are two main types of human flu viruses: types A and B. The flu A and B viruses that routinely spread in people are responsible for seasonal flu epidemics each year.
1918 Flu Pandemic

- **1918**: It is estimated that about **500 million people** or one-third of the world’s population became infected with this virus.

- The number of deaths was estimated to be at last 50 million worldwide with about 675,000 in the US.
  - No vaccine
  - No antibiotics to treat secondary bacterial infections
2009 H1N1 Flu Pandemic

• **2009**: CDC estimated that 151,700 – 575,400 people worldwide died from (H1N1) pdm09 virus infection during the first year the virus circulated. Globally, 80% of these deaths were estimated to have occurred in people younger than 65 years of age.

• The 2009 H1N1 strain is related to the 1918 pandemic strain
  • An (H1N1)pdm09-like virus strain has been included in the seasonal influenza vaccine each year since.
Influenza

- You’ve all heard of it...
  - Many of you have experienced it...

- Symptoms:
  - Flu/Influenza is a disease of the body’s breathing system, including the nose, throat and lungs. It is caused by a virus.
  - The most common symptoms of flu are fever, cough, and sore throat. Symptoms can also include body aches, headache, chills, runny nose and feeling very tired. Some people, especially young children, also have diarrhea and vomiting. Symptoms last from a few days to up to a week or more.

- Testing:
  - Flu testing is done most often by performing PCRs (polymerase chain reaction) - a test to detect genetic material.
  - Rapid antigen tests are still done as well although they are less sensitive.
  - And less often – cultures.
Influenza: The Basics

- **Influenza** is an acute respiratory disease caused by infection with *influenza viruses*.
  - The clinical severity of infection can range from asymptomatic illness to primary viral pneumonia and death.
  - Acute symptoms generally last 2–7 days, although malaise and cough may continue for 2 weeks or longer.

- **Transmission:** Most experts believe that flu viruses spread mainly by tiny droplets made when people with flu cough, sneeze, or talk.
  - These droplets can land in the mouths or noses of people who are nearby. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose or possibly their eyes.

- **Incubation Period:** Ranges from 1 to 4 days.

- **Period of Contagiousness Can Vary.** Peak virus shedding usually occurs from 1 day before onset of symptoms to 3-4 days after.
  - People with flu are most contagious in the first 3-4 days after their illness begins.
  - Some otherwise healthy adults may be able to infect others beginning one day before symptoms develop and up to five to seven days after becoming sick.
  - Some people, especially young children and people with weakened immune systems, might be able to infect others for an even longer time.
Influenza: The Basics

• Quarantine: There is NO quarantine for influenza exposure.

• Preventing Seasonal Flu
  - The first and most important step in preventing flu is to get a flu vaccine each year. Flu vaccine has been shown to reduce flu related illnesses and the risk of serious flu complications that can result in hospitalization or even death.
  - CDC also recommends everyday preventive actions (like staying away from people who are sick, covering coughs and sneezes, and frequent handwashing) to help slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu.

• Diagnosing Flu
  - It is very difficult to distinguish flu from other viral or bacterial respiratory illnesses based on symptoms alone. There are tests available to diagnose flu. More information is available: Diagnosing Flu.

• Treating Flu
  - There are flu antiviral drugs that can be used to treat flu illness.
Influenza

• But maybe what isn’t as well known to the general public:
  • Every flu season is different!
  • It is difficult to predict what each season will bring...
  • The influenza vaccine changes every year to match the expected flu strains that will be circulating in the country.
  • Annual influenza vaccination is recommended for persons 6 months and older who do not have contraindications.
  • Influenza is caused by an actual influenza virus!
    • Even though “the flu” is often a term used for generic illness or GI illnesses.
    • Even though several other respiratory viruses also spread during flu season and can cause symptoms similar to those seen with flu infection.
Influenza Surveillance: Tracking the Flu Each Season...

2022-2023 Season Weekly Flu Reports
Rates of flu and flu-like illness in Massachusetts.

FLU VIEW
A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Note: CDC is tracking the COVID-19 pandemic in a weekly publication called COVID Data Tracker Weekly Review.
The Goal of Influenza Surveillance

• **Tracking the Influenza Virus** each season is multifaceted (it’s not as simple as counting cases!) and we look at many different data sources combined to help CDC to:
  • Find out when and where influenza activity is occurring
  • Track influenza-related illness
  • Determine what influenza viruses are circulating
  • Detect changes in influenza viruses
  • Measure the impact influenza is having on hospitalizations and deaths in the United States
While seasonal influenza (flu) viruses are detected year-round in the United States, flu viruses typically circulate during the fall and winter during what’s known as **The Flu Season**.
- Official Flu Season (enhanced surveillance) is Oct-May.

Most of the time flu activity peaks between December and February, although significant activity can last as late as May.
- Since the start of the COVID pandemic, the timing and duration of flu activity has been less predictable.

The “**peak month of flu activity**” is the month with the highest percentage of respiratory specimens testing positive for influenza virus infection during that flu season.

The figure shows peak flu activity in the United States by month for the 1982-1983 through 2021-2022 flu seasons. During this 40-year period, flu activity most often peaked in February (17 seasons).

*There was no discernible peak in activity during the 2020-2021 season due to the uncharacteristically low level of influenza virus circulation that season.*
So, what happened the last few flu seasons nationally?

2019-2020
- 200 Pediatric influenza-associated deaths.
- Two peaks of activity
- Saw a lot of Flu A (H1N1) and Flu B (Victoria)
- Once COVID-19 mitigation efforts kicked in, ILI activity dropped

2020-2021
- Minimal flu!
- Likely influenced by COVID-19 mitigation efforts (masking, limited school, social distancing, etc.)

2021-2022
- Almost all A(H3N2) virus in all age groups and regions
- Long and late season
  - Two waves of circulation
  - Activity began to increase in November, remained elevated and even increased in some areas in May and early June
  - Activity levels higher in May and June than ever before
- Low levels of activity overall
  - Lowest ever compared to pre-pandemic seasons by most metrics
  - But higher than the 2020-2021 season
CDC: Tracking Hospitalization Data

U.S. Laboratory-confirmed Influenza Hospitalizations 2015-16 to 2021-22
So what does MDPH do when it comes to flu?

• Influenza surveillance has many components.
• We look at:
  1. Influenza-like illness (ILI)
  2. Hospitalizations
  3. Influenza Positive Lab Test Results reported to the MDPH
• These weekly markers are analyzed and assist us to classify the severity using historical data collected during past influenza seasons.
Influenza Surveillance in Massachusetts

- Our Weekly Flu Report will soon transition to an interactive Weekly Flu Dashboard on mass.gov!
- The flu report tells us:
  - How much Influenza-like illness we are seeing in Massachusetts
  - How much ILI activity is in your region of the state!
  - If we are seeing more Flu A or Flu B in Massachusetts
  - Percentage of people hospitalized for influenza
  - Percentage of people vaccinated for flu

https://www.mass.gov/report/2022-2023-season-weekly-flu-reports
1. Influenza-Like Illness (ILI)

- Many people experiencing influenza symptoms do not go to the doctor, and of those that do, many do not receive influenza laboratory testing.

- As a result, tracking influenza requires looking at multiple markers, including “trends” in Influenza-Like Illness (ILI).

**Definition of Influenza-like illness activity**

- Influenza-like illness (ILI) is defined as fever (temperature of 100 deg F or greater) in addition to cough and/or sore throat.
- It’s important to note that many more people are infected with influenza than are tested for influenza.
1. Influenza-Like Illness (ILI) Surveillance

- Close to 100 healthcare facilities called ‘sentinel sites’ report the **number of patients they see with ILI each week** during regular flu season to us.

- **Sentinel Sites** include provider offices, school health services, community health centers, urgent care centers, and emergency departments across Massachusetts.

*Figures represent percentage of visits for Influenza-Like Illness (ILI) reported by Sentinel Provider Sites in Massachusetts from October 3, 2021 to May 21, 2022.*
2. Influenza Hospitalization Surveillance

This graph shows the percent of people who came in through hospital emergency departments who tested positive for influenza and were admitted.
3. Influenza Surveillance in Massachusetts – Lab Data

- Laboratories in Massachusetts report all positive molecular influenza test results to MDPH.

- The majority of individuals with ILI are not tested; therefore, the number of positive test results does not reflect the total number of influenza cases in MA.

- However, laboratory data do provide information about the types of influenza virus circulating in Massachusetts and help indicate the presence and define the distribution of influenza in the state.

Note: MDPH stopped accepting rapid flu antigen labs back in 2018. Labs reported now are primarily PCR and viral culture.
Massachusetts Data is Important!

Testing at the State Public Health Laboratory

- Not every specimen collected is typed for influenza across the state, but the Massachusetts State Public Health Laboratory (MA SPHL) performs influenza surveillance testing year-round to confirm circulating influenza virus types. Samples are submitted by outpatient healthcare providers (ILINet) and hospital diagnostic laboratories in Massachusetts.

- This critical surveillance in our state during the 2012-13 season identified:
  - B/Massachusetts/2/2012-like virus

- This locally identified B strain was subsequently recommended by the WHO to be included in the following two seasonal influenza vaccines (2013-14 and 2014-15) for the Northern Hemisphere!
Influenza Surveillance: Both Art and Science

- Tracking Influenza each season requires data from many sources and is less about exact numbers than identifying trends in real time.
  - We know not every sick person receives a reported influenza test, so we look to other indicators to see where we are in the season and how the virus has changed from one season to the next (so we can allocate resources and plan for next season’s vaccines).

- Massachusetts follows influenza-like illness very closely throughout the year
  - ILI
  - Hospitalizations
  - Positive labs for influenza

- Tracking flu season also means monitoring other respiratory illnesses similar to flu, including RSV, Adenovirus/Rhinovirus and many others (now including COVID-19!)
Influenza Surveillance: Both Art and Science

- Respiratory illness affects us all
  - Missed work, missed school
  - Medical appointments
  - ED visits
  - Hospitalizations – many times including ICU admissions and deaths
• Q. Is *Haemophilus influenzae* (or *Haemophilus influenzae* Type B) the same as Influenza?

• A. No. *Haemophilus influenzae* (*HI*), a **type of bacteria**, can cause many different kinds of infections. These infections range from mild (like ear infections), to serious (like bloodstream infections). We will discuss HI infections (which are reportable in MAVEN) in a later webinar in December, but they are not the same as Influenza, which is caused by the **Influenza Virus**, and control measures and follow-up differ for HI.
Influenza Surveillance FAQs

• Q. Can I track our flu data in MAVEN?
  
  • A. Yes, you could run a report for flu events in your jurisdiction by doing an extract, but remember there are many other data points that go into monitoring and tracking the flu season and just looking at positive labs may not show the whole picture.

  • There is also the [weekly state flu report](#) by MDPH and also [CDC’s Flu View page](#) which shows national weekly trends.

• Q. Are ILI and Flu Hospitalization Data Tracked in MAVEN?

  • A. No, these data are not in MAVEN and are compiled from other reporting sources. Check out the weekly state flu report for more information.
LBOH & Influenza
LBOH Overview: Influenza In MAVEN

1. Positive Influenza Lab Results are reported electronically to MAVEN by Clinical Laboratories.
   - These generate Influenza Virus events in MAVEN but require no follow-up and appear in your LBOH Notification but no follow up needed workflow. You can use the bulk action feature to update Step 1 (LBOH Notification) to YES. See Tipsheet Here.

2. Influenza-Associated Pediatric Deaths (< 18 years old) are reported directly to the Epidemiology Program by Healthcare Providers.
   - Pediatric Deaths are high profile and require additional investigation and data collection. Sometimes there may be community control measures (such as a flu vaccination campaign at the child’s school or other support for the community). MDPH Epis will work with you and the family to assist in these situations.

3. Respiratory/Influenza Clusters are reportable to MAVEN via (soon to be online) teleform in facilities such as:
   - Long Term Care Facilities (LTCFs), Assisted Living Facilities (ALFs), Group Homes, Correctional Facilities, Daycares/Schools/Colleges, Hospitals, and Other Congregate Settings.
   - LBOH can provide guidance on control measures and assist with follow-up as needed.

4. Highly Pathogenic Avian Influenza (HPAI) identified in birds or people is reportable directly to the Epidemiology Program.
   - These novel events often require contact monitoring and follow-up would be a joint effort between MDPH Epis and relevant LBOH.
1. Individual Influenza Cases

- **Individual cases of influenza typically are not investigated.**
  - The rare exception to this might be severe or unusual complications (such as a pediatric death) or when the infecting virus is suspected or confirmed to be of animal origin (most frequently highly pathogenic avian influenza (HPAI)), both of which we discuss shortly...

- **Isolation & Quarantine:** There is no official isolation or quarantine period for cases or exposed individuals. Ill individuals should stay home while sick and comply with typical school or work sick policies.

- We expect to see positive flu labs in MAVEN each year, but LBOH are not expected to do more than bulk acknowledge these cases.

- **NOTE:** Rapid antigen flu tests in a typical provider office are not reported to MDPH. (PCRs and culture results are reported systematically through Electronic Lab Reporting (ELR)). LBOH should not create an individual flu event. If you have questions, contact MDPH and we can help troubleshoot.
2. Influenza-Associated Pediatric Deaths

- Influenza-Associated Pediatric Mortality Reporting

  - Influenza-associated deaths in children (persons less than 18 years of age) were added as a nationally notifiable condition in 2004. Any laboratory-confirmed influenza-associated death in a child is reported through this system.

  - Demographic and clinical information are collected on each case and transmitted to CDC.

  - MDPH Epis will take the lead on these events but work closely with local jurisdictions.

<table>
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LBOH & Influenza

• Because individual influenza cases do not require follow-up, the LBOH’s role in Influenza season varies based upon local priorities and the occurrence of occasional high-profile events (such as a pediatric death or the identification of highly pathogenic Avian Influenza (HPAI) exposure).

• Many LBOH are also involved in Influenza Prevention through vaccination and health education activities (which we will briefly discuss at the end of this presentation).

• The most common CASE WORK for influenza involves providing control measure guidance and assistance in locally reported facility Clusters which we will discuss next...
3. Influenza Clusters in LTCF/ALF

- If you get a call from a facility in your community reporting a cluster of respiratory illness or influenza illness:
  - Facility should complete the reporting form which will create a cluster event in MAVEN.
  - An MDPH epidemiologist will be assigned to the facility and will reach out to them to discuss control measures.
  - As the LBOH, you can task yourself to the cluster as well.

A note about MAVEN:
- Flu/ILI clusters do not appear in a workflow.
- You can search for them using the MAVEN ID or search using Type = "Outbreak".
Control Measures for LTCF/ALF

Facilities experiencing respiratory illness should:

<table>
<thead>
<tr>
<th>Test</th>
<th>Isolate</th>
<th>Treat</th>
<th>Prevent</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Symptomatic people for COVID and flu</td>
<td>• Flu cases on droplet precautions</td>
<td>• Discuss use of antivirals for ill residents</td>
<td>• Surveillance for new cases</td>
<td>• DPH</td>
</tr>
<tr>
<td>• Consider full respiratory panel</td>
<td>• Cohort flu and COVID cases separately</td>
<td>• Consider PEP for non-ill residents</td>
<td>• Hand hygiene and cough etiquette among staff</td>
<td>• LBOH</td>
</tr>
<tr>
<td>• NO 'outbreak' testing like with COVID-19</td>
<td></td>
<td></td>
<td>• Vaccinate! (residents and staff)</td>
<td>• Licensing agency (HCSQ or EOEA)</td>
</tr>
</tbody>
</table>

Q: What if a school calls you and says that 20% of their 4th and 5th grade students are out due to respiratory illness?

A: Depending on the time of year and the ILI activity we are seeing, this may not be surprising. They can always report this via the cluster reporting form and we can make recommendations, including:

- Emphasize vaccination – both flu and COVID
- Stay home when sick and consider testing
- Good hand hygiene and covering coughs/sneezes
- Take antivirals if your clinician prescribes them for you
- Consider sending a fact sheet about influenza/notification to families about flu season
Flu Follow-Up FAQs

• Q: What happens if a school in your community calls you and they want to shut down due to cases of flu in the school?
  • A: Typically, we try to discourage closing of schools. Unless there are not enough staff to keep a school running safely, we want schools to remain open. Feel free to call 617-983-6800 to speak to an epidemiologist if this occurs.

• Q: Should we reinstate mask wearing if there is an outbreak of respiratory illness in a school setting or some other setting?
  • A: We defer to local jurisdictions for decision making around control measures. We can certainly be consulted and provide guidance, but the decision is up to the local health department.
4. Highly Pathogenic Avian Influenza (HPAI) A(H5N1)

**Key points:**
- Wild aquatic birds (gulls, ducks, geese, etc.) can carry and spread the virus but show no signs of illness.
- HPAI is extremely contagious and deadly to domestic poultry (90-100% mortality in chickens).
- Avian influenza rarely infects humans and the risk to the public is LOW.
- People with job-related or recreational exposures to birds should take appropriate precautions to protect against bird flu.
  - Follow-up for LBOH typically involves monitoring exposed individuals for an incubation period to identify if there is transmission to humans.

**National Situation:**
- Outbreak began in US in Feb 2022. There have since been:

  - **Wild Birds**
    - Wild Birds Detected: 2,930 as of 10/5/2022 [Full Report >]

  - **Poultry**
    - Poultry Affected: 47,576,891 as of 10/18/2022 [Full Report >]

  - **Humans**
    - Reported Human Cases in the U.S.: 1 as of 04/28/2022 [Full Report >]

[Bird Flu Current Situation Summary (cdc.gov)]
HPAI in Massachusetts

• 2 backyard poultry farms identified in MA with HPAI
  • 1 in Berkshire County; 1 in Bristol County
• Flocks were culled.
• Individuals involved were monitored for symptoms for 10 days by both MDPH epidemiologists and PHNs.
• No human infections resulted.
• MDPH Epidemiologist will reach out to you if there is a HPAI case identified in your community to discuss contact monitoring.

https://www.cdc.gov/flu/avianflu/avian-in-birds.htm
Highly Pathogenic Avian Influenza (HPAI)

**Do’s**

- Call the **MA Dept of Agricultural Resources at 617-626-1798** regarding sick or dead wild, commercial, or backyard flocks, or questions about testing birds.
- Avoid contact with wild birds
- Wear PPE if you must interact with sick birds and practice hand hygiene!

**Don’ts**

- Pick-up dead birds
- Kiss, cuddle or snuggle birds (especially sick ones!)

Emmanuel The Emu's Owner Has Disease Experts Squirming Over How She’s Handling The Bird Flu Outbreak ([Link](#))
Summary of LBOH Role in Flu Casework

• **Individual cases** – no follow-up required!
  • Will be in "LBOH Notification but no follow up needed" workflow for bulk review

• **Clusters**
  • LTCF/ALF
    • Have sites send in cluster report form if they haven't already
  • Schools/daycares
    • Provide general guidance
    • Can create Maven cluster if helpful or have them send it cluster report form for DPH assistance

• **Highly Pathogenic Avian Influenza (HPAI) Exposures**
  • MDPH Epis will help consult on next steps, but this often involves contact monitoring following an exposure.
Influenza Vaccination & Resources

• Encourage vaccination every day – you already do this!

• As if you needed any convincing of this...
Estimated Benefits of Influenza Vaccination

• Vaccine effectiveness varies, affected by:
  • Season/predominant viruses
  • Degree of match between circulating and vaccine viruses
  • Age and immunity of the recipient

• In a season during which most circulating viruses are similar to those represented in the vaccine, can expect 40%-60% effectiveness overall.
  • Generally better for older children and younger adults vs older adults
  • Generally better for influenza A(H1N1) and influenza B viruses than for influenza A(H3N2) viruses
  • But, vaccination still provides important benefits even in a season of low overall effectiveness.

"ACIP recommends that adults aged ≥65 years preferentially receive any one of the following higher dose or adjuvanted influenza vaccines:

- quadrivalent high-dose inactivated influenza vaccine (HD-IIV4),
- quadrivalent recombinant influenza vaccine (RIV4), or
- quadrivalent adjuvanted inactivated influenza vaccine (aIIV4).

If none of these three vaccines is available at an opportunity for vaccine administration, then any other age-appropriate influenza vaccine should be used."
How is Massachusetts doing when it comes to vaccinating for influenza?

Source: CDC
How is Massachusetts doing when it comes to vaccinating for influenza? (From MIIS)
Communicating the Benefits of Influenza Vaccine during COVID-19

- Influenza (flu) severity varies from year to year, but flu season always brings serious consequences.

- Flu outbreaks were limited in the 2020–2022 seasons due to widespread use of COVID-19 prevention measures like masks and social distancing. But flu viruses never went completely away.

- As COVID-19 prevention measures were relaxed, flu viruses and flu-related complications like pneumonia and heart attacks resurfaced. Flu outbreaks are unpredictable; vaccination is the best preparation for any influenza season.

Flu vaccination is the best way to prevent flu and its complications.

- Everyone age 6 months and older is recommended to get a yearly flu vaccine. This can markedly lower the risk of influenza-related illness, hospitalization, and death.
- And because flu and COVID-19 share many symptoms, preventing flu means fewer people will need to seek medical care and testing for flu and COVID-19, saving time, money, and stress.
- Flu vaccine may be given at the same time as COVID-19 vaccine. Take advantage of every opportunity to make a strong recommendation for flu vaccinations to your patients.

Communicating the Benefits of Influenza Vaccine during COVID-19

Vaccination rates* remain well below optimal levels:

- 55% children 6 months–17 years
- 45% adults 18+ years
- 68% adults 65+ years
- 80% healthcare personnel
- 50% pregnant women


CDC estimates the annual impact of flu from 2010–2022* ranged from:

- 8.0 million–45 million flu illnesses
- 3.7 million–21 million flu medical visits
- 82,000–810,000 flu hospitalizations
- 5,000–61,000 flu deaths


20% of Health care professionals did not get the flu vaccine during the 2021-22 season.
Health Equity and Flu Vaccination

• Only 1 in 2 American adults got a flu vaccine during the 2021–2022 flu season.
• Less than 43% of Black, Hispanic, and American Indian/Alaska Native adults were vaccinated during the 2021–2022 flu season.
• Flu hospitalization rates were nearly 80% higher among Black adults than White adults from 2009–2022.

https://www.cdc.gov/mmwr/volumes/71/wr/mm7143e1.htm?s_cid=mm7143e1_w
Flu Vaccine FAQs

• Q: Can I get a flu vaccine and a COVID-19 vaccine during the same visit?
  • A: Yes! You can get a COVID-19 vaccine and a flu vaccine at the same time if you are eligible and the timing coincides.

• Q: Can I get a flu vaccine and a monkeypox vaccine during the same visit?
  • A: Yes! You can get a COVID-19 vaccine and a monkeypox vaccine at the same time if you are eligible and the timing coincides.

• Q: When is the best time to get a flu vaccine?
  • A: It’s best to be vaccinated before flu begins spreading in your community. (Now is an EXCELLENT time to be vaccinated.) However, even in November or even later (December, January), vaccination is still recommended because remember that earlier graph, flu most commonly peaks in February and significant activity can continue into May.

• Q: When can someone who recovered from COVID-19 receive a flu vaccine
  • A: Flu vaccination should be deferred until a patient is no longer acutely ill.
Key Takeaways

• We will see influenza this season – whether a severe season or a mild season is unknown at this time!

• Getting people vaccinated will provide the best protection we have to reduce the severity of illness, hospitalizations and death

• If you come across people who do not see themselves at risk for flu, let them know:
  • That if they don’t want to get vaccinated for themselves, then do it for the people around them –
    • their grandparents,
    • their immunocompromised parent,
    • their partner,
    • their own infant or the infant of a friend/family member

Epidemiologists are always available to answer questions and assist! (617) 983-6800
Weekly Influenza Updates Email & Flu Report

• MDPH sends out a weekly email that highlights recent local and national flu activity and associated guidance. If you are interested in receiving these flu updates, please email Joyce Cohen (joyce.cohen@mass.gov).

Influenza Activity in the U.S.

Key Points:
• An annual flu vaccine is the best way to protect against flu. Vaccination helps prevent infection and can also prevent serious outcomes in people who get vaccinated but still get sick with flu.
• CDC recommends that everyone ages 6 months and older get a flu vaccine, ideally by the end of October.
• There are also prescription flu antiviral drugs that can be used to treat flu illness; those need to be started as early as possible.
• Influenza activity is low but increasing in most of the country. Regions 4 (southeast) and 6 (south-central) are reporting the highest levels of flu activity.

National Influenza Activity:
According to this week’s FluView report, early increases in seasonal influenza activity have been reported in most of the United States, with the southeast and south-central areas of the country reporting the highest levels of activity.

Below is a summary of the key influenza indicators for the week ending October 8, 2022:

Viral Surveillance - Clinical Lab: The percentage of respiratory specimens testing positive for influenza at clinical laboratories is 3.3% this week.

Viral Surveillance - Public Health Lab: The most frequently reported viruses this week were influenza A(H3N2).

Virus Characterization: Influenza virus characterization information will be reported later this season.

Outpatient Illness: The percentage of patient visits to a health care provider for respiratory illness in week 40 was 2.6% which is above baseline.

Outpatient Respiratory Illness: ILINet Activity Map: This week, three jurisdictions experienced moderate activity, and six jurisdictions experienced high or very high activity.

Influenza-associated Hospitalizations: Hospitalization rates will be updated starting later this season.

NCHS Mortality: 8.7% of deaths were attributed to pneumonia, influenza, or COVID 19 (PIC). This percentage is above the epidemic threshold of 5.8% for this week. Currently, the majority of PIC mortality is due primarily to COVID-19 and not influenza. (NCHS: National Center for Health Statistics)

Influenza-associated Pediatric Deaths: Three influenza-associated deaths was reported this week; all occurred during the 2021-2022 season.

Click for full CDC FluView

Influenza Activity in Massachusetts
Resources

- CDC Influenza homepage: https://www.cdc.gov/flu/
- Influenza Surveillance: https://www.cdc.gov/flu//weekly/fluactivitysurv.htm
- Influenza Vaccination Coverage: https://www.cdc.gov/flu//fluvaxview/index.htm
- For Professionals: https://www.cdc.gov/flu/professionals/index.htm
- - vaccination homepage: https://www.cdc.gov/flu/professionals/vaccination/index.htm
- National Foundation for Infectious Diseases: www.nfid.org
- MDPH Influenza Homepage: www.mass.gov/flu
- For Healthcare Settings: https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm
- For HPAI situations
Q & A