

## Long-Term Care Facilities (LTCF): Control of Influenza and Pneumococcal Disease 2018 – 2019

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### Key Recommendations

#### LTCF Residents

- Everyone aged 6 months and older should receive flu vaccine every year and vaccination should be offered as soon as it is available.
- No preference for inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV)<sup>1</sup>.
- No preference for adjuvanted vaccine or high dose influenza vaccine.
- Vaccination should not be delayed to procure a specific vaccine formulation.



#### The Centers for Medicare and Medicaid Services (CMS) requires nursing homes to offer all residents flu and pneumococcal vaccines and to document vaccination administration data.

- See the following link: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V10.pdf>

#### LTCF Staff

- Aim to achieve at least 90% of healthcare personnel vaccinated annually against influenza in order to best protect patients, family members, and staff from influenza illness, per MDPH and National Healthy People 2020 Healthcare Personnel Vaccination Rate Targets.
- Massachusetts Department of Public Health (MDPH) encourages facilities to review current healthcare personnel influenza vaccination policies and implement processes to maximize vaccination coverage.

#### Massachusetts Licensure Regulations <https://www.mass.gov/service-details/flu-vaccination-reporting-requirements-for-health-care-personnel> requires LTC facilities, Rest Homes and Adult Day Health Programs to offer flu vaccine to all personnel.

- Influenza is often introduced into and spread throughout a facility by staff or visitors. Flu vaccine may be less effective in the very elderly and some vaccinated LTC residents may remain susceptible. It is important to reduce their exposure to flu. Healthcare provider vaccination reduces mortality in elderly patients.

<sup>1</sup>The Advisory Committee on Immunization Practices (ACIP) Recommendation. There is no preferential recommendation for any one age-appropriate flu formulation over another. Choice of which influenza vaccine formulation to use should primarily be driven by the age indication, contraindications and precautions. There is no current preference for quadrivalent vs. trivalent or high-dose vs. adjuvanted vs. standard dose.

# Part 1:

## Influenza Prevention and Control

### Prevention and Control Strategies

*Flu vaccination of healthcare workers protects the healthcare workers, their patients and their families. Flu vaccination is an occupational health and patient safety issue.*

#### How to prevent and control flu:

- Vaccination
  - Annual influenza vaccination of all residents and healthcare personnel.
  - Age-appropriate vaccination of residents with pneumococcal vaccines.
- Surveillance
  - Active surveillance and influenza testing for symptomatic residents.
- Control Measures
  - Rapid treatment with antivirals.
  - Standard and droplet precautions with suspect or confirmed influenza cases.
  - Restriction of ill visitors and personnel.
  - Handwashing and respiratory hygiene/cough etiquette programs.
- Post Exposure
  - Rapid administration of prophylaxis.

*Your recommendation and offer of vaccine are the most important determinants of whether or not your patient gets vaccinated. Use annual flu vaccination to assess patients for the need for other vaccines, including Tdap, zoster vaccine (Shingrix), and pneumococcal conjugate (PCV13) and pneumococcal polysaccharide (PPSV23) vaccines.*

### Recommendations for Individuals with Neurological and Neuromuscular Conditions in Congregate Housing

#### Influenza, Neurologic and Neuromuscular Conditions, and Congregate Housing

Children and adults with neurological and neuromuscular conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury) are at increased risk of complications from influenza. These conditions can compromise respiratory function, handling of secretions and increase the risk of aspiration. Like everyone else six months of age and older, these individuals should receive influenza vaccine every year. [CDC data](#) from the 2016-2017 Influenza Season found that flu vaccination coverage in young adults (age 18-49 yrs) with high risk conditions was only 39%.

People with neurological and neuromuscular conditions who live in congregate housing (e.g., group homes) and/or attend day programs may be exposed to influenza throughout the season. **They should receive flu vaccine as soon as it is available. Staff at these facilities should be vaccinated as well. In addition, when outbreaks of influenza-like illness (fever with cough and/or sore throat) occur in a group home or day program serving vulnerable populations, healthcare providers should be immediately notified and should consider rapid antiviral treatment of ill individuals as well as antiviral prophylaxis of individuals who were exposed.**

## **Influenza, Neurologic and Neuromuscular Conditions, and Congregate Housing (Cont.)**

Outbreaks across the age spectrum in these settings have occurred annually in Massachusetts and have resulted in serious illness and even death. MDPH recommends proactive development of an influenza outbreak response protocol within agencies serving vulnerable populations, to facilitate a rapid response when an outbreak occurs, as well as immediate notification of MDPH and other appropriate agencies

### **Infection Control**

*To prevent the transmission of all respiratory infections, including influenza, in health care settings, implement the following infection control measures at the first point of contact with a potentially infected person. Tools to help promote and implement these recommendations are available at:*

*[www.cdc.gov/flu/professionals/infectioncontrol](http://www.cdc.gov/flu/professionals/infectioncontrol). Providers should routinely check for updates at [www.mass.gov/flu](http://www.mass.gov/flu) and [www.cdc.gov/flu/professionals/](http://www.cdc.gov/flu/professionals/).*

#### **Nine steps for when you suspect that flu is circulating in your facility:**

##### **1) Treat ill residents promptly and empirically**

- Recommended Antiviral drugs (Neuraminidase inhibitors):
  - Oseltamivir (Tamiflu<sup>®</sup>)
  - Zanamivir (Relenza<sup>®</sup>)
  - Peramivir (Rapivab<sup>®</sup>)

*Antiviral drugs are an adjunct to, not a substitute for, vaccination for preventing and controlling influenza.*

- **Not recommended** antiviral drugs (Adamantanes\*):
  - Amantadine
  - Rimantadine

*\*These are not recommended because of high levels of resistance to these drugs among circulating influenza A (H3) and 2009 H1N1 influenza viruses.*

**Prompt empiric antiviral treatment:** Clinical judgment is an important factor in treatment decisions for patients presenting with influenza-like illness. Prompt empiric antiviral treatment with influenza antiviral medications is recommended while results of definitive diagnostic tests are pending, or if diagnostic testing is not possible, for patients with clinically suspected influenza illness who have:

- Illness requiring hospitalization,
- Progressive, severe, or complicated illness, regardless of previous health status, and/or
- Increased risk for severe disease.

Antiviral treatment, when clinically indicated, should *not be delayed pending definitive laboratory confirmation of influenza*. Influenza antiviral medications are most effective when initiated within the first 2 days of illness, but these medications may also provide benefits for severely ill patients when initiated even after 2 days. Guidance on use of antivirals may change depending upon resistance data. Consult CDC's latest recommendations on antiviral use at [www.cdc.gov/flu/professionals/antivirals/](http://www.cdc.gov/flu/professionals/antivirals/).

##### **2) Test promptly for influenza and other causes of febrile respiratory illness**

- Respiratory specimens should ideally be collected as early as possible (ideally within three days/72 hours after illness onset when influenza viral shedding is highest). See page 6 for more information about influenza testing.

##### **3) Isolate and/or cohort ill patients**

- Restrict staff floating and consider limiting resident activities within the facility. Exclude symptomatic staff and patients until at least 24 hours after they no longer have a fever without the use of fever-reducing medications.

4) **Immediately report clusters via faxed teleform** as described under “Influenza Reporting” on page 5.

5) **Use standard and droplet precautions**

- When caring for patients with suspected or confirmed seasonal influenza. For more about standard precautions, [www.cdc.gov/hicpac/2007IP/2007ip\\_part3.html#a](http://www.cdc.gov/hicpac/2007IP/2007ip_part3.html#a).

6) **Conduct daily active surveillance and testing for new illness and cases**

- Educate staff about the signs and symptoms of influenza-like illness (ILI). ILI is defined as *a fever of  $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ], oral or equivalent, AND cough and/or sore throat without another known cause*. A helpful line list tool is available at [MDPH line list](#)

7) **Encourage respiratory hygiene/cough etiquette/hand hygiene**

- Provide staff reminders or retraining if necessary. Post visual alerts (in appropriate languages) at the entrance to the facility. Posters, brochures and fact sheets promoting cough etiquette and handwashing in multiple languages are available from the Massachusetts Health Promotion Clearinghouse at <https://massclearinghouse.ehs.state.ma.us/>

8) **Use antiviral agents for outbreak control**

- Used in conjunction with vaccination and behavioral measures, including droplet precautions and cohorting of ill residents, antiviral agents are a key component of outbreak control in long-term care facilities and other institutional settings. For more information, please see the [Antiviral Agents for Outbreaks](#) section below.

9) **Offer vaccine to unvaccinated staff**

- They should also be offered chemoprophylaxis if staff work with residents at high risk for complications.

## Antiviral Agents for Outbreaks

*Antiviral chemoprophylaxis should be considered following identification of any laboratory-confirmed case of influenza or when three or more residents have influenza-like illness (fever with cough and/or sore throat) in a facility or area of the facility.*

1) **Administer to all residents**

- When antiviral agents are used for outbreak control, they should be administered to all residents regardless of immunization status. Priority should be given to residents living on the same unit or floor as an ill resident.

2) **Order antiviral agents in advance**

- Pre-approved medication orders, or plans to obtain physician’s orders on short notice, should be in place to ensure that chemoprophylaxis can be started as soon as possible.

3) **Use the correct dosage**

- The antiviral dose for each resident is determined based on age, renal function, liver function and other pertinent characteristics.

4) **Continue treatment**

- The drugs should be continued for a minimum of 2 weeks and continuing for at least 7 days after the last known case was identified.

5) **Expand chemoprophylaxis for variant flu strains**

- All staff, regardless of vaccination status, should be offered chemoprophylaxis if there are any indications that the outbreak is caused by a variant strain of influenza that is not covered by the vaccine.

6) **Re-offer vaccine to all unvaccinated staff**

- They should also be offered chemoprophylaxis if staff work with residents at high risk for complications.

7) **Watch for additional information**

- Additional CDC guidance concerning control of influenza in LTCFs is available at <http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>
- Clinicians should be alert to changes in antiviral recommendations that might occur as additional antiviral resistance data becomes available during the 2018-2019 season. For more information go to <http://www.cdc.gov/flu/professionals/antivirals/antiviral-infection-control.htm>

## Influenza Surveillance and Reporting

### Influenza Surveillance

- Throughout the year, and especially during flu season, conduct surveillance for respiratory illness with fever among your residents so that prompt identification of ILI can be addressed. Influenza testing can help to identify outbreaks so infection control measures can be promptly initiated in all settings, including inpatient and outpatient settings.

Clusters in hospitals and long-term care: Report clusters of influenza-like illness to MDPH via faxed *teleform*.

Teleforms are available by:

- Phone: 617-983-6801, or
  - Web: <http://www.mass.gov/eohhs/docs/dph/cdc/reporting/case-report-forms/resp-cluster-reporting-form.pdf>.
- Please provide as much detail on the teleform as possible. Upon receipt of the form, an epidemiologist will contact you to provide guidance concerning testing, prophylaxis and infection control.
  - Clusters in hospitals, long term care facilities and other entities licensed by the Division of Healthcare Quality (DHCQ) should also be reported to DHCQ by using the web-based Health Care Facility Reporting System (HCFRS) via the Virtual Gateway <https://sso.hhs.state.ma.us>.
  - All Reportable Assisted Living Incident Reports are submitted to the Executive Office of Elder Affairs via the Automated Quickbase Reporting system which is accessed at <http://alrir.800ageinfo.com/>.
  - Group homes, prisons, or other settings should also contact the appropriate oversight agency for your facility.



### Influenza Reporting

Reporting positive flu test results: Positive laboratory findings indicative of influenza virus infection (by culture and PCR) are reportable directly to MDPH, in accordance with 105 CMR 300.000 (Reportable Diseases, Surveillance and Isolation and Quarantine Requirements). This is usually done by laboratories where the testing occurs. Please note that reporting of faxed rapid influenza test results has been discontinued.

*For specific information about reporting, see the MDPH 105 CMR 300.000: Reportable Diseases, Surveillance and Isolation and Quarantine Requirements at [www.mass.gov/eohhs/docs/dph/cdc/reporting/rdq-reg-summary.rtf](http://www.mass.gov/eohhs/docs/dph/cdc/reporting/rdq-reg-summary.rtf). Please note that additional jurisdiction-specific reporting requirements may also apply. For example, healthcare providers and laboratories within the City of Boston must also report all cases of influenza and all laboratory tests positive for influenza directly to the Boston Public Health Commission (see [www.bphc.org/](http://www.bphc.org/) or contact BPHC at 617-534-5611).*

## Influenza Testing

*Diagnostic testing for influenza can aid clinical judgment and guide treatment decisions and control measures. Clinical testing services performed on specimens submitted to a state public health laboratory provide important diagnostic information to the clinician and also contribute to public health respiratory surveillance response and control measures. Remember to test only symptomatic patients. Do not test asymptomatic contacts.*

### **Reminder: Rapid testing has limited sensitivity**

Point of care rapid tests capable of detecting influenza A and B virus infections are available, *but healthcare providers and public health personnel should be aware that rapid influenza diagnostic tests have limited sensitivity and false negative results are common.* Thus, negative results from rapid influenza diagnostic test should not be used to guide decisions regarding treating patients with influenza antiviral medications. In addition, false positive tests can occur and are more likely when influenza is rare in the community. When laboratory confirmation is desired, use RT-PCR and/or viral culture.

### **Specimen Collection and Shipping to MA SPHL:**

Flu specimens should be collected as soon as possible after onset of illness, preferably within three days (72 hours). Specimens collected after 72 hours are usually unsuitable for testing. Specimens should be submitted immediately after collection to MA SPHL in order to be tested within three days of collection. If samples will be shipped to MA SPHL  $\geq 3$  days from collection or on a Friday but are collected within 72 hrs, they should be frozen at  $< -20^{\circ}\text{C}$  and shipped with ice packs on Monday. This variation must be noted on the specimen submission form to avoid an “unsatisfactory for testing” designation.

- Information on specimen collection and submission, including the respiratory surveillance specimen submission form may be found at: [www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-virus-collection.pdf](http://www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-virus-collection.pdf) and [www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-specimen-submission-form.pdf](http://www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-specimen-submission-form.pdf).
- For information on influenza specimen testing please call MDPH at 617-983-6800 and ask to speak with an immunization epidemiologist.

## Part 2:

# Influenza and Pneumococcal Vaccines

### Influenza Vaccine: What's new for the 2018-2019 season?

- Persons with a history of egg allergy of any severity may receive any licensed, recommended, and age-appropriate influenza vaccine (IIV, RIV4, or LAIV4).
- **Fluarix.** Fluarix Quadrivalent (IIV4) has received FDA approval for an expanded age indication. It can be used in persons 6 months and older. The dose volume for children aged 6 through 35 months is 0.5 mL per dose, the same as is used for older children and adults.
- **LAIV4.** Following two seasons (2016-17 and 2017-18) during which ACIP recommended that LAIV4 not be used, ACIP voted in February 2018 to recommend that for the 2018-19 season, vaccination providers may choose to administer any licensed, age-appropriate influenza vaccine (IIV, RIV4 or LAIV4). LAIV4 is an option for those whom it is appropriate.

An updated list of all flu vaccine products is available at <http://www.immunize.org/catg.d/p4072.pdf>

### **Massachusetts Immunization Information System (MIIS) – Regulations and Compliance (Section 222.400)**

All health care providers licensed in the Commonwealth who administer immunizations in Massachusetts to any person, whether or not that person is a resident of the Commonwealth, shall report immunization administration to the MIIS. <https://www.mass.gov/files/documents/2017/09/11/105cmr222.pdf> All facilities not yet registered with the MIIS should call 617-983-4335 to register.

### Timing of Flu Vaccination and Waning Immunity

A 2017 study in *Clinical Infectious Diseases (CID)* showed that influenza vaccination reduced deaths, intensive care unit (ICU) admissions, ICU length of stay, and overall duration of hospitalization among hospitalized influenza patients.

*The ACIP recommends vaccination before the onset of influenza activity in a community and by the end of October, if possible. To avoid missed opportunities for vaccination, providers should offer flu vaccination at routine health visits and hospitalizations as soon as vaccine is available.*

#### Timing of Vaccination

- Vaccination should continue to be offered throughout the flu season as long as flu viruses are circulating and the vaccine has not expired. (In New England, flu activity usually lasts until April or May.)
- It takes about two weeks after vaccination for antibodies to develop and provide protection against the flu virus.
- It is best practice for people to get vaccinated before influenza spreads in the community.

#### Waning Immunity

- Revaccination later in the season of persons who have already been fully vaccinated is not recommended.

Some available data indicate that early vaccination (e.g., in July and August) might be associated with suboptimal immunity before the end of the influenza season, particularly among older adults. However, this finding has not been found consistently across studies, age groups, influenza viral subtypes or seasons. The relative contribution of potential waning of immunity compared with those of other determinants of the impact of vaccination (e.g., timing, severity of the influenza season, emergence of drifted antigenic strains) and in particular the impact of missed opportunities when individuals delaying vaccination fail to return later in the season is not known. In addition, the ability to vaccinate a large population within a more constrained time period may result in decreased coverage rates. Vaccination programs need to balance maximizing likelihood of persistence of vaccine-induced protection through the season with avoiding missed opportunities to vaccinate or vaccinating after onset of influenza circulation occurs in a community.

*As additional data about the duration of immunity and potential programmatic impact become available, ACIP will review them to determine if any changes in this policy should be made. For additional information, see the ACIP [Recommendations](#) and the corresponding ACIP [Background](#) document.*

## Vaccination of Residents and Staff

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### LTCF Residents

- Vaccinate residents against flu when vaccine is available.
  - Vaccinate residents admitted from September through March on admission if prior vaccine is not documented.
- Ensure that written policies include annual flu vaccination, and pneumococcal vaccines (PPSV23 and PCV13), zoster, and Tdap vaccination for residents.
- Include Vaccine Information Statements (VIS) for PPSV23, PCV13, Tdap, shingles vaccine (Shingrix), and flu vaccines in the admission packet. Vaccine Information Statements (VISs) for all vaccines are available in many languages: [www.immunize.org/vis](http://www.immunize.org/vis).
- Obtain consent for vaccination from the resident or family member on admission.
- Implement standing orders to administer flu, PCV13, PPSV23, Shingrix, and Tdap vaccines.
  - Use chart audits to ensure that there is documentation in every chart that the resident has been offered PPSV23, PCV13, Shingrix, and Tdap vaccines and annual influenza vaccine.
- Consider residents with uncertain immunization histories as NOT immunized and vaccinate accordingly. The benefits of vaccination far outweigh any concerns about revaccination.
- The immunogenicity and safety of the simultaneous or sequential administration of two vaccines containing novel adjuvants (e.g., Fluad, Shingrix) has not yet been evaluated. Consider using a non-adjuvanted influenza vaccine (if available) when co-administration is necessary. Vaccination should not be delayed if a specific product is not available.

### LTCF Staff

(See [Appendix](#) for healthcare provider vaccination rates)

Use a systematic approach to vaccination, with checklists, to increase immunization levels:

- Vaccinate all staff against influenza every year.
- CDC, the Advisory Committee on Immunization Practices (ACIP), MDPH and the Healthcare Infection Control Practices Advisory Committee (HICPAC) recommend that all U.S. health care workers<sup>2</sup> get vaccinated annually against influenza.
- As a condition of licensure, DPH regulations require health care facilities<sup>3</sup> to offer free-of-charge, annual influenza vaccine to all personnel (full and part-time employees, contracted employees,

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<sup>2</sup> Health care workers include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing, and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from health care workers and patients.

volunteers, house staff and students) and document receipt of influenza vaccine administered and declination of immunization.

- Licensed facilities are also required to report information to DPH documenting compliance with the vaccination requirement, in accordance with reporting and data collection guidelines of the Commissioner (105 CMR).
- The long-term care facility and adult day health program regulations are available at the following links:
  - Licensing of Long Term Care Facilities: 105 CMR 150.002(D)(8), <http://www.mass.gov/eohhs/docs/dph/regs/105cmr150.pdf>
  - Licensure of Adult Day Health Programs: 105 CMR 158.030(L)(8) <http://www.mass.gov/courts/docs/lawlib/104-105cmr/105cmr158.pdf>

## Vaccination of Family Members and Visitors

Inform family members and other visitors about their role in the transmission of flu to patients and encourage them to get vaccinated. *To find flu vaccine, they can call their healthcare provider or local board of health, visit <https://vaccinefinder.org/> for a list of flu vaccination clinics by town.*

## Guidance for Safe Administration and Proper Evaluation

The ACIP recommends that **any** licensed, recommended and age-appropriate influenza vaccine (i.e., IIV, RIV4 or quadrivalent live attenuated influenza vaccine quadrivalent [LAIV4]) that is otherwise appropriate for the recipient's health status may be administered to persons with egg allergy of **any** severity. To ensure safety, providers should follow the guidance outlined below:

- Persons with a history of egg allergy who have experienced only hives after exposure to egg should receive influenza vaccine. **Any** licensed, recommended and age-appropriate influenza vaccine (i.e., IIV, RIV4, or LAIV4) that is otherwise appropriate for the recipient's health status may be used in any usual immunization setting.
- Persons who report having had severe allergic reactions to egg involving symptoms other than hives, such as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who required epinephrine or another emergency medical intervention, may similarly receive **any** licensed, recommended, and age-appropriate influenza vaccine (i.e., IIV, RIV4 or LAIV4) that is otherwise appropriate for the recipient's health status.
- The selected vaccine should be administered in an inpatient or outpatient medical setting (including but not necessarily limited to hospitals, clinics, long-term care facility and physician offices). **Vaccine administration should be supervised by a healthcare provider who is able to recognize and manage severe allergic conditions.** Facilities will need to determine if they have the trained staff, protocols and equipment in place to safely vaccinate those with severe egg allergy or refer them to their medical home or another provider.

*For additional questions about management of egg allergic persons please see <https://www.cdc.gov/flu/protect/vaccine/egg-allergies.htm>*

## Observation Period after Vaccination

- No period of post-vaccination observation is recommended specifically for egg-allergic patients. However, providers should continue with the general best practice recommendation to observe all patients for 15 minutes after any vaccination to decrease the risk for injury should they experience syncope.

<sup>3</sup> Health care facilities include hospitals, ambulatory surgical centers, dialysis centers, clinics, nursing homes, rest homes, and adult day health programs

## General Plan for Response to Acute Vaccine Reactions

- Although anaphylactic reactions are rare after vaccination, their immediate onset and life-threatening nature require that all personnel and facilities providing vaccinations have procedures in place for anaphylaxis management. All vaccination providers should be familiar with the office emergency plan and be currently certified in cardiopulmonary resuscitation. Epinephrine and equipment for maintaining an airway should be available for immediate use.

## Pneumococcal Vaccine Recommendations

Since 2014, the ACIP recommends that PCV13 and PPSV23 should be administered routinely in a series to all immunocompetent adults aged  $\geq 65$  years. PCV13 should be administered only once for all adults. [The recommended intervals between PCV13 and PPSV23 vaccines](#) were updated in 2015 and published in the MMWR.

Specific recommendations are based on a person's previous pneumococcal vaccine history.

Guidance for pneumococcal vaccine recommendations for those  $\geq 65$  years of age can be found at the CDC job aid [Pneumococcal Vaccine Timing for Adults](#). This document contains a number of algorithms and a summary table.

CDC's [Pneumococcal Frequently Asked Questions](#) was developed to help healthcare professionals address common questions patients ask regarding pneumococcal vaccination. Information and other resources can be found on CDC's [Pneumococcal Disease](#) and [Pneumococcal Vaccination](#) web pages.

## Regulations, Requirements, and Reimbursement

### Massachusetts Licensure Regulations requires LTC facilities, Rest Homes and Adult Day Health Programs to offer flu vaccine to all personnel.

- Influenza is often introduced into and spread throughout a facility by staff or visitors. Flu vaccine may be less effective in the very elderly and some vaccinated LTC residents may remain susceptible. It is important to reduce their exposure to flu. Healthcare provider vaccination reduces mortality in elderly patients.
- Regulation 105 CMR 150.002(D)(8) requires LTC facilities and 105 CMR 158.030(L)(8) requires Adult Day Health Programs to provide information about the risks and benefits of flu vaccine and flu vaccine at no cost to all personnel. All LTC facilities and Adult Day Health Programs are also required to report information to MDPH documenting compliance with the vaccination requirement, in accordance with the reporting and data collection guidelines of the Commissioner (105 CMR). MDPH Circular Letter DHCQ 15-12-650 is available at the following: <http://www.mass.gov/eohhs/docs/dph/quality/hcq-circular-letters/2015/dhcq-650.pdf>. For questions regarding the reporting requirements, please contact Eileen McHale at the Bureau of Healthcare Safety and Quality at 617-753-7324 or [eileen.mchale@state.ma.us](mailto:eileen.mchale@state.ma.us).

### The CMS requires nursing homes to offer all residents flu and pneumococcal vaccines.

- See the following link: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V10.pdf>

### Medicare reimbursement for influenza and pneumococcal vaccination:

- For more information on Medicare Part B reimbursement for vaccines, see:
  - [Influenza Vaccine Payment Allowances:](https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM10914.pdf)  
<https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM10914.pdf>

- Seasonal Influenza Vaccine Prices:
  - <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Part-B-Drugs/McrPartBDrugAvgSalesPrice/VaccinesPricing.html>
- Center for Medicaid and Medicare Services Medical Learning Network:
  - <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/>

*If you have questions regarding pricing and reimbursement under Medicare Part B, including pneumococcal vaccines, please call the Medicare Call Center at 1-800-MEDICARE (1-800-633-4227).*

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## Vaccine Ordering and Locating Clinics

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### Providers Wishing to Order Flu Vaccine for Private Purchase

- The national Influenza Vaccine Availability Tracking System (IVATS) assists providers wishing to privately purchase flu vaccine. IVATS identifies available doses of influenza vaccine by formulation and distributor/vendor throughout the season.

### Location of Flu and Adult Vaccination Services

- Flu vaccination clinics can be found at [HealthMap Vaccine Finder](#). This website assists the public with locating influenza and adult vaccination services within their communities. It is a free, online service where users can search for locations that offer immunizations. Its staff works with partners such as clinics, pharmacies, and health departments to provide accurate and up-to-date information about vaccination services. MDPH urges providers and other agencies to [register their locations](#) on the HealthMap Vaccine Finder site too.

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## General References and Contacts

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### Top References

- 1) ACIP's 2018-2019 Recommendations for Prevention and Control of Influenza with Vaccines at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6703a1-H.pdf>
- 2) MDPH Flu website at [www.mass.gov/flu](http://www.mass.gov/flu)
  - a. Has information for providers and the general public. Click on 'Information for Healthcare Professionals' for provider resources such as clinical advisories and control guidance, model standing orders, screening forms and planning clinics and campaigns.
- 3) Questions about influenza and technical consultation
  - a. Call the Massachusetts Department of Public Health Immunization Program at 617-983-6800 or your local board of health. For questions about state-supplied influenza vaccine, please call the Vaccine Unit at 617-983-6828.

### Additional CDC References

- 4) CDC Influenza Toolkit for Long-Term Care Employers
  - a. Resources for increasing vaccination rates among healthcare personnel in LTCFs: <http://www.cdc.gov/flu/toolkit/long-term-care/>
- 5) CDC Prevention and Control of Influenza with Vaccines
  - a. Recommendations of the Advisory Committee on Immunization Practices (ACIP) - United States, 2018-19 Season. MMWR 2018 67(RR-6709a1)1-20 <http://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6703a1-H.pdf>

- b. 2018-19 Summary of Recommendations available at:  
<https://www.cdc.gov/flu/professionals/acip/2018-2019/2018-19summary.htm>
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## Other References

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### Health Care Personnel

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  - a. MA state reports available here: <https://www.mass.gov/service-details/flu-vaccination-reports-for-healthcare-personnel>

## Reports and Surveillance

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## Appendix

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### Healthcare Provider Influenza Vaccination Rates

#### Quick Facts (Influenza Season 2017-2018)

- 71% of healthcare workers in Nursing Homes and Rest Homes received influenza vaccine
- 63% of healthcare workers in Adult Day Health programs received influenza vaccine.

Healthcare personnel are at high risk for influenza exposure and illness, and may be a source of influenza virus transmission in healthcare settings. Annual influenza vaccination is the best method of preventing influenza and potentially serious complications. The current Healthy People 2020 goal for influenza vaccination coverage among healthcare personnel is 90%. In 2017-2018, 78% of acute care hospital facilities in Massachusetts achieved vaccine coverage of 90% or greater among healthcare workers.

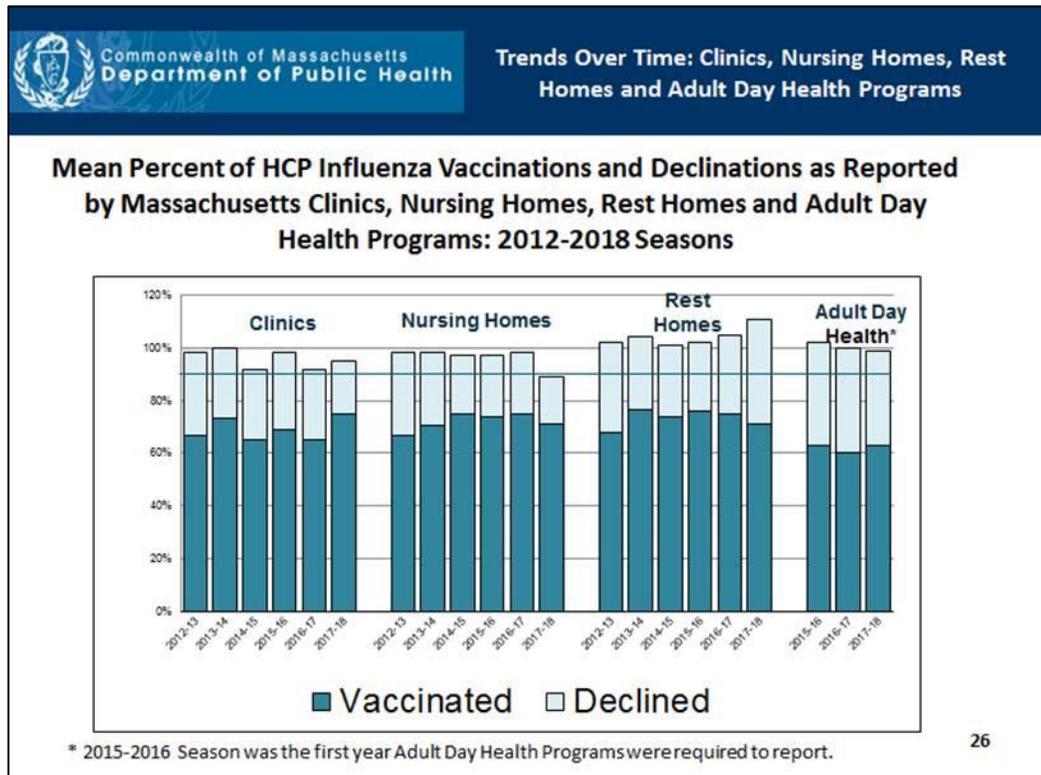
The table below outlines influenza vaccination rates for healthcare workers in three different long-term care settings. In contrast to the high vaccination coverage in acute care hospitals described above, coverage in long term care settings are much lower. This highlights the need for improved vaccination rates in these types of facilities.

#### **Reported Seasonal Vaccination Rates Among Healthcare Personnel**

MA - Healthcare Personnel Setting	MA 2015-16 <sup>1</sup>	MA 2016-17 <sup>1</sup>	MA 2017-18 <sup>1</sup>
Nursing Homes	73%	75%	71%
Rest Homes	76%	75%	71%
Adult Day Health	63%	60%	63%

<sup>1</sup>[Influenza Vaccination of Health Care Personnel in MA Nursing Homes and Acute Care Hospitals](#)

Improvement needed: MDPH encourages facilities to review current healthcare personnel influenza policies and implement processes to maximize vaccination coverage. All healthcare facilities should strive to reach the goal of having 90% of healthcare personnel vaccinated annually against influenza in order to best protect patients, family members, and staff from influenza illness. Recording the vaccination status of your staff is a requirement for all health care facilities.



Please see the following resources to assist in improving influenza vaccination among healthcare personnel:

- CDC Influenza Resources for Health Care Professionals: <https://www.cdc.gov/flu/professionals/index.htm>
- CDC toolkit for Increasing Influenza Vaccination among Health Care Personnel in Long-term Care Settings: <https://www.cdc.gov/flu/toolkit/long-term-care/index.htm>
- Seasonal Influenza (Flu)-Free Resources: [www.cdc.gov/flu/freeresources/index.htm](http://www.cdc.gov/flu/freeresources/index.htm)
- Providing a Safer Environment for Health Care Personnel and Patients through Influenza Vaccination Strategies from Research and Practice: [https://www.jointcommission.org/assets/1/18/Flu\\_Monograph.pdf](https://www.jointcommission.org/assets/1/18/Flu_Monograph.pdf)
- Strategies to Achieve the Healthy People 2020 Annual Influenza Vaccine Coverage Goal for Health-Care Personnel: Recommendations from the National Vaccine Advisory Committee: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3514716/pdf/phr12800007.pdf>
- MDPH Influenza Resources for Health Care Professionals: <http://www.mass.gov/flu>