

Massachusetts Healthcare Personnel COVID- 19 and Influenza Vaccination in Health Care Facilities and Emergency Medical Services:

*2023-2024 Season*

Katherine T. Fillo, Ph.D, MPH, RN-BC, Director of the Office of Health Care Strategy and Planning Fareesa Hasan, MPH, MS Epidemiologist

Eileen McHale, RN, BSN, Healthcare Associated Infection Coordinator

Background

* Health care personnel (HCP) are at high risk for influenza (flu) and coronavirus (COVID-19) exposure and illness and may be a source of viral transmission in health care settings.
* Annual immunization decreases the risk of flu and COVID-19 and is the best method of preventing serious complications.\*
* The Massachusetts Department of Public Health (DPH) considers the prevention of flu and COVID-19 by promoting vaccination an organizational priority that should be part of the overall institutional commitment to improvement for licensed healthcare facilities and emergency medical services.

*\** [*https://www.cdc.gov/flu/prevent/keyfacts.htm*](https://www.cdc.gov/flu/prevent/keyfacts.htm)*;* [*https://www.cdc.gov/covid/vaccines/benefits.html*](https://www.cdc.gov/covid/vaccines/benefits.html)

Background

As a condition of licensure\*, current DPH regulations require health care facilities and providers including hospitals, ambulatory surgical centers, dialysis centers, clinics, nursing homes, rest homes, hospice programs, emergency medical services and adult day health programs to:

* Ensure all HCP are vaccinated annually with annual influenza vaccine and are up to date with vaccine doses for COVID-19 as recommended by the Centers for Disease Control and Prevention (CDC), unless an individual is exempt from vaccination,
* Notify HCP about the requirements and educate them about the benefits and risks of these vaccines,
* At no cost to the HCP provide or arrange for vaccination of all personnel who cannot provide proof of current vaccination unless an individual is exempt,
* Report information to DPH documenting each facility’s compliance with the HCP vaccination requirements.

\*105 CMR 130.325 and 130.326, 105 CMR 140.150, 105 CMR 141.201(D), 105 CMR 150.002(D)(8) and

150.008(D)(11), 105 CMR 158.030(L) and 158.030(M), 105 CMR 170.341 and 170.342

Performance Goal

To protect the lives and welfare of patients, employees, and communities, as well as to improve quality and reduce healthcare costs, DPH has established an overall minimum vaccination rate of 90% or greater for eligible HCP at all licensed healthcare facilities.

This performance goal is intended to advance patient and HCP health and safety by ensuring optimal HCP vaccination coverage and was originally established based on the National Healthy People 2020 target of achieving 90% influenza coverage of HCP.

The Advisory Committee on Immunization Practices (ACIP) recommends that HCP receive an annual influenza and COVID-19 vaccination to reduce influenza related morbidity and mortality among HCP and their patients as well as reduce absenteeism among HCP.

[*https://www.healthypeople.gov/node/4668/data\_details*](https://www.healthypeople.gov/node/4668/data_details)

Methodology

Health care facilities report HCP flu and COVID-19 vaccination rates to DPH in one of three ways:

1. National Healthcare Safety Network (NHSN) at the Centers for Disease Control and Prevention (CDC): Acute care hospitals, non-acute hospitals, ambulatory surgical centers, dialysis centers, and nursing homes
2. Health Care Facility Reporting System (HCFRS): Rest homes and adult day health programs
3. Online survey: EMS, Clinics and hospice programs

This was the first year that hospice programs and emergency medical services (EMS) were required to submit vaccination reports. DPH aligned state reporting with federal requirements where possible.

Reporting Requirements

* DPH determined reporting periods and deadlines based upon federal requirements for each vaccine type.
* All providers were required to submit the total number of HCP that worked onsite at least one day, the total number of HCP vaccinated, and the total number of HCP who claimed an exemption within the defined reporting period.

|  |  |
| --- | --- |
| HCP Vaccination Metric | Reporting Period |
| Up-to-date for COVID-19 vaccine | October 1, 2023 to December 31, 2023 |
| Received annual flu vaccine | October 1, 2023 to March 31, 2024 |

Measures and Calculations

Percentage of HCP vaccinated in each season for each provider

Flu Vaccine Coverage =

Total HCP Who Received an Annual Flu Vaccine

Total # HCP at Facility

COVID-19 Vaccine Coverage =

Total HCP Considered “Up-to-date” on COVID-19 vaccination

Total # HCP at Facility

|  |  |
| --- | --- |
| Season 2023-2024 | Mean Flu Vaccinated % |
| Acute Care Hospitals | 89.4% |
| Non-Acute Care Hospitals | 80.0% |

100%

80%

Mean % per Facility

60%

Mean Flu Vaccination Rates for Acute and Non-Acute Care Hospitals

Acute Care Hospitals Non-Acute Care Hospitals

5-Year Flu Vaccination Trends: Hospitals

40%

90% Vaccination Goal

72.0%

77.0%

80.0%

80.0%

86.0%

89.4%

91.0%

94.0%

94.5%

94.6%

20%

0%

2019-20 2020-21 2021-22 2022-23 2023-24 2019-20 2020-21 2021-22 2022-23 2023-24

|  |  |
| --- | --- |
| Season 2023-2024 | Mean Flu Vaccinated % |
| Ambulatory Surgical Centers | 81.1% |
| Dialysis Centers | 48.5% |
| Clinics | 51.3% |

100%

Mean Flu Vaccination Rates for ASCs, Dialysis Centers, and Clinics

Ambulatory Surgical Centers Dialysis Centers Clinics

80%

90% Vaccination Goal

60%

Mean % per Facility

40%

20%

0%

5-Year Flu Vaccination Trends: Ambulatory Surgical Centers (ASC), Dialysis Centers, and Clinics

2019-

20

2020-

21

2021-

22

2022-

23

2023-

24

2019-

20

2020-

21

2021-

22

2022-

23

2023-

24

2019-

20

2020-

21

2021-

22

2022-

23

2023-

24

|  |  |
| --- | --- |
| Season 2023-2024 | Mean Flu Vaccinated % |
| Nursing Homes | 58.3% |
| Rest Homes | 68.7% |
| Adult Day Health | 53.1% |

5-Year Flu Vaccination Trends: Nursing Homes, Rest Homes, and Adult Day Health Centers

100%

90%

80%

Mean % per Facility

70%

60%

50%

40%

30%

20%

10%

0%

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2019- | 2020- | 2021- | 2022- | 2023- | 2019- | 2020- | 2021- | 2022- | 2023- | 2019- | 2020- | 2021- | 2022- | 2023- |
| 20 | 21 | 22 | 23 | 24 | 20 | 21 | 22 | 23 | 24 | 20 | 21 | 22 | 23 | 24 |

Mean Flu Vaccination Rates for Nursing Homes, Rest Homes, Adult Day Health Centers, Hospice

Nursing Homes Rest Homes Adult Day Health

90% Vaccination Goal

100.0%

80.0%

60.0%

Mean % per Provider

89.4%

80.0% 81.1%

48.5%

62.5%

58.3%

72.1%

90% Vaccination Goal

60.6%

55.6%

40.0%

25.1%

20.0%

0.0%

Acute Care Hospitals

Non-Acute Care Hospitals

Ambulatory Surgical Centers

Dialysis Centers

Clinics Nursing Homes

Rest Homes Adult Day

Health

Hospice EMS

Mean HCP Flu Vaccination Rate for 2023-24 by Provider

Massachusetts Department of Public Health mass.gov/dph

11

* Uptake of the most up-to-date COVID-19 vaccine was low in the 2023-24 respiratory disease season.
* Rest homes had the highest average rate of vaccination for COVID-19 (69%)
* Dialysis Centers had the lowest average vaccination rate (6%)
* Many facilities reported the majority of their HCP as “Unknown” in federal reporting. DPH regulations require vaccination status to be documented for all HCP.

100%

80%

Mean % per Provider

60%

40%

20%

0%

Mean COVID-19 HCP Vaccination Rates in Season 2023-24

90% Vaccination Goal

|  |  |  |  |
| --- | --- | --- | --- |
|  | 20.0% | 16.2% | 6.0% |

Acute Care Hospitals Non-Acute Care Ambulatory Surgical Dialysis Centers Clinics Hospitals Centers

48.5%

51.3%

100%

|  |  |
| --- | --- |
| Provider Type | COVID-19 Vaccinated % |
| Rest Homes | 68.7% |
| Hospice | 58.0% |
| Adult Day Health | 53.1% |
| Clinics | 51.3% |
| Ambulatory Surgical Centers | 48.5% |
| EMS | 21.2% |
| Acute Care Hospitals | 20.2% |
| Nursing Homes | 18.5% |
| Non-Acute Care Hospitals | 16.2% |
| Dialysis Centers | 6.0% |

80%

Mean % per Provider

60%

40%

20%

0%

Mean COVID-19 HCP Vaccination Rates in Season 2023-24

90% Vaccination Goal

68.7%

53.1%

58.0%

21.2%

18.5%

Nursing Homes Rest Homes Adult Day Health Hospice EMS

COVID-19 Vaccination 2023-24

100%

Statewide Vaccination Rates Season 2023-24

90% Vaccination Goal

80%

60%

Percent HCP Vaccinated

40%

20%

0%

Acute Care Hospitals

Non-Acute Care Hospitals

Ambulatory Surgical Centers

Flu  COVID-19

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Dialysis | Clinics | Nursing | Rest Homes | Adult Day | Hospice | EMS |
|  |  | Homes |  | Health |  |  |

Statewide HCP Vaccination Rates by Facility Type

Massachusetts Department of Public Health mass.gov/dph

13

Conclusions

* Only one provider type, Acute Care Hospitals, has reached the 90% goal for HCP flu vaccination coverage.
* Rest Homes are leading in ensuring HCP are up-to-date with COVID-19 vaccination. No provider type has reached the 90% goal for HCP COVID-19 vaccination coverage.
* Many facilities are reporting HCP as having unknown vaccination status for COVID-19, potentially underrepresenting the true vaccination rate
* Early respiratory virus season availability of vaccine, prompt reporting deadlines and changes in definitions to be considered up-to-date may have contributed to low reported vaccination rates

Next Steps

Massachusetts Department of Public Health mass.gov/dph

15

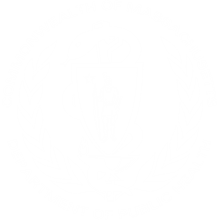
* DPH strongly recommends all HCP are vaccinated against flu and COVID-19 in September 2024
* DPH will update state data collection tools, trainings, and supporting documentation in alignment with new regulations and recommendations for vaccinations against flu and COVID-19 for the 2024-2025 respiratory virus season
* DPH will continue hosting webinars to provide updated information for each respiratory virus season. The first is scheduled for September 24, 2024

‒ Topics to include information on National and Massachusetts infection activity; best practices to promote HCP vaccination; and guidance on data submission

* DPH will continue promotion of continuous quality improvement by recommending licensed facilities and emergency medical services share vaccination rates with all staff, including administrators, boards of directors, practice managers, ombudspersons and patient/family councils

Next Steps (continued)

* DPH will continue to provide useful resources educational materials, strategies and interventions to promote increasing vaccination coverage among HCP
* DPH will continue distribution of job aids to assist clinics, adult day health centers, and rest homes in tracking and monitoring HCP vaccination progress
* DPH will share this update with all licensed healthcare facilities and emergency medical services with recommendations to distribute broadly within each facility and to use the reported data to drive improvement
* This update and facility specific results will be available on the MDPH website: [https://www.mass.gov/info-details/health-care-personnel-covid-influenza-](https://www.mass.gov/info-details/health-care-personnel-covid-influenza-vaccination-references-and-resources) [vaccination-references-and-resources](https://www.mass.gov/info-details/health-care-personnel-covid-influenza-vaccination-references-and-resources)



Thank you for the opportunity to present this information today. Please direct any questions to:

[dhcq.fludata@mass.gov](mailto:dhcq.fludata@mass.gov)

Bureau of Health Care Safety and Quality Office of Health Care Strategy and Planning