

# Post-acute and Long-term Care Facility Toolkit: Influenza Vaccination among Healthcare Personnel

## Introduction

This comprehensive toolkit is intended to assist post-acute and long-term care (LTC) facility owners and administrators with improving influenza vaccination coverage among their healthcare personnel (HCP). The toolkit outlines the importance of influenza vaccination for HCP, provides strategies for increasing influenza vaccination coverage among HCP, and describes tools a facility may use for monitoring influenza vaccination coverage among their HCP throughout an influenza season. A list of supplemental resources is also provided.

The toolkit is composed of four sections:

- Section I: Overview of Influenza Vaccination among HCP
- Section II: Increase Influenza Vaccination Coverage among your HCP
- Section III: Monitor Influenza Vaccination Coverage among your HCP
- Section IV: Resources on Influenza Vaccination

## Section I: Overview of Influenza Vaccination among HCP

*Why increasing HCP influenza vaccination coverage is important*

### HCP Categories

HCP include, but are not limited to, the following groups:

- Physicians
- Nurses
- Nursing assistants
- Therapists
- Technicians
- Emergency medical service personnel
- Dental personnel
- Pharmacists
- Laboratory personnel
- Autopsy personnel
- Students and trainees
- Non-employee contracted staff

### Additional At-Risk HCP

Persons not directly involved in patient care, but who could still be exposed to infections in healthcare, are also considered HCP and include:

- Clerical
- Dietary
- Engineering
- Housekeeping
- Laundry
- Security
- Maintenance
- Administration
- Billing
- Volunteers<sup>[3]</sup>

### HCP Working in Post-acute and LTC Facilities

As of 2014, over three million individuals delivered direct care as a part of LTC services; this was approximately one-fifth of the overall healthcare workforce [1]. By 2050, the number of HCP providing direct care in LTC settings is projected to increase to between 5.7-6.6 million [2]. Even staff who are not directly involved in patient care are considered HCP since they can be exposed to infections in healthcare settings. HCP can be defined as: all paid and unpaid persons working in healthcare settings who have the potential for exposure to patients and/or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air [3] (and includes staff not involved in direct patient care).

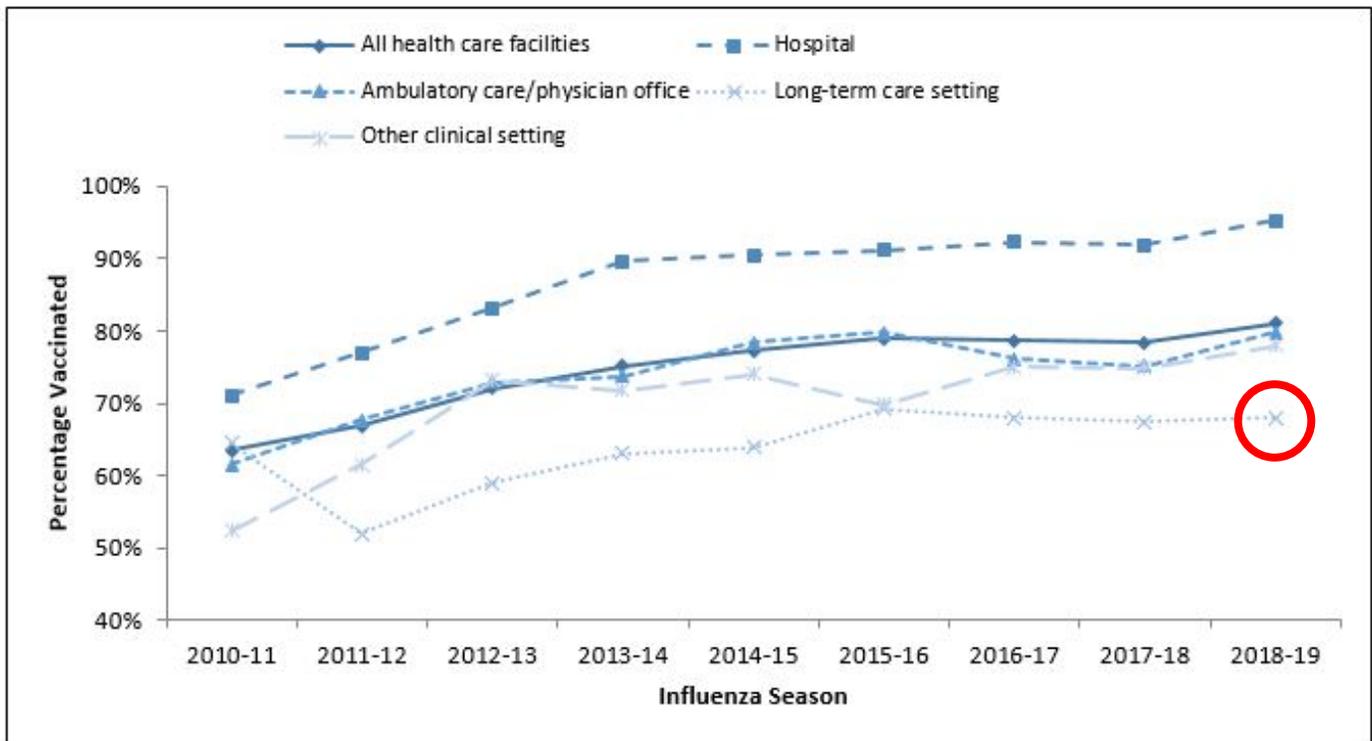
### Impact of Influenza

Each year influenza causes outbreaks in LTC facilities. The impact of influenza on LTC facilities can be particularly devastating since influenza can be a serious health threat, especially for people vulnerable to influenza complications, including older adults and people living with certain long-term medical conditions. People older than age 65 are at highest risk for hospitalization and complications from influenza and account for the majority of influenza hospitalizations and deaths in the United States each year [4].

Increasing influenza vaccination rates among HCP is critical for protecting the health of post-acute and LTC facility residents and staff. HCP may be more likely to work when ill than other professions, which increases the risk for influenza transmission in healthcare facilities. As many as 1 in 2 infected people never show classic influenza symptoms [5] but can shed virus for 5–10 days. Resident admissions and HCP absenteeism are typically higher during the influenza season, which increases the impact of influenza-related absenteeism on operations of these healthcare facilities.

### Influenza Vaccination Coverage among HCP

The Advisory Committee on Immunization Practices (ACIP) recommends all HCP be vaccinated against influenza each year [6]. However, during the 2018–19 influenza season, influenza vaccination coverage was 68% among HCP working in long-term care settings, versus 95% among HCP working in hospitals [7]. This has been the trend for the past 8 influenza seasons [7]. Healthcare employers can take steps to improve voluntary uptake of vaccination by HCP, such as providing vaccine without charge at convenient times and locations and educating HCP about the importance of vaccination. The highest rates of vaccination are in settings that require it as a condition of employment. The Society for Post-acute and Long-Term Care Medicine advocates mandatory influenza vaccination of HCP (regardless of patient contact) in LTC facilities with exceptions made only in the case of medical contraindications to influenza vaccine [8]. Various other professional organizations also have policies supporting mandatory influenza vaccination of HCP.



Percentage of health care personnel who received influenza vaccination, by work setting — Internet panel surveys, United States, 2010–11 through 2018–19 influenza seasons. [https://www.cdc.gov/flu/fluview/hcp-coverage\\_1819estimates.htm](https://www.cdc.gov/flu/fluview/hcp-coverage_1819estimates.htm)

### Benefits of Influenza Vaccination

Several studies have demonstrated that vaccination in healthcare settings decreases influenza transmission from HCP to patients, particularly in LTC settings [9, 10]. Studies in LTC facilities have shown that staff vaccination against influenza has been associated with reductions in all-cause mortality among residents [9, 10], influenza-like illness (ILI) [11], and hospitalizations of individuals with ILI. In addition, one LTC study suggested that although staff vaccination rates did not independently predict ILI outbreaks, high rates of vaccination among *both* staff and residents substantially reduced the rate and impact of influenza outbreaks [12].

Vaccinating HCP working in post-acute and LTC facilities is vital for preventing influenza transmission to residents

## Section II: Increase Influenza Vaccination Coverage among your HCP

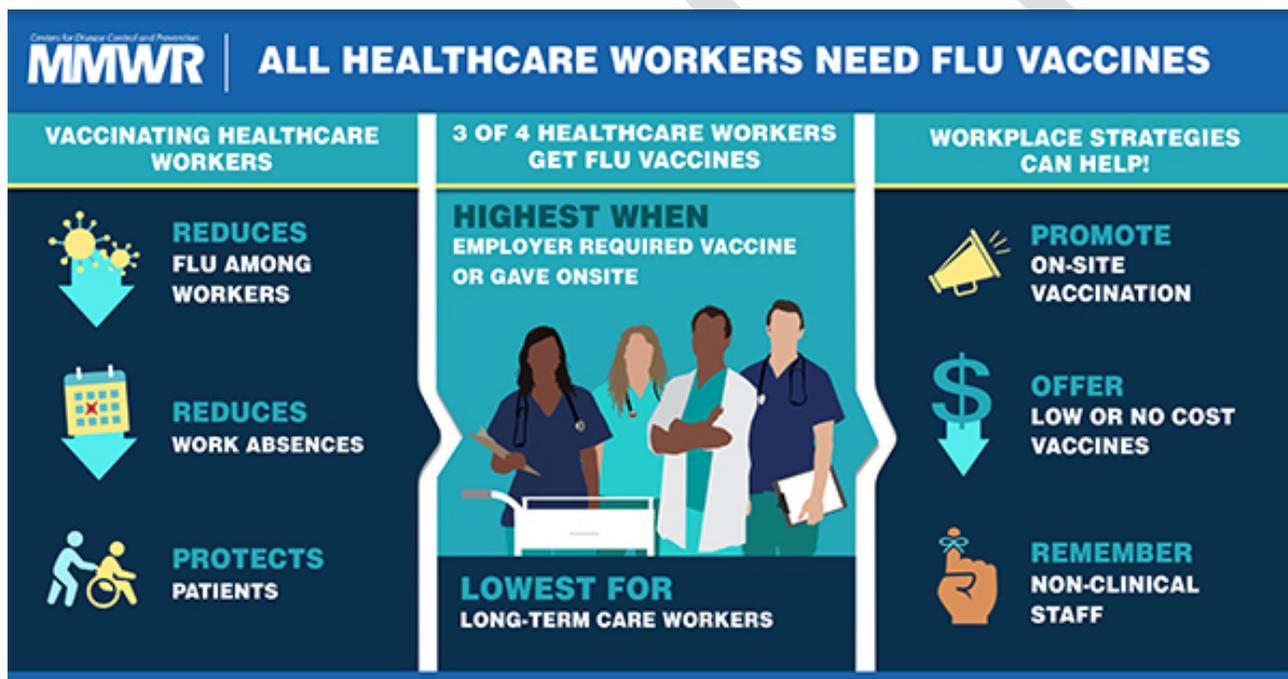
*How to increase your facility's influenza vaccination rates*

### Best Practices for Increasing HCP Influenza Vaccination

In a national survey looking at the 2018–19 influenza season, the highest vaccination coverage, at 98%, was among HCP subject to workplace vaccination requirements [7]. Yet, only 30% of HCP in LTC facilities report that influenza vaccination is required by their employer [13]. The lowest vaccination coverage, at 42%, was among HCP working in settings where vaccination was not mandated, promoted, or offered on-site. Among HCP who did not have to abide by a workplace requirement, 83% reported receiving influenza vaccine when it was offered for no cost at their worksite for more than one day [7].

Implementing a workplace vaccination requirement is the most effective strategy to increase influenza vaccination coverage among HCP in post-acute and LTC facilities

The National Adult and Influenza Immunization Summit (NAIS) has specific [guidance for LTC administrators](#) planning to increase influenza vaccination through a workplace vaccination requirement. Employer-sponsored workplace vaccination is often cost-saving as vaccinated employees are less likely to miss work due to illness [14]. Additional strategies for improving HCP influenza vaccination are described below.



[https://www.cdc.gov/flu/fluview/hcp-coverage\\_1819estimates.htm](https://www.cdc.gov/flu/fluview/hcp-coverage_1819estimates.htm)

### Planning for an Influenza Season

It is recommended that post-acute and LTC facilities establish solid plans for vaccinating HCP working at their facilities. Ideally, facilities should outline plans during the summer prior to the influenza season that cover educating HCP on influenza vaccination, promoting influenza vaccination, and administering and tracking vaccine. This may also be a good time to establish an influenza vaccination policy for HCP if one is not already in place.

Develop plans for vaccine education, promotion, administration, and tracking

To assist facility administrators and other staff who are involved in the planning process (e.g., occupational health or infection control specialists), a series of questions to consider and some suggested strategies are provided. Facilities can decide which [strategies](#) are most appropriate to their situation and can develop action steps on how to implement them.

## Vaccine Education

Should my facility implement an educational campaign for HCP?

- ✓ If HCP influenza vaccination coverage is sub-optimal, consider using the materials/information below to address the following topics:
  - Belief that influenza is not a serious illness:
    - Show the video: “How Does Flu Make You Sick?”:  
<https://www.youtube.com/watch?v=MfX6xGdQcoQ>
    - Share information from the CDC on “Misconceptions about Seasonal Flu and Flu Vaccines:”  
<https://www.cdc.gov/flu/prevent/misconceptions.htm>
    - Share a question and answer document on influenza from the Immunization Action Coalition:  
<https://www.immunize.org/catg.d/p4208.pdf>.



Educating staff about influenza vaccination may include showing them “How Does Flu Make You Sick?” on YouTube.

- Belief that influenza vaccine is not effective or will cause illness/side effects:
  - Share the Joint Commission’s [Influenza and Influenza Vaccine Myths and Reality](#) fact sheet
  - Emphasize the benefits of influenza vaccination: <https://www.cdc.gov/flu/vaccines-work/averted-estimates.htm>
  - Share data from the CDC’s Seasonal Flu Vaccine Effectiveness Studies: <https://www.cdc.gov/flu/vaccines-work/effectiveness-studies.htm>
  - Refer to the following information on how influenza vaccination is an important preventive tool for people with chronic health conditions:
    - Influenza vaccination has been associated with [lower rates of some cardiac events](#) among people with heart disease, especially among those who had had a cardiac event in the past year
    - Influenza vaccination can reduce worsening and hospitalization for flu-related chronic lung disease, such as in persons with [chronic obstructive pulmonary disease \(COPD\)](#)
    - Influenza vaccination has been shown in [separate studies](#) to be associated with reduced hospitalizations among people with [diabetes](#) and [chronic lung disease](#)
- Fear of injection:
  - Emphasize that there is a nasal spray vaccine (‘FluMist’) for eligible individuals preferring to avoid injection: <https://www.cdc.gov/flu/prevent/nasalspray.htm>

- ✓ Incorporate culturally competent materials:
  - Provide educational materials in multiple languages:
    - Seasonal Flu Factsheets: <https://www.cdc.gov/flu/resource-center/freeresources/multi-language-factsheets.html>



*CDC's Spanish-Language Factsheet on Seasonal Flu*

- CDC's Vaccine Information Statements: <https://www.immunize.org/vis/>
  - Inactivated Influenza Virus: [https://www.immunize.org/vis/vis\\_flu\\_inactive.asp](https://www.immunize.org/vis/vis_flu_inactive.asp)
  - Live, Attenuated Influenza Vaccine: [https://www.immunize.org/vis/vis\\_flu\\_live.asp](https://www.immunize.org/vis/vis_flu_live.asp)
- MedlinePlus provides influenza information in [multiple languages, tutorials](#), and videos that may be helpful to low literacy groups (refer to section four of this document for other materials)
- Conduct listening sessions with HCP to talk through potential barriers to influenza vaccination such as fears surrounding vaccination and influenza vaccine safety

### Vaccine Promotion

*How can my facility best promote influenza vaccination?*

- ✓ Publicize a "vaccine day" offering influenza vaccination in combination with education
- ✓ Provide contests or incentives to get vaccinated (small gift cards, raffle prizes, pizza parties, etc.)
- ✓ Designate influenza vaccine 'champions' (such as nurses and/or residents) to set the tone for the importance of vaccination. These champions may represent various cultural and ethnic backgrounds.
- ✓ Vaccinate facility administrators and managers in front of staff
- ✓ Encourage HCP to obtain influenza vaccination through communication tools such as e-mail, posters, and newsletters (refer to section four of this document for materials)
- ✓ Remind and encourage unvaccinated HCP to get a flu vaccine via e-mail, letters, telephone calls, and in person
- ✓ Consider using CDC's Digital Media Toolkit as a resource to promote influenza vaccination



Consider using CDC's Digital Media Toolkit to promote influenza vaccination:  
<https://www.cdc.gov/flu/resource-center/toolkit/index.htm>

## Vaccine Administration and Tracking

*How will influenza vaccine be administered to HCP at my facility?*

- ✓ Contact community organizations (e.g., local hospitals, pharmacies, or nurse associations) to develop partnerships for administering influenza vaccine to HCP
- ✓ Offer influenza vaccine at mandatory trainings, orientations for new staff, departmental conferences, and other meetings
- ✓ Offer influenza vaccine at multiple times and locations convenient to HCP on all shifts during the influenza season
- ✓ Use a mobile vaccination cart to vaccinate HCP working in various locations of the facility

*Will my facility provide influenza vaccine to HCP for free?*

- ✓ If yes, this may encourage vaccination uptake
- ✓ If no, consider the following:
  - Provide staff with a voucher for vaccination at another location, such as a pharmacy or clinic
  - Share information with HCP on other options:
    - Employee health insurance plans may cover influenza vaccination
    - Other health insurance plans that staff may participate in (such as a spouse's insurance plan) may cover influenza vaccination
    - Staff who do not qualify for employer-provided insurance may be able to get insurance through state Health Insurance Marketplaces

*How will influenza vaccination be tracked at my facility?*

- ✓ Establish a process to record influenza vaccination status of each healthcare worker throughout the influenza season (use a spreadsheet or electronic tracking system)
- ✓ Provide a [declination form](#) to learn why HCP are declining vaccination and tailor any educational messages
- ✓ Review data periodically to identify unvaccinated HCP and follow-up with them as the influenza season progresses
- ✓ Adjust vaccine promotion strategies to reach unvaccinated HCP



## Section III: Monitor Influenza Vaccination Coverage among your HCP

*How to monitor HCP vaccination rates and report them via the National Healthcare Safety Network*



### Benefits of measuring HCP influenza vaccination coverage

There are several benefits of measuring influenza vaccination coverage for HCP. Collecting and monitoring data allows facilities to recognize trends in influenza vaccination. This may assist the facility in identifying unvaccinated HCP and tailoring educational efforts and vaccination programs to reach these individuals. Facilities can also use the data for strengthening quality improvement activities. Below are tools and resources available to post-acute and LTC facilities to measure influenza vaccination coverage.

### Monitoring data through the National Healthcare Safety Network

In 2012, the National Quality Forum (NQF) endorsed quality measure #0431 on collecting influenza vaccination data among HCP. The Centers for Medicare and Medicaid Services (CMS) currently mandates certain healthcare facilities (such as acute care facilities) to report data using quality measure #0431 to meet requirements of quality reporting programs. Facilities may enter measure data into the [National Healthcare Safety Network](#) (NHSN). NHSN is an internet-based surveillance system managed by the Centers for Disease Control and Prevention (CDC). Although there are no mandates for post-acute and LTC facilities to report influenza vaccination coverage data, these facilities may monitor HCP influenza vaccination data using NHSN (even if not required to do so).

Use CDC's National Healthcare Safety Network to monitor your facility's influenza vaccination coverage throughout the influenza season

The NHSN measure for LTC facilities collects weekly influenza vaccination data on HCP who physically worked in a healthcare facility for at least one day during the prior 7 days (October 1 through March 31).

For each HCP category, facilities report the following influenza vaccination status data:

- HCP receiving an influenza vaccination at the healthcare facility since influenza vaccine became available this season
- HCP providing a written report or documentation of influenza vaccination received outside the healthcare facility since influenza vaccine became available this season
- HCP who have a medical contraindication to the influenza vaccine
- HCP who declined to receive the influenza vaccine this season
- HCP having an unknown vaccination status (or did not meet the criteria for any of the other categories)

Post-acute and LTC facilities can enroll in NHSN to report HCP influenza vaccination data. NHSN comprises several components where facilities report various types of data pertaining to HCP and patients. To report weekly HCP influenza vaccination data, LTC facilities can enter data into the HCP Vaccination Module, which is part of the Long-Term Care Component. This module is designed to ensure that HCP influenza vaccination coverage is consistent over time within a LTC facility and comparable across facilities.

A facility will need to complete a few steps before they can begin entering data into NHSN:

1. Enroll facility in NHSN: <https://www.cdc.gov/nhsn/ltc/enroll.html>
2. Review data collection forms and training materials on HCP influenza vaccination data reporting: <https://www.cdc.gov/nhsn/ltc/vaccination/index.html>
3. Add the Long-Term Care Component to the facility in NHSN: <https://www.cdc.gov/nhsn/ltc/vaccination/index.html>

[Additional resources for monitoring HCP influenza vaccination data](#)

The National Adult and Influenza Immunization Summit (NAIIS) has also developed resources that post-acute and LTC facilities can use to [track and evaluate HCP vaccination data](#). A spreadsheet, like the NAIIS Influenza Vaccine Roster, can help track the vaccination status of HCP and help keep information organized and easily accessible. NAIIS also provides tools for staff to visually see how the facility and different units within the facility stand in terms of influenza vaccination coverage.

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## Section IV: Resources on Influenza Vaccination

<b>Guidance Documents/Toolkits</b>
The Community Guide. Worksite: Seasonal Influenza Vaccinations Using Interventions with On-Site, Free, Actively Promoted Vaccinations – Healthcare Workers. <a href="https://www.thecommunityguide.org/findings/worksite-seasonal-influenza-vaccinations-healthcare-on-site">https://www.thecommunityguide.org/findings/worksite-seasonal-influenza-vaccinations-healthcare-on-site</a>
New York State Department of Health. Health Care Provider/Facility Influenza Immunization Toolkit. <a href="https://www.health.ny.gov/prevention/immunization/toolkits/influenza_toolkit/">https://www.health.ny.gov/prevention/immunization/toolkits/influenza_toolkit/</a>
County of San Diego, Health and Human Services Agency. Immunization Toolkit for Long-term Care Providers. <a href="http://www.sdiz.org/HealthCarePros/LTCF-Flu-Toolkit.html">http://www.sdiz.org/HealthCarePros/LTCF-Flu-Toolkit.html</a>
Centers for Disease Control and Prevention. Make It Your Business to Fight the Flu: Promoting the Seasonal Flu Vaccine. A Toolkit for Businesses and Employers. <a href="http://www.cdc.gov/flu/pdf/business/toolkit_seasonal_flu_for_businesses_and_employers.pdf">http://www.cdc.gov/flu/pdf/business/toolkit_seasonal_flu_for_businesses_and_employers.pdf</a>

<b>Influenza Materials for Organizations</b>
Centers for Disease Control and Prevention. Flu Resources for Businesses. <a href="http://www.cdc.gov/flu/business/index.htm">http://www.cdc.gov/flu/business/index.htm</a>
Veterans Health Administration. Seasonal Influenza Campaign Calendar. <a href="https://www.publichealth.va.gov/docs/flu/flu-campaign-calendar.pdf">https://www.publichealth.va.gov/docs/flu/flu-campaign-calendar.pdf</a>
Immunization Action Coalition. Declination of Influenza Vaccination Form. <a href="http://www.immunize.org/catg.d/p4068.pdf">http://www.immunize.org/catg.d/p4068.pdf</a> (fact sheets and other resources)

<b>Influenza Materials for Healthcare Personnel</b>
The Joint Commission. Influenza and Influenza Vaccine Myths and Reality. <a href="https://www.jointcommission.org/-/media/Deprecated-unorganized/imported-assets/tjc/system-folders/assetmanager/jc_influenza_mythspdf.pdf?db=web&amp;hash=A9BA0B5B8345DF2F6DFAB450F41656EE">https://www.jointcommission.org/-/media/Deprecated-unorganized/imported-assets/tjc/system-folders/assetmanager/jc_influenza_mythspdf.pdf?db=web&amp;hash=A9BA0B5B8345DF2F6DFAB450F41656EE</a>
Centers for Disease Control and Prevention. Seasonal Influenza Vaccination Resources for Health Professionals. <a href="http://www.cdc.gov/flu/professionals/vaccination/index.htm">http://www.cdc.gov/flu/professionals/vaccination/index.htm</a>
Centers for Disease Control and Prevention. Influenza Vaccination Information for Health Care Workers. <a href="http://www.cdc.gov/flu/healthcareworkers.htm">http://www.cdc.gov/flu/healthcareworkers.htm</a>
Centers for Disease Control and Prevention. I Won't Spread Flu to my Patients or my Family. (Poster) <a href="http://www.cdc.gov/flu/pdf/freeresources/healthcare/healthcare-poster.pdf">http://www.cdc.gov/flu/pdf/freeresources/healthcare/healthcare-poster.pdf</a>
New York Department of Health. Protect Your Patients, Protect Your Family, Protect Yourself! (Poster) <a href="http://www.health.ny.gov/prevention/immunization/toolkits/docs/protect.pdf">http://www.health.ny.gov/prevention/immunization/toolkits/docs/protect.pdf</a>
Centers for Disease Control and Prevention. Continue to Vaccinate Patients and Staff Against the Flu. (Podcast) <a href="http://www2c.cdc.gov/podcasts/player.asp?f=8622778">http://www2c.cdc.gov/podcasts/player.asp?f=8622778</a>

<b>Influenza Materials for the General Public</b>
Centers for Disease Control and Prevention. Resources on Seasonal Influenza. <a href="http://www.cdc.gov/flu/freeresources/index.htm">http://www.cdc.gov/flu/freeresources/index.htm</a>
Centers for Disease Control and Prevention. Misconceptions about Seasonal Flu and Flu Vaccines. (Questions and answers) <a href="http://www.cdc.gov/flu/about/qa/misconceptions.htm">http://www.cdc.gov/flu/about/qa/misconceptions.htm</a>
Centers for Disease Control and Prevention. I Can't Miss Work. (Flyer) <a href="http://www.cdc.gov/flu/pdf/freeresources/updated/cannot-miss-work-flu-flyer.pdf">http://www.cdc.gov/flu/pdf/freeresources/updated/cannot-miss-work-flu-flyer.pdf</a>
Centers for Disease Control and Prevention. No More Excuses: There are Many Places to Get Your Flu Vaccine. (Flyer) <a href="http://www.cdc.gov/flu/pdf/freeresources/updated/vaccine-locations-flyer.pdf">http://www.cdc.gov/flu/pdf/freeresources/updated/vaccine-locations-flyer.pdf</a>
Centers for Disease Control and Prevention. Everyday Preventive Actions that Can Help Fight Germs, Like Flu. (Flyer) <a href="http://www.cdc.gov/flu/pdf/freeresources/updated/everyday_preventive.pdf">http://www.cdc.gov/flu/pdf/freeresources/updated/everyday_preventive.pdf</a>
Centers for Disease Control and Prevention. "Take 3" Actions to Fight the Flu. (Flyer) <a href="http://www.cdc.gov/flu/pdf/freeresources/general/take3.pdf">http://www.cdc.gov/flu/pdf/freeresources/general/take3.pdf</a>
Centers for Disease Control and Prevention. "Take 3" Actions to Fight the Flu. (Poster) <a href="http://www.cdc.gov/flu/pdf/freeresources/general/take3-poster.pdf">http://www.cdc.gov/flu/pdf/freeresources/general/take3-poster.pdf</a>
Centers for Disease Control and Prevention. Fight the Flu. (Sticker) <a href="http://www.cdc.gov/flu/pdf/freeresources/general/flu-cling-sticker.pdf">http://www.cdc.gov/flu/pdf/freeresources/general/flu-cling-sticker.pdf</a>

<b>Influenza Materials for Ethnic/Cultural Groups</b>
Centers for Disease Control and Prevention. The National Influenza Vaccination Disparities Partnership (NIVDP) Resource Kit. <a href="https://www.cdc.gov/flu/pdf/nivw/nivdp-resource-kit-2014.pdf">https://www.cdc.gov/flu/pdf/nivw/nivdp-resource-kit-2014.pdf</a>
Centers for Disease Control and Prevention. Seasonal Influenza. (Materials available in Spanish) <a href="http://www.cdc.gov/flu/freeresources/print-spanish.htm">http://www.cdc.gov/flu/freeresources/print-spanish.htm</a>
Centers for Disease Control and Prevention. Seasonal Flu Materials for Refugees. (Materials available in various languages) <a href="http://www.cdc.gov/immigrantrefugeehealth/resources/index.html">http://www.cdc.gov/immigrantrefugeehealth/resources/index.html</a>
Immunization Action Coalition. Influenza Vaccine Information Statements. (Materials available in various languages) <a href="http://www.immunize.org/vis/vis_flu_inactive.asp">http://www.immunize.org/vis/vis_flu_inactive.asp</a>
U.S. National Library of Medicine. MedlinePlus. (Materials available in various languages) <a href="http://www.nlm.nih.gov/medlineplus/languages/flu.html">http://www.nlm.nih.gov/medlineplus/languages/flu.html</a>
Public Health–Seattle & King County. (Materials available in various languages) <a href="http://www.kingcounty.gov/healthservices/health/communicable/diseases/Influenza.aspx">http://www.kingcounty.gov/healthservices/health/communicable/diseases/Influenza.aspx</a>

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