Immunization Toolkit

2017 – 2018

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

Table of Contents

Nursing Home Immunization Toolkit

The National Quality Forum (NQF), a not-for-profit organization with broad participation from the health care sector, was created to develop and implement a national strategy for health care quality measurement and reporting (http://www.qualityforum.org). For several years, the NQF has supported the Centers for Medicare & Medicaid Services (CMS) inclusion of immunizations as a publicly reported measure in the nursing home (NH) setting.

The original Immunization Toolkit was originally created by Quality Partners of Rhode Island (quality improvement organization for Rhode Island) in 2003. The toolkit intends to emphasize the importance of NH immunizations for both residents and staff.

Nursing home stakeholders share a sense of urgency related to the impact of immunizations on resident outcomes, workforce productivity and health care costs. These efforts are in alignment with two national goals: The Healthy People 2020 goal of 90 percent immunization for residents and the Association for Professionals in Infection Control and Epidemiology (APIC) goal of 90 percent influenza immunization among staff.

This toolkit offers specific information and education for NH providers, staff, beneficiaries and families on the benefits of immunization. These benefits include decreased resident hospitalization and vulnerability to pneumonia and decreased staff illness. The toolkit also offers NH providers comprehensive and timely information related to immunization, in addition to sample guidelines and tools needed to run an effective and sustainable resident and staff immunization program.

It is with the utmost gratitude for the hard work and dedication of the members of the Quality Partners of Rhode Island Team and all the contributing individuals who created the Immunization Toolkit that Mountain-Pacific Quality Health has updated with information for the 2016-2017 influenza season and offers to NH providers in Alaska, Montana, Hawaii and Wyoming.

This material originated from Quality Partners of Rhode Island, the QIO for Rhode Island, and has been reproduced and distributed by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam and American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-17-211

The Basics

The following is an overview of influenza and pneumococcal vaccinations. Nursing homes may use this material to help educate staff, residents and families.

Background on Influenza and Pneumonia

As the 2017-2018 influenza season (October through March) approaches, all nursing homes (NHs) should strive for a 100 percent immunization rate among their eligible residents for both influenza and pneumonia. Because those at high risk for complications from influenza are also at high risk for pneumococcal disease, autumn is the optimal time to institute guidelines for the administration of both influenza and pneumococcal vaccines. (Although it is true that flu is mostly seasonal, pneumococcal disease occurs year-round. Therefore, the flu vaccination occurs primarily in the fall, and pneumococcal vaccination status should be assessed and updated throughout the year.) These safe and effective vaccines can protect your residents during the coming months and will prevent unnecessary hospitalizations and deaths.

Influenza Disease

Influenza, or the flu, is a contagious respiratory disease caused by influenza viruses. Although those who contract the flu usually recover within one to two weeks, for those age 65 and older (especially those who reside in NHs or have conditions that put them at high risk for complications), influenza can be a serious and potentially life-threatening disease. It is important to note that older people do not always present with classic flu symptoms. They may be asymptomatic or simply "act differently" from their usual behavior.

Symptoms of the flu may also include:

- Increased body temperature
- Headache of sudden onset, often severe
- Fatigue – can last two or more weeks
- Dry cough – can become severe
- Sore throat/decreased food, fluid intake
- Stuffy or runny nose
- Body/muscle aches
- Increased confusion

The flu spreads very easily from person to person through indirect contact when an infected person coughs or sneezes into the air and releases air droplets, which are then breathed in by other people. The virus can also be spread by direct contact when droplets from an infected person or object (e.g., door handle, telephone receiver) come in contact with another person's nose or mouth.

Epidemiology

Influenza outbreaks are most common from early autumn through late spring and peak during the winter months. The 2012-2013 influenza season was a reminder of how unpredictable and severe influenza can be. Influenza activity began early in the United States and was high for 15 weeks. The hospitalization rates for older adults were the highest recorded since the Centers for Disease Control and Prevention (CDC) began tracking data, and deaths attributed to pneumonia and influenza were the highest recorded in nearly a decade.[1] The more people we vaccinate, the more people we can help protect.

Only about half of all health care workers protect their residents by getting immunized against influenza. The remaining 50 percent greatly increase the risk of spreading flu in health care facilities, including NHs.

Influenza Vaccine Effectiveness

The influenza vaccine is thought to be 50 to 60 percent effective in preventing hospitalization and certain forms of pneumonia. It is 80 percent effective in preventing death from influenza and influenza-related pulmonary and circulatory complications.

Who should receive the influenza vaccine?

All residents, staff and volunteers of NHs should be immunized unless they are allergic to the vaccine. Additional information can be found at http://www.cdc.gov/flu/index.htm. Immunizations are mandatory for health care workers, per the National Healthcare Safety Network (NHSN).

Prevention and Control

In addition to an immunization campaign, various approaches can be implemented to assist in the prevention and spread of the flu in NHs:

- Immunize residents and staff early each fall.
- Encourage contractors, visitors, state surveyors and consultants to get immunized.
- Ask employees, family members and volunteers to stay home when sick.
- Insist that staff wash hands frequently and assist residents to do the same.
- Require non-immunized staff to wear face masks throughout the flu season.
- Cover nose and mouth with tissue when sneezing and/or coughing.
- Recognize early symptoms of flu and pneumonia and implement treatment.

If an outbreak occurs, follow infection control guidelines at http://www.cdc.gov/flu/index.htm.

Administration Timing and Frequency

Influenza immunization campaigns ideally should be implemented in September or October. Residents admitted into a NH through late March, however, should be assessed and vaccinated at the time of admission, if appropriate. Immunization status documentation should accompany the resident when he or she is transferred to another health care facility or transferred home. Caregivers should be informed that the vaccination has already been administered.

Immunization Side Effects

The most common side effect associated with the influenza vaccination is soreness at the vaccination site, which affects ten to 50 percent of individuals vaccinated. Soreness rarely interferes with the individual's ability to conduct daily activities and generally subsides in about 24 to 48 hours.

Less common side effects include fever, malaise, myalgia and other systemic symptoms. When these symptoms occur, they usually begin six to 12 hours after immunization and last one to two days. Rarely are there immediate reactions (e.g., hives, angioedema, allergic asthma and systemic anaphylaxis) that occur after influenza vaccination. These reactions generally result from an allergy to a component of the vaccine. Severe adverse reaction may be treated immediately with epinephrine and will subside.

Influenza Vaccine and Egg Allergy

New information from an article in the June 2013 Annals of Allergy, Asthma & Immunology suggests that "after reviewing 28 studies of 4,300 egg-allergic individuals who received influenza vaccine without any serious reactions, that it is considered relatively safe for individuals reporting an egg-allergy to receive influenza vaccine." The Advisory Committee on Immunization Practices for the CDC and the American Academy of Pediatrics' Committee on Infectious Diseases both concluded an egg allergy of any severity, even anaphylaxis, is not a contraindication to administering of influenza vaccine, but a precaution.[2] Not being vaccinated is a greater risk than being vaccinated. Anyone who has an egg allergy should consult a physician or allergist, but should not delay getting vaccinated.

Two new influenza vaccines that were not grown in eggs are available and approved for people 18 years and older. These are called Flucelvax and Flublock. People should consult their health care provider or facility medical director to determine the efficacy of providing egg-protein-free vaccines to residents and staff.

For the 2017-2018 season, quadrivalent and trivalent influenza vaccines will be available. Inactivated influenza vaccines (IIVs) will be available in trivalent (IIV3) and quadrivalent (IIV4) formulations. Updated checklists in this toolkit use IIV4. Recombinant influenza vaccine (RIV) will be available in trivalent (RIV3) and quadrivalent (RIV4) formulations. Consult with your medical director for direction about which to provide for your residents and staff.

Pneumococcal Disease

Pneumococcal disease refers to a serious infectious disease caused by the bacteria *Streptococcus pneumoniae*. Those at high risk for invasive infection and death from pneumococcal disease include children less than two years of age, those 65 years of age and older, and those with underlying medical conditions such as chronic cardiac and respiratory disease, liver disease, those who have had their spleen removed, diabetes mellitus (DM) and those with HIV.

Symptoms of pneumococcal disease are related to the type of infection caused by the bacteria. Symptoms of infection include:

- Ear infection (otitis media) – fever, ear pain, drainage, vomiting, irritability
- Sinus infection (sinusitis) – sinus pressure and pain, low-grade fever, headache, nasal discharge
- Pneumonia – fever, chills, shortness of breath or rapid breathing, chest pain that increases with deep breaths, productive cough
- Bacteremia – shaking chills, fever, increased pulse, low blood pressure
- Meningitis – high fever, headache, stiff neck, nausea, vomiting, aversion to bright light, confusion, sleepiness

Pneumococcal disease spreads from person to person by coughing, sneezing or close contact. The pneumococcal bacteria stick to the surface of cells in the respiratory tract. Once the bacteria invade the body, they can multiply in a process called colonization. The infected person becomes immune to the bacteria as long as his or her immune system develops antibodies against the bacteria. If the immune system does not respond adequately, the bacteria can spread to the middle ear, lungs and/or bloodstream.

Epidemiology

Pneumococcal infections occur year-round, but increase in the winter, with peak incidence among adults occurring from late December through mid-January. Most (>95%) pneumococcal deaths in the United States are in adults. Yet 67 million adults at increased risk remain unvaccinated, leaving them vulnerable.[3] Vaccination is the safest, most effective way to prevent pneumococcal infections.

When considering the development of invasive pneumococcal disease, the overall health and age of the person with the disease are more important than bacterial colonization. Therefore, pneumococcal immunization is not recommended for health care workers, as it is not spread as easily as influenza and does not necessarily lead to clinical illness.

Pneumococcal Vaccine Effectiveness

The pneumococcal polysaccharide vaccine (PPSV23, so named, because it protects against 23 serotypes of *Streptococcus pneumoniae*) is estimated to be 56 to 81 percent effective in preventing invasive pneumococcal disease. It is important to note that there are some types of pneumonia for which the vaccine does not provide protection (i.e., pneumonias caused by infection with pathogens other than *Streptococcus pneumoniae* or even aspiration pneumonia). A person may contract other forms of pneumonia despite PPSV23 vaccination.

In February 2010, a 13-valent pneumococcal conjugate vaccine (PCV13) was approved by the Food and Drug Administration (FDA) and replaced the 7-valent PCV. PCV has demonstrated to be safe and extremely effective. Since the introduction of PCV13, the number of cases of invasive pneumococcal disease has dropped from 44 cases to five cases per 100,000.

Prevention and Control

Methods to assist in the prevention and spread of pneumococcal disease in the NH include:

- Annually assess residents and vaccinate, as appropriate
- Insist that staff wash hands frequently and assist residents to do the same
- Cover nose and mouth with tissue when sneezing and/or coughing

If an outbreak occurs, follow infection control guidelines.

Administration Timing and Frequency

Residents admitted to a NH should be assessed and vaccinated at the time of admission, if the pneumococcal vaccination has not been performed, or if vaccination status is uncertain. PPSV23 and PCV13 can be administered year-round. The Advisory Committee on Immunization Practices (ACIP) recommends that adults 65 years of age or older who have not previously received PCV13 but have received PPSV23 should receive a dose of PCV13. If an older adult has received no previous pneumococcal vaccinations, ACIP recommends he or she receives a dose of PCV13 followed by a dose of PPSV23 six to 12 months later. PPSV23 and PCV13 should never be administered on the same day. In fact, the acceptable interval between PCV13 and PPSV23 administrations is eight weeks.[4]

Influenza and pneumococcal vaccinations, however, can be administered at the same time without increased risk of side effects. Immunization status documentation should accompany the resident when he or she is transferred to another health care facility or to home. This serves to inform the family or caregiver that vaccination has already been done.

Immunization Side Effects

Soreness at the vaccination site is the most common side effect associated with the pneumococcal vaccination and affects 30 to 50 percent of individuals vaccinated. However, this rarely interferes with the individual's ability to

Who should receive the two types of pneumococcal vaccines?

Pneumococcal conjugated vaccine (PCV13) is recommended for:

- All adults age 65 and older, including residents in long-term care
- People age 2 through 24 years of age with long-term health problems (e.g., heart disease, sickle cell disease, diabetes, lung disease, cirrhosis, leaks of cerebrospinal fluid, alcoholism, immunocompromised conditions)
- All babies and children under the age of 2

Pneumococcal polysaccharide vaccine (PPSV23) is recommended for:

- All adults age 65 and older, including residents in long-term care
- Adults 19 through 64 years old who smoke cigarettes
- People 2 through 64 years old with long-term health problems (as stated above)

conduct daily activities and subsides in about 24 to 48 hours. Less common side effects include moderate systemic reactions (e.g., fever, myalgia). Severe generalized reactions are rare with pneumococcal immunization, even among individuals who are re-immunized.

Vaccine Information Statements

Vaccine Information Statements (VIS) are one-page, two-sided informative sheets produced by the CDC to inform vaccine recipients of their legal representatives about the benefits and risks of vaccines. The law requires that VISs be given out before the administration of certain vaccines. The most current VISs for the 2017-2018 season are provided as attachments with this toolkit.

More Information

The CDC has a lot of information on influenza and pneumococcal disease. Go to **www.cdc.gov**.

The National Nursing Home Quality Initiative has information and resources customized for us in nursing homes. Find them at **www.nhqualitycampaign.org**.

Similarly, the Centers for Medicare & Medicaid Services (CMS) created a comprehensive online resource of quality improvement information for Medicare providers and beneficiaries. Find information about vaccinations at **www.cms.gov**.

Finally, you might check out the website developed by the National Foundation for Infectious Diseases, which can be found at **www.nfid.org/factsheets/**.

1. The 2012-2013 influenza season. CDC 24/7: Saving Lives, Protecting People. *Centers for Disease Control and Prevention* March 2015; www.cdc.gov/flu/pastseasons/1213season.htm.
2. Kelso, J.M. Influenza vaccine and egg allergy. *Annals of Allergy, Asthma and Immunology* June 2013; Volume 1110, Issue 6: 297-401.
3. Pneumococcal disease. CDC 24/7: Saving Lives, Protecting People. *Centers for Disease Control and Prevention* June 2015; https://www.cdc.gov/pneumococcal/about/facts.html.
4. Vaccines and immunizations: Pneumococcal disease. CDC 24/7: Saving Lives, Protecting People. *Centers for Disease Control and Prevention* December 2014; www.cdc.gov/vaccines/vpd-vac/pneumo/vac-PCV13-adults.htm.

Myths and Facts

Many myths persist about the effectiveness and safety of the flu and pneumococcal vaccines. The fact is, these vaccines are effective and safe for the majority of the population. Despite their safety, however, too many people who should get vaccinated do not out of fear it will make them ill or cause complications.

Common Myths and Facts about Vaccines

Myth: **Vaccines that are supposed to prevent flu and pneumococcal diseases actually cause illness.**

Fact: The influenza and pneumococcal vaccines are made from inactivated viruses and bacteria and cannot cause illness.

Myth: **The flu is not a serious disease, so I do not need to worry about being vaccinated.**

Fact: Flu is unpredictable and how severe it is can vary widely from one season to the next. Together, pneumonia and flu cause about 57,000 deaths each year, and during a regular flu season, about 90 percent of deaths occur in people 65 years and older.

Myth: **You should not get the flu shot, because it may not cover current strains of flu.**

Fact: Although the vaccine may not be a perfect match for the predominant virus strains circulating each year, getting the vaccine does provide some protection from cross-reactivity of strains. This means those who are vaccinated and then exposed to a different strain are less likely to have severe complications (e.g., hospitalization, death), if they contract the flu.

Myth: **You should not give the influenza and pneumococcal vaccines at the same time, because it increases the risk for side effects.**

Fact: Both vaccines can safely be given at the same time (but at different sites).

Myth: **You must get signed content from residents before administering vaccination.**

Fact: There are no federal or state laws or regulations (except in Maryland) that require NHs to obtain signed consent before vaccinations. However, it is strongly recommended residents are informed about the risks and benefits and provide informed consent.

Myth: **The pneumococcal vaccine is not very effective.**

Fact: Although the PPSV23 vaccine is not as effective as others, it is 60 to 80 percent effective against invasive pneumococcal disease when it is given to immunocompetent people aged 65 years and older or with chronic illness. The vaccine can significantly lower the risk of serious pneumococcal disease and its complications in most recipients.

See the Toolbox section for a handout form of these Myths and Facts. For more information on influenza and pneumonia, go to **www.immunize.org**.

Flu Facts for Staff

Health care workers may be reluctant to ask certain questions and, as a result, choose not to be vaccinated. Presenting common questions and correct responses just before a vaccine campaign may assist with reaching concerned health care workers.

The following are common questions about the flu vaccine:

Q: Who should get the flu shot?
A: All health care employees.

Q: What is influenza (the flu)?
A: The flu is a very contagious disease of the respiratory system. Symptoms include fever, cough, muscle aches, headache and general weakness. Do not confuse the flu with a cold. When you get the flu, you will be in bed and unable to carry out your daily activities for about a week.

Q: When can I get the flu?
A: The flu occurs most often in the winter and peaks in December and January.

Q: How could I get the flu?
A: Viruses that cause the flu live in the nose and throat and are sprayed into the air when an infected person sneezes, coughs or talks. People nearby can then inhale the virus. Flu symptoms usually start one to three days after a person inhales the virus.

Q: Can the flu shot cause the flu?
A: The flu vaccine is made of killed flu viruses and cannot cause the flu. Because other common infections cause flu-like symptoms, people mistake other illnesses for the flu, if they have recently received a vaccination.

Q: Does the vaccine have side effects?
A: Those who do experience side effects will have a mild reaction such as redness or swelling of the area where the vaccine was administered. Most health care workers who receive the vaccine will not have side effects.

Q: Why should I get vaccinated?
A: It is important for health care workers to receive the vaccine to not only protect themselves, but their family, friends and the residents they care for.

Q: What about FluMist?
A: The CDC no longer recommends the use of FluMist because of poor efficacy.

For more Q&A on influenza and pneumonia, go to **www.immunize.org**.

Influenza Outbreaks

If an influenza outbreak occurs in your NH, specific measures should be taken to limit further transmission.

1. **Inform** local and state health department officials within 24 hours of outbreak recognition. Determine what type of testing for influenza is available to your facility.

2. **Implement** daily active surveillance for respiratory illness among all residents and staff until at least one week after the last confirmed influenza case occurred.

3. **Institute** the facility's plan for collecting and handling of specimens at the first sign of an outbreak to identify influenza as the causative agent. Influenza can be diagnosed by performing rapid influenza virus testing on respiratory specimens from residents with recent onset of symptoms suggestive of influenza. Ensure the laboratory performing the tests notifies the facility of test results promptly.

4. **Implement** droplet precautions for all residents with suspected or confirmed influenza. Such precautions are recommended for many viral causes of respiratory infection.

5. **Confine** the first symptomatic resident and his or her exposed roommate(s) to their room. Restrict them from common activities and serve meals in their room. Restrict staff movement from areas of the facility experiencing the outbreak.

6. **Cancel** common activities, if other residents become symptomatic. Serve all meals in residents' rooms. If residents are ill in certain units, do not move them or move staff to other units. Do not admit new residents to the unit(s) with symptomatic residents.

During an influenza outbreak, you must also consider the impact on visitors and staff. Limit visitors and consider restricting visitation of children via posted notices. Monitor personnel absenteeism due to respiratory symptoms and exclude those with influenza-like symptoms from resident care for five days after the onset of symptoms.

The following are a few final tips for how to deal with an outbreak:

Q: Should we take any new admissions?
A: Limit new admissions, especially to units that have confirmed outbreaks.

Q: What about residents and staff who have not been vaccinated against influenza?
A: Review health records for those residents. Consider reoffering the current season's influenza vaccine to unvaccinated staff and residents. Pay attention to the CDC's current vaccination recommendations for influenza vaccines.

Q: What about prophylaxis and treatment?
A: Administer influenza antiviral prophylaxis and treatment to residents and staff according

to the CDC's current recommendations.

Q: What else can staff do?

A: If the health department has announced that the outbreak is caused by a variant of influenza viruses that are not well matched by the vaccine, consider antiviral chemoprophylaxis for staff members, regardless of their vaccination status.

For more information about how to handle an influenza outbreak, go to **www.cdc.gov**.

Monthly Checklist

The following is a month-by-month checklist to be used as a guide for your influenza vaccination program for health care workers. This list encourages collaboration between infection control professionals and other departments to ensure a successful program throughout the year.

January – Month

☐ Identify an interdisciplinary team meeting for the influenza program, with physicians, nurses, administrators and pharmacists represented. Invite representatives from departments with the lowest employee immunization rates during last year's program.

☐ Appoint an in-house "champion" to manage the program. Empower this person to educate leadership during management meetings, departmental in-service training and new employee orientations about the importance of immunizing health care workers against influenza.

☐ Evaluate last year's employee immunization program:

- How many employees were immunized?
- How does this compare with previous years?
- Was the vaccine supply appropriate for the demand?
- Try to learn why some employees chose not to be immunized. If their concerns are based on misinformation, you may be able to correct it this year.

☐ Coordinate with the pharmacy to order influenza vaccine for this year's program.

April – May

☐ Determine your budget for the employee influenza immunization program.

☐ Develop a program action plan using this checklist as a guide.

☐ Consider establishing an immunization goal of 100% of residents and 90% of staff.

☐ Schedule meetings with management and highlight the health and economic importance of an employee influenza immunization program.

June – July

☐ Meet with the influenza program team to decide what types of educational materials would be most appropriate for your facility.

☐ Work with the committee to develop a promotion and logistical plan for the program:
- Consider using rolling influenza vaccine carts that can be taken to each department, the cafeteria, grand rounds, etc.
- Make vaccine available during all shifts and to all departments.
- Plan a clinic "kick-off" event to generate excitement about getting vaccinated.
- Use a variety of mechanisms (e.g., flyers, posters, emails, newsletter articles, paycheck flyers, in-service training, etc.) to promote the influenza vaccination clinic.
- Offer incentives or prizes for those immunized (e.g., paid vacation days, cafeteria coupons, gift certificates, free parking spaces for a year, etc.). Consider rewarding groups with the highest vaccination rate (e.g., lunch at a restaurant of their choice).
- Consider special incentives for employees who typically resist immunization or for those who are getting the influenza vaccine for the first time.
- Create departmental competition and reward winners with a newsletter article and prizes.

☐ Gather educational materials about influenza and health care workers for the upcoming influenza season. Check the websites of the Association for Professionals in Infection Control and Epidemiology (APIC – **www.apic.org**), of the Centers for Disease Control and Prevention (CDC – **www.cdc.gov**) and **www.immunize.org** for materials that can be downloaded.

☐ Secure support from members of the leadership team. Ask them to take an active role in the encouragement of employee influenza immunization. Solicit testimonials from leaders who have been vaccinated in the past and plan to be vaccinated again.

☐ Order promotional materials (e.g., buttons, stickers) to hand out at clinics or units.

August

☐ Meet the committee to complete your plan for the employee influenza immunization program.

☐ Begin promotion via email, posters, flyers, newsletter articles and paycheck flyers. Use multilingual materials if appropriate.

☐ Confirm the timing of influenza vaccine delivery through the pharmacy.

☐ Provide training for additional nursing staff to administer influenza vaccine within their department.

September

- ☐ Arrange for the administrator and other members of leadership to be among the first immunized at the influenza vaccine clinic "kick-off." Encourage the administrator, department heads and key management staff to wear influenza shot stickers, pins, etc.
- ☐ Obtain the most recent Vaccine Information Sheet from the CDC website: **http://www.cdc.gov/vaccines/hcp/vis/index.html**
- ☐ Hold the clinic "kick-off" and begin immunizing employees.
- ☐ Take photos of leadership being immunized and publish the image in employee newsletters, post in the cafeteria or distribute via email.

October

- ☐ Continue promoting the employee influenza immunization program and continue vaccinating employees.
- ☐ Report to staff any early influenza activity in the community to encourage immunization.

November

- ☐ Monitor vaccination rates. Troubleshoot any problems and brainstorm ways to reach the employees who have not yet been immunized.
- ☐ Continue to promote and offer vaccinations.
- ☐ Use a newsletter article to announce which department has the highest rates of immunization. Remind staff that it is not too late to get vaccinated.

December

- ☐ Continue to promote and offer vaccinations.
- ☐ Begin critiquing program and identifying areas for improvement.
- ☐ Continue to track immunization rates.
- ☐ Develop preliminary estimates of vaccine orders and order quantities for next influenza season.

Employee Immunization Program

Elements of a successful vaccination program include:

- **Availability** to ensure the vaccine is available to all employees on all shifts
- **Education** using creative slogans and eye-catching designs to create educational materials about influenza and immunization
- **Incentives** to encourage participation with raffles

Plan Your Program (and include all departments)

Because the core immunization program does not change from year to year, infection control manages the planning and ensures a consistent influenza immunization program for its staff. Although the core immunization program remains unchanged from year to year, a creative approach to augment the existing program is crucial. This includes promoting the same materials with new handouts, newsletter and other promotional activities specific to the facility.

The program's success also depends on the support from departments such as nursing service, administration and nurse volunteers to administer influenza vaccinations throughout the season. Having leadership show support by being the first to be immunized and setting an example for the staff encourages staff to join in also.

Interdepartmental support can account for a large vaccinated employee population. Encourage the infection control department to partner with multiple other departments in the planning of the employee vaccination effort. Examples are:

- Rehabilitation services share responsibility with infection control for the coordination and operation for the "clinic"
- Nurses from all shifts volunteer to assist in the administration of the vaccine
- Purchasing department orders safety syringes
- The activities department, along with leadership, coordinates incentives
- Leadership acts as role models by being among the first to be immunized against influenza each year

Maintain Leadership Support

Leadership and infection control maintain the high level of support by providing ongoing reports of the influenza clinic's success at management meetings and via memo or email.

Promote the Program – *Consistently*

Use the same posters throughout the year to alert staff to the influenza vaccine clinics, creating an association between the posters and the vaccine clinics. Articles in the employee newsletter and/or a memo with paychecks or in the cafeteria will encourage immunization and update employees on rates of vaccination after the season is underway.

Use many highly visible and effective tactics to increase awareness about influenza and to encourage health care workers to be immunized.

- **Posters:** Brightly colored signs with innovative slogans posted in central areas where employees congregate (e.g., the cafeteria) and throughout the facility. The posters help raise awareness about the vaccine clinic, provide general information about influenza in a "did you know?" style and dispel common myths about immunization against influenza.
- **Handouts:** At the vaccine clinic, employees receive one-page handouts with key facts and figures about influenza and immunization.
- **Newsletter articles:** The employee newsletter publishes a series of articles before, during and after the influenza immunization program to communicate important immunization messages to all employees. The articles present projections about the next influenza season, information about the disease and immunization and employee immunization rates as the season progresses.
- **Vaccine Information Sheet:** The CDC produces this resource, which the clinic hands out to help answer employees' vaccine-related questions.

Make Vaccination Convenient

Employees are more likely to be immunized if it is convenient. Offer opportunities for employees to be vaccinated:

- A flu clinic is held for four, full days next to the cafeteria. Employees are offered raffle tickets for free coffee and free beverages at the cafeteria. After they are immunized, employees receive candy.
- Rolling carts help nurse volunteers vaccinate employees on each floor and in each department while they are working.
- Unit nurses and supervisors vaccinate their employees during night shifts and off hours.

Reach the Resistors

An important aspect of an employee influenza immunization program is its effort to determine why certain employees are hesitant to receive the vaccine. Certain people will probably never change their minds about immunization, but remember—it never hurts to ask.

Have infection control staff encourage the nurse vaccinators to use one-on-one counseling and to help counsel employees, especially those who are reluctant, of the importance and safety of influenza immunization. A key factor is dispelling myths about getting influenza from the vaccine. If the employee refuses, ensure he or she signs the declination statement provided in the toolkit.

Evaluate the Program

Have infection control staff monitor employee immunization rates from the first vaccine clinic throughout the season. Assessing the program on a continuous basis gives the nursing home an opportunity to redirect awareness efforts if the rates are lower than in previous years.

Campaign Flyers and Posters

On the following pages are handouts and posters to use at your facility to help promote your vaccination campaign.

Protect yourself and **your loved ones.**

DON'T WAIT. VACCINATE!

You can protect yourself and those around you by getting vaccinated. Vaccines reduce your chance of getting sick and spreading certain diseases.

Learn more at www.cdc.gov/vaccines.

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-15-91

Ten Tips for a Successful Vaccination Campaign at Your Facility

1. **Go to the head of the line.** Leadership goes first and sets a highly visible example. It's just the right thing to do.
2. **Give the shots for free (or at a very low cost).** A few dollars spent on flu vaccine now saves many more dollars in avoided absenteeism, serious complications and/or hospitalizations.
3. **Be factual.** Work to dispel vaccination myths. Make sure people know they can't get the flu from the shot (it contains inactivated virus), and they're protected, even if the strain that's "going around" doesn't exactly match the strain that's in the vaccination.
4. **Be firm.** "First, do no harm." Staff have an ethical obligation to protect themselves and the residents for whom they care. Very few people are truly contraindicated.
5. **Use blitz advertising.** We're talking flyers in mailboxes, posters in high-traffic, visual areas and reminders in the restrooms.
6. **Throw a party!** Celebrate health and wellness, autumn/winter, etc. Make it festive. Include food, music and maybe even door prizes. Little things mean the most!
7. **24/7 for stragglers.** Have a traveling vaccination cart for folks who can't make it to the party. All shifts. Every day.
8. **Make it competitive.** Recognize the wing (unit, shift, department, etc.) with the highest percentage vaccinated.
9. **Track it and report it.** Keep a paper log, an Excel spreadsheet or an expanded roster billing of who gets the shot, on what date, from what lot, etc. If the health department asks that you report rate of vaccination, do so.
10. **Share best practices.** If you are successful in your vaccination campaign, spread the news! Tell us, tell your peers in long-term care, tell everyone about how you managed it. We can all learn from your success.

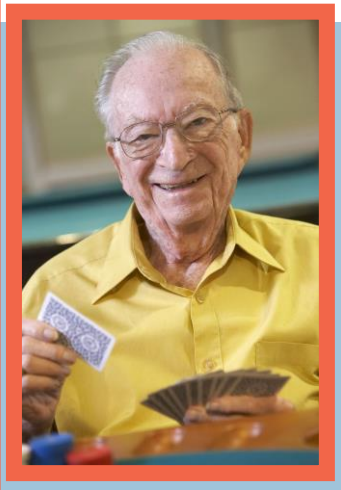
DON'T WAIT. VACCINATE!

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-15-92

Be good to you…
Don’t get the flu.



DON’T WAIT. VACCINATE!

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-15-93

“I got vaccinated, because **I can’t risk getting sick.”**

DON’T WAIT. VACCINATE!

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-15-94

“I do a lot to stay healthy, including getting vaccinated.”

DON’T WAIT. VACCINATE!

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-15-95

Protect Your Residents…
…Protect Yourself.

INFLUENZA FACTS

- The influenza shot cannot cause the flu.
- Influenza is the eighth leading cause of death among adults in the U.S.
- During a regular flu season, 90% of influenza-related deaths occur in people 65 and older.
- Influenza is a highly contagious disease that is spread by coughing, sneezing, direct physical contact and contact with objects that carry the virus (e.g., doorknobs, phones, etc.).
- Symptoms of influenza include fever, extreme fatigue, headache and body aches.
- You may not have symptoms and still be contagious.
- Immunization is highly effective in preventing influenza in healthy people under the age of 65.

It's That Time of Year Again

With influenza season just around the corner, now is the time to start thinking about getting immunized. The Centers for Disease Control and Prevention (CDC) recommends annual influenza immunization for health care workers who have direct contact with residents, but [Name of Facility] encourages all our employees to protect themselves against the flu.

In fact, this year's annual influenza immunization program goal is to vaccinate [XX]% of our staff.

Health care workers have a special obligation to protect residents by making sure we are immunized against influenza each year. Many of us come in contact with residents who have chronic illness and are at high risk for influenza-related complications. Health care workers can be key in causing or preventing influenza outbreaks in health care settings. Influenza vaccine effectiveness can vary widely but it is believed it was 50 to 60% effective in most years in preventing or minimizing flu.

Influenza immunization has a long record of safety, and you cannot get the flu from the inactivated influenza vaccine. To learn more about influenza and the safety of the vaccination, contact [Facility Contact Name] in the [Name of Department] department.

Free influenza vaccinations will be available here soon! To help reach our goal of vaccinating [XX]% of our staff, we are providing free influenza immunizations in October. To encourage participation, we will [Insert incentives, prize/ details about a department competition, etc.]!

It's That Time of Year Again!

Protect yourself and those around you from getting sick and get vaccinated.

WHEN: **[Date]**
[Time Frame]

WHERE: **[Location]**

[Provide any additional information.]

DON'T WAIT. VACCINATE!

Be good to you…

Don't get the flu.

[Facility Name] has officially started our flu campaign!

Protect yourself and those around you from getting sick at this year's "flu clinic."

THANK YOU!

DON'T WAIT. VACCINATE!

Sample Letter – Staff

The following is a sample letter for employees that NH administration might consider enclosing with paychecks just before a vaccination campaign. Details of the campaign (date, time, location) can be inserted.

Dear [Employee's Name],

Each year on average, vaccine-preventable influenza and pneumonia cause about 57,000 deaths in the United States, and during a regular flu season, about 90 percent of deaths occur in people 65 years and older—*despite the availability of vaccines*. About 50 to 80 percent of these deaths could be prevented with timely and widespread vaccination.

You can protect yourself and our nursing home residents from the flu and its complications by ensuring you are immunized each year. A flu vaccination will protect you from getting influenza and will prevent you from passing this serious illness to our most vulnerable residents. Getting immunized demonstrates your professional commitment to preserving the health of our residents.

For added protection, ensure your residents have received both their PCV13 and PPSV23 pneumococcal vaccinations.

Our goal is to increase influenza and pneumococcal immunizations to [XX] percent or better this year. If you have any questions, please contact [insert your name or your campaign contact's name].

Thank you, as always, for making a difference!

Sincerely,

Enclosure:

Sample Letter – Family

The following is a sample letter for residents' families that NH administration might consider mailing or handing out just before a vaccination campaign.

Dear [Family Member],

Each year on average, the flu and pneumonia cause about 57,000 deaths in the United States, and during a regular flu season, about 90 percent of deaths occur in people 65 years and older—*despite the availability of vaccines*. About 50 to 80 percent of these deaths could be prevented with timely and widespread vaccination.

You can protect your loved one from the flu and pneumonia by making sure you are immunized each year. Vaccinations protect you from getting sick and will prevent you from passing serious illness to our most vulnerable residents. Getting immunized against the flu and pneumococcal disease shows just how much you care about your loved one's health.

If you do become sick with a cold, a flu virus or any other contagious illness, we ask that you postpone your visits until you recover. Many of our residents are frail and are at risk of getting sick and suffering severe complications from contagious illnesses.

Ask your employer, family doctor or pharmacist or take a look at your health plan and find out about getting a flu shot and updating your pneumococcal vaccination status. It's simply the right thing to do—for your good health, for your loved one's safety and for protecting the health of all our residents at the nursing home.

Sincerely,

Enclosure:

Sample Letter – Medical Director

The following is a sample letter for the NH medical director or other physicians involved with your facility.

Dear Dr. [Name],

As you are no doubt aware, each year on average, vaccine-preventable influenza and pneumonia cause about 57,000 deaths in the United States, and during a regular flu season, about 90 percent of deaths occur in people 65 years and older—*despite the availability of vaccines*. About 50 to 80 percent of these deaths could be prevented with timely and widespread vaccination.

In an effort to improve efficiency and effectiveness, we have set a facility-wide immunization goal of [XX] percent or better among our residents and staff. We have also set the goal that 100% of our residents have current pneumococcal vaccination status. Enclosed is our guideline for immunization at [name of facility].

Achieving these goals will provide a safe environment for both residents and employees. We seek your support and ask that you encourage family members to get immunized as well.

Thank you, as always, for making a difference.

Sincerely,

Enclosure: Immunization guideline/policy

Sample Letter – Availability

The following is a sample letter to staff that NH administrators may consider mailing or handing out one month before a vaccination campaign.

Dear Employees,

This year, [Name of NH] has launched our annual employee influenza immunization program, with the goal of vaccinating [##] percent of our employees against influenza. Health care workers can be key in causing or preventing influenza outbreaks in health care settings.

[Consider spurring employees' competitive spirit by listing last year's vaccination rate or national average for the United State (according to the CDC, the national average is 59.3% among adults for influenza and 61.3% for pneumococcal) and encourage staff to beat the rate. Offer incentives for every X% above the facility or national average they achieve.]

We will hold free vaccination clinics next month for all employees. Details about dates and locations of these clinics will be available soon. [I, another administrator's name or campaign contact's name] will be happy to answer any questions you may have about influenza or the vaccine.

Together, we can meet our vaccination goal of [##] percent and help protect our residents, our families and ourselves by getting immunized against influenza.

I will be at the vaccination clinic next month to get my immunization. I hope to see you there!

Sincerely,

[Name of administrator]

Sample Influenza Immunization Guideline – with Standing Orders

The following is a sample guideline (policy or procedure) for influenza vaccination of residents, staff and volunteers. Nursing homes located in states with standing orders can adapt this guideline for use in their facilities.

Nursing Home Guideline for

Standing Order Influenza (Flu) Vaccination

of Residents, Staff and Volunteers

I. Guideline:

The Advisory Committee on Immunization Practices recommends vaccinating persons who are at high risk for serious complications from influenza, including those >6 months of age and older, including ALL residents of nursing homes. The Association for Professionals in Infection Control (APIC), the Centers for Disease and Control Prevention (CDC), the Immunization Action Coalition and the National Foundation for Infectious Diseases all recommend that health care workers be immunized as well, because they work in close contact with residents.

Recognizing the major impact and mortality of influenza disease on nursing home residents and the effectiveness of vaccines in reducing health care costs and preventing illnesses, hospitalizations and death, [Name of Facility] has adopted the following policy statements:

1. All facility residents, staff and volunteers should annually receive the influenza vaccine, unless there is a documented contraindication.

2. These vaccines may be administered by any appropriately qualified personnel who are following our facility procedures, without the need for an individual physician evaluation or order.

Every year, a log documenting how many people (residents, staff and volunteers) received the vaccine as well as the number who refused and did not receive the vaccination will be sent to [State Department of Health or another entity responsible for reporting immunization status of NH residents, staff and volunteers].

II. Administration Procedure:

A. Current and newly admitted residents, staff and volunteers will be offered the influenza vaccine from September of each year through the end of March the following year.

B. Each resident, staff and volunteer's immunization status will be determined prior to vaccination and will be documented in either the resident's medical record or staff/volunteer's immunization record.

C. Informed consent in the form of a discussion regarding risks and benefits of vaccination will occur prior to vaccination. (In the case of residents, this may be with their authorized representative, when appropriate. If signed consent is required according to state law, it would occur at this procedural step.)

D. Residents, staff and volunteers may refuse vaccination. Vaccination refusal and reasons why (e.g., allergy, contraindicated, does not want vaccine, etc.) should be documented by the facility.

E. Ensure the current year's influenza vaccine is used. Discard old vaccine.

F. Vaccine will be administered according to the Standing Order: Administrator 0.5ml IM of influenza vaccine to all residents, staff and volunteers who meet vaccination criteria. Any large muscle may be used as an injection site (e.g., deltoid or quadriceps).

G. Vaccine should not be administered to residents, staff or volunteers who are allergic to the vaccine or any of the vaccine's components.

H. Check body temperature before giving the vaccine. Any changes in baseline or anyone who is febrile (above baseline) or being treated for an infection will not receive the vaccine until he or she has recovered.

I. Document administration of the vaccine, including injection site, in the medical record (e.g., medication sheet, nurses' notes, immunization record, progress sheet) or staff/volunteer immunization record. Submit immunization information to state entity, as required.

J. The vaccine may be given at the same time or at any time before or after a dose of pneumococcal vaccine (PPSV23, PCV13). There are no minimal interval requirements between doses of the flu and the pneumococcal vaccine. If given at the same time as the pneumococcal, the influenza vaccine must be given in a separate body site, using a different syringe.

K. An epinephrine injection 1:1000 will be kept on hand for severe allergic reactions (i.e., anaphylaxis). Should anaphylaxis occur, a dose of 0.5cc epinephrine 1:1000 SC will be given, standing emergency treatment procedures followed and the event reported to the Vaccine Adverse Events Reporting System at 1-800-822-7967 or at www.vaers.org.

Administrator	Director of Nursing	Medical Director
Date	Date	Date

Note: The above sample guideline also applies to agency staff.

Sample Influenza Immunization Guideline – without Standing Orders

The following is a sample guideline (policy or procedure) for influenza vaccination of residents, staff and volunteers. Nursing homes located in states without standing orders can adapt this guideline for use in their facilities.

Nursing Home Guideline for

Influenza (Flu) Vaccination

of Residents, Staff and Volunteers

I. Guideline:

The Advisory Committee on Immunization Practices recommends vaccinating persons who are at high risk for serious complications from influenza, including those >6 months of age and older and ALL residents of nursing homes. The Association for Professionals in Infection Control (APIC), the Centers for Disease and Control Prevention (CDC), the Immunization Action Coalition and the National Foundation for Infectious Diseases all recommend that health care workers be immunized as well, because they work in close contact with residents.

Recognizing the major impact and mortality of influenza disease on nursing home residents and the effectiveness of vaccines in reducing health care costs and preventing illnesses, hospitalizations and death, [Name of Facility], with the advice of the covering physician/medical director, will yearly offer the influenza vaccine to all residents, staff and volunteers, unless contraindicated. Vaccination will be offered from September of each year through the end of March the following year.

Every year, a log documenting to whom the vaccine was offered and how many people (residents, staff and volunteers) received the vaccine as well as those who refused will be sent to [State Department of Health or another entity responsible for reporting immunization status of NH residents, staff and volunteers].

II. Administration Procedure:

A. Current and newly admitted residents, staff and volunteers will be offered the influenza vaccine from September of each year through the end of March the following year.

B. Each resident, staff and volunteer's immunization status will be determined prior to vaccination and will be documented in either the resident's medical record or staff/volunteer's immunization record.

C. Informed consent in the form of a discussion regarding risks and benefits of vaccination will occur prior to vaccination. (In the case of residents, this may be with their authorized representative, when appropriate. If signed consent is required according to state law, it would occur at this procedural step.)

D. Residents, staff and volunteers may refuse vaccination. Vaccination refusal and reasons why (e.g., allergy, contraindicated, does not want vaccine, etc.) should be documented by the facility.

E. An order from the resident's physician, nurse practitioner or physician assistant must be obtained. If difficult to obtain, an order from the medical director should be obtained to prevent delay in vaccine administration.

F. Ensure the current year's influenza vaccine is used. Discard old vaccine.

G. Ensure individual residents do not have contraindications, then administer the influenza vaccine as ordered.

H. Vaccine should not be administered to residents, staff or volunteers who are allergic to the vaccine or any of the vaccine's components.

I. Check body temperature before giving the vaccine. Any changes in baseline or anyone who is febrile (above baseline) or being treated for an infection will not receive the vaccine until he or she has recovered.

J. Document administration of the vaccine, including injection site, in the resident's medical record (e.g., medication sheet, nurses' notes, immunization record, progress sheet) or staff/volunteer's immunization record. Submit immunization information to state entity, as required.

K. The vaccine may be given at the same time or at any time before or after a dose of pneumococcal vaccine (PPSV23, PCV13). There are no minimal interval requirements between doses of the flu and pneumococcal vaccine. If given at the same time as the pneumococcal, the influenza vaccine must be given in a separate body site, using a different syringe.

L. An epinephrine injection 1:1000 will be kept on hand for severe allergic reactions (i.e., anaphylaxis). Should anaphylaxis occur, a dose of 0.5cc epinephrine 1:1000 SC will be given, standing emergency treatment procedures followed and the event reported to the Vaccine Adverse Events Reporting System at 1-800-822-7967 or at www.vaers.org.

Administrator	Director of Nursing	Medical Director
Date	Date	Date

Note: The above sample guideline also applies to agency staff.

Sample PPV Immunization Guideline – with Standing Orders

The following is a sample guideline (policy or procedure) for pneumococcal pneumonia vaccination (PPV) of residents. Nursing homes located in states with standing orders can adapt this guideline for use in their facilities.

Nursing Home Guideline for

Standing Order Pneumococcal Vaccination

for Residents

I. Guideline:

The Advisory Committee on Immunization Practices (ACIP) recommends vaccinating persons at high risk for serious complications from pneumococcal pneumonia, including those 65 years of age and older and all residents of nursing homes.

Recognizing the major impact and mortality of pneumococcal disease on nursing home residents and the effectiveness of vaccines in reducing health care costs and preventing illnesses, hospitalizations and death, [Name of Facility] has adopted the following policy statements:

1. All residents at our facility should receive the appropriate pneumococcal vaccine, if they are 65 years of age or older or if they are younger than 65 with underlying conditions that are associated with increased susceptibility to infection or increased risk for serious disease and its complications.

2. Vaccination with pneumococcal conjugate vaccine (PCV13) or pneumococcal polysaccharide vaccine (PPSV23) will follow Centers for Disease Control and Prevention (CDC) guidelines.

3. These vaccines may be administered by any appropriately qualified personnel who are following our facility procedures without the need for an individual physician evaluation or order.

Every year, a log documenting the number of residents who received the vaccine as well as the number who refused will be sent to [State Department of Health or another entity responsible for reporting immunization status of NH residents].

II. Administration Procedure:

A. Each resident's pneumococcal immunization status will be determined upon admission or soon afterwards and will be documented in the resident's medical record. Current residents will have their immunization status determined by reviewing available past and present medical records.

B. All residents with undocumented or unknown pneumococcal vaccination status will be offered the appropriate vaccine (PCV13 or PPSV23).

C. Informed consent in the form of a discussion regarding risks and benefits of vaccination will occur prior to vaccination. (This may be with the resident's authorized representative, when appropriate. If signed consent is required according to state law, it would occur at this procedural step.)

D. Residents may refuse vaccination. Vaccination refusal and reasons why (e.g., allergy, contraindicated, does not want vaccine, etc.) should be documented by the facility.

E. Check to ensure the current pneumococcal vaccine vials have not expired. Discard old vaccine.

F. Vaccine will be administered according to the Standing Order: Administrator 0.5ml IM or SC of pneumococcal vaccine (PCV13, PPSV23) to all residents who meet vaccination criteria. Any large muscle may be used as an injection site (e.g., deltoid, quadriceps).

G. Vaccine should not be administered to residents who are allergic to the vaccine or any of the vaccine's components.

H. Check resident's body temperature before giving the vaccine. Any resident who is febrile (above baseline) or being treated for an infection will not receive the vaccine until he or she has recovered.

I. Document administration of the vaccine, including injection site, in the medical record (e.g., medication sheet, nurses' notes, immunization record, progress sheet). Submit immunization information to state entity, as required.

J. The vaccine may be given at the same time or at any time before or after a dose of influenza vaccine. There are no minimal interval requirements between doses of the flu and pneumococcal vaccines. If given at the same time as the influenza vaccine, the pneumococcal vaccine must be given in a separate body site, using a different syringe.

K. An epinephrine injection 1:1000 will be kept on hand for severe allergic reactions (i.e., anaphylaxis). Should anaphylaxis occur, a dose of 0.5cc epinephrine 1:1000 SC will be given, standing emergency treatment procedures followed and the event reported to the Vaccine Adverse Events Reporting System at 1-800-822-7967 or at www.vaers.org.

Administrator	Director of Nursing	Medical Director
Date	Date	Date

Sample PPV Immunization Guideline – without Standing Orders

The following is a sample guideline (policy or procedure) for pneumococcal pneumonia vaccination (PPV) of residents. Nursing homes located in states without standing orders can adapt this guideline for use in their facilities.

Nursing Home Guideline for

Pneumococcal Vaccination

for Residents

I. Guideline:

The Advisory Committee on Immunization Practices (ACIP) recommends vaccinating persons at high risk for serious complications from pneumococcal pneumonia, including those 65 years of age and older and all residents of nursing homes.

[Name of Facility], with the advice of the covering physician/medical director, will offer the pneumococcal vaccination to all residents who meet immunization criteria and who cannot provide documentation of a previous vaccination. Given there is no risk in re-vaccination, those who are unsure or do not know their vaccination status will be offered the most appropriate vaccine (pneumococcal conjugate vaccine [PCV13] or pneumococcal polysaccharide vaccine [PPSV23]) per CDC guidelines.

Every year, a log documenting to whom the vaccine was offered and how many residents received the vaccine as well as the number who refused will be sent to [State Department of Health or another entity responsible for reporting immunization status of NH residents].

II. Administration Procedure:

A. Each resident's pneumococcal immunization status will be determined upon admission or soon afterwards and will be documented in the resident's medical record. Current residents will have their immunization status determined by reviewing available past and present medical records.

B. All residents without a documented history of immunization or with unknown pneumococcal vaccination status will be offered the appropriate vaccine (PCV13 or PPSV23) per CDC guidelines.

C. Informed consent in the form of a discussion regarding risks and benefits of vaccination will occur prior to vaccination. (This may be with the resident's authorized representative, when appropriate. If signed consent is required according to state law, it would occur at this procedural step.)

D. Residents may refuse vaccination. Vaccination refusal and reasons why (e.g., allergy, contraindicated, does not want vaccine, etc.) should be documented by the facility.

E. An order from the resident's physician, nurse practitioner or physician assistant must be obtained. If difficult to obtain, an order from the medical director should be obtained to prevent delay in vaccine administration.

F. Check to ensure the current pneumococcal vaccine vials have not expired. Discard old vaccine.

G. Make sure the resident does not have contraindications, then administer the recommended dosage for the pneumococcal vaccine (PPSV23, PCV13) as ordered.

H. Vaccine should not be administered to residents who are allergic to the vaccine or any of the vaccine's components.

I. Check resident's body temperature before giving the vaccine. Any resident who is febrile (above baseline) or being treated for an infection will not receive the vaccine until he or she has recovered.

J. Document administration of the vaccine, including injection site, in the medical record (e.g., medication sheet, nurses' notes, immunization record, progress sheet). Submit immunization information to state entity, as required.

K. The vaccine may be given at the same time or at any time before or after a dose of influenza vaccine. There are no minimal interval requirements between doses of the flu and pneumococcal vaccines. If given at the same time as the influenza vaccine, the pneumococcal vaccine must be given in a separate body site, using a different syringe.

L. An epinephrine injection 1:1000 will be kept on hand for severe allergic reactions (i.e., anaphylaxis). Should anaphylaxis occur, a dose of 0.5cc epinephrine 1:1000 SC will be given, standing emergency treatment procedures followed and the event reported to the Vaccine Adverse Events Reporting System at 1-800-822-7967 or at www.vaers.org.

Administrator	Director of Nursing	Medical Director
Date	Date	Date

Sample Adverse Reaction Guideline – with Standing Orders

The following is a sample guideline (also known as a policy or procedure) for emergency and non-emergency treatment of residents, staff or volunteers if immunization leads to adverse reactions. Nursing homes located in states with standing orders can adapt this guideline for use in their facilities.

Nursing Home Guideline for

Adverse Reaction to Vaccination

following Immunization*

Because of possible hypersensitivity to vaccine components, persons administering biologic products or serum should be prepared to recognize and treat allergic reactions, including anaphylaxis. The necessary medications, equipment and staff competent to maintain the patency of the airway and to manage cardiovascular collapse must be immediately available. Vaccine providers must be in close proximity to a telephone, so emergency medical personnel can be summoned immediately, if necessary. Whenever possible, residents should be observed for an allergic reaction for 15 to 20 minutes after receiving immunization(s).

I. Treatment for Syncope

Syncope may occur after vaccination. Personnel should be aware of pre-syncopal manifestations and take appropriate measures to prevent injuries if weakness, dizziness or loss of consciousness occurs. The relatively rapid onset of syncope in most cases suggests that having residents sit or lie down for 15 minutes after immunization could avert many syncopal episodes and secondary injuries.

A. If resident becomes pale and/or feels faint:
- Have resident lie flat or sit with head between knees for several minutes
- Observe resident until asymptomatic
- Notify attending physician of incident

B. If resident loses consciousness but has a steady pulse, normal blood pressure and respirations:
- Place resident flat on back with feet elevated
- Have resident rest in a quiet area and observe for 30 minutes after regaining consciousness
- Notify attending physician of incident
- Continue to monitor vital signs
- If resident regains consciousness within three minutes, observe for at least 30 minutes
- CALL FOR AMBULANCE if resident remains unconscious for more than three minutes

C. If vital signs are abnormal (e.g., decreased blood pressure, decreased/increased/irregular pulse):
    - Place resident flat on back with feet elevated
    - Administer IV fluids, if indicated and you have a physician's order
    - Notify attending physician (if you have not already done so)
    - Continue to monitor vital signs:
        - If normal, observe for at least 30 minutes
        - If abnormal, CALL FOR AMBULANCE

II. Treatment for Local Reaction

Soreness of the arm is the most common side effect associated with vaccination and affects 30-50% of individuals vaccinated. However, this rarely interferes with the individual's ability to conduct daily activities and subsides in about 24 to 48 hours. Symptoms of local reaction may include mild pain, redness, pruritus or swelling at the injection site. If a local reaction occurs:

- Apply ice to site
- Administer PO acetaminophen or ibuprofen, if indicated
- Administer PO diphenhydramine or hydroxyzine, if indicated
- Notify attending physician of incident
- If symptoms subside, observe for at least 30 minutes

III. Treatment for Mild to Severe Symptoms of Anaphylaxis

Symptoms of mild systemic anaphylaxis may include pruritus, erythema, urticarial and angioedema. If systemic anaphylaxis occurs:

- Administer epinephrine 1:1000 0.5cc SC. Epinephrine may be repeated every five to 15 minutes up to a maximum number of three times. If the resident's condition improves with this management and remains stable, a physician may also recommend the resident take an oral antihistamine for the next 24 hours.
- Notify attending physician of incident
- If symptoms subside, observe for at least 30 minutes
- If symptoms do not subside after appropriate administration of medications, CALL FOR AMBULANCE

IV. Treatment for More Severe or Potentially Life-Threatening Systemic Anaphylaxis

Symptoms of more severe or potentially life-threatening systemic anaphylaxis may include severe bronchospasm, laryngeal edema, shock and cardiovascular collapse.

- CALL FOR AMBULANCE
- Maintenance of the airway and oxygen administration should be instituted immediately
- If resident is wheezing, has generalized hives or is in respiratory distress, have him or her sit

- If resident has low blood pressure or pulse is weak, have resident lie down on back and elevate feet
- If cardiac and/or respirator arrest occur, start CPR
- Administer epinephrine 1:1000 0.5cc SC. Epinephrine may be repeated every five to 15 minutes up to a maximum number of three times
- Notify attending physician of incident

V. Document All Adverse Events

A. Document administration of all emergency medications according to established MAR procedures
B. Document vital signs and other relevant clinical information and all adverse events in the resident's medial record
C. Report adverse event(s) to the Vaccine Adverse Event Reporting System 1-800-822-7967 or at www.vaers.hhs.gov

VI. Emergency Equipment and Supplies to Have on Hand

A. Sphygmomanometer and stethoscope
B. Emergency medications:
   - Epinephrine 1:1000
   - Diphenhydramine hydrochloride – PO and injectable
C. Syringes:
   - 1cc syringes with 5/8- to 3/4-inch needles (for epinephrine injection)
   - 1 and 2cc syringes with 1- to 1 ½-inch needles (for diphenhydramine injection)
D. Oral airways (small, medium, large)
E. Alcohol wipes and bandages
F. Paper and pen

Administrator	Director of Nursing	Medical Director
Date	Date	Date

**Adapted from the Massachusetts Department of Public Health: Massachusetts Immunization Program*

Sample Admission Checklist

The following checklist specifies risk factors for contracting influenza and pneumonia and the contraindications and possible outcomes of vaccination among residents.

Admission Checklist
Influenza and Pneumococcal Immunization*

Resident:	Room#:
Assessed by:	Date:
Influenza Vaccine (given October – March)	**Pneumococcal Vaccine (offered year-round)**
Considered high risk due to: ☐ Every nursing home resident is at risk for influenza infection	Considered high risk due to (*check all that apply*): ☐ Resident is 65 years of age or older and does not have documentation of previous immunization for pneumococcal pneumonia in past 5 years. ☐ Resident is 65 years of age or older and has documented only one vaccination type (PCV13 or PPSV23) in past 5 years. ☐ Resident is under the age of 65 and has a history of heart disease, lung disease, end stage renal disease, weakened immune system, diabetes or other chronic medical condition. **REFER TO VIS FOR PCV13 AND PPSV23.** ☐ Resident is none of the above. **STOP HERE.**
Contraindications	**Contraindications**
Vaccine not indicated to do (*check all that apply*): ☐ Serious (anaphylactic) allergy to thimerosal (preservative in contact lens solution) ☐ Previous adverse reaction to influenza vaccine ☐ Physician order not to vaccinate at this time ☐ Acute febrile illness ☐ Other **IF CONTRAINDICATED, STOP HERE.**	Vaccine not indicated to do (*check all that apply*): ☐ Hypersensitivity to any component of the vaccine ☐ Previous adverse reaction to PCV13 or PPSV23 ☐ Physician order not to vaccinate at this time ☐ Febrile respiratory illness or other active infection ☐ Other **IF CONTRAINDICATED, STOP HERE.**
Outcome	**Outcome**
☐ Vaccine indicated but not administered, because resident declined. Why? _____ _____ ☐ Vaccine indicated and administered	☐ Vaccine indicated but not administered, because resident declined. Why? _____ _____ ☐ Vaccine indicated and administered

**Adapted from the CMS/CDC Standing Orders Project*

Sample Tracking Form

This tracking form can be used to identify residents and staff who did not receive a vaccine for any reason. The form can be completed on a daily basis from the beginning to the end of flu season or for any desired time period. It is recommended to keep two separate forms: One for residents and one for staff.

Date	Name	Reason for Not Receiving Vaccine	Plan	Initials	Date Vaccine Was Received *(indicate PCV13 or PPSV23)*	Initials

Sample Employee Declination

The following is a sample employee declination form, adapted from the New York City department of health, to be presented to those staff members who choose to decline the vaccine. It is recommended to provide all educational materials to these individuals and make them aware that the vaccine is available.

I, _____, have been offered the influenza vaccine by my
(Print your name here.)
employer, _____, and even though I have no contraindications
(Print facility name here.)
to receiving the influenza vaccine, I wish to refuse it. I understand that I can change my mind at a later time and accept vaccination, if the vaccine is available.

In declining an influenza vaccine, I understand the following:

- ☐ The vaccine does not cause influenza illness.
- ☐ The influenza vaccine takes about two weeks to reach maximum protection. Therefore, the vaccine may not decrease my risk of contracting influenza disease until that time.
- ☐ A mild to moderate influenza illness that I may experience can be life-threatening to vulnerable residents in my care.
- ☐ Influenza strains change every year, and an immunization received in prior years does not usually provide immunity to this year's influenza disease.
- ☐ My decision may increase the risk of influenza disease to residents, my family, myself and the community.

I have read and fully understand this declination form.

_____ _____

Signature Date

_____

Signature of Witness

Sample Vaccination Log

This is a sample tool for documenting administration of flu and pneumonia vaccines. The vaccination log can be used to keep a running list of residents who are vaccinated, the date of vaccination and whether the appropriate Vaccination Information Statement (VIS) sheet was given. This log may be able to be used for roster billing.

Vaccination Log – Residents or Staff

#	Last Name	First Name	Influenza Vaccine Date	PCV13 Date	PPSV23 Date	VIS Sheet Given/ Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Sample Vaccination Tally Sheet

The vaccine tally sheet can be used to track the number of residents and staff who have received each vaccination, the numbers for whom the vaccines were contraindicated and the numbers who refused. This tally sheet can be completed on a monthly basis, at the end of flu season or for any desired time period.

Vaccination Tally Sheet

Instructions:

This tool allows for separate tallying for resident and staff vaccination data. Specify below the time period for which data are being summarized. Because resident census fluctuates, choose a method for determining census that you will be able to use consistently. Examples include the midpoint census, the average census or the highest census during the chosen data collection time period. Examples of contraindications: Allergic to vaccine, hospice patient, medical contraindications

Time period: _____ to _____

Facility name: _____ Floor/wing: _____

Recorder name: _____

RESIDENTS

Total resident census	
Total residents receiving flu vaccine	
Total residents for whom flu vaccine contraindicated and/or resident refused	
Total residents receiving pneumonia vaccine	
Total residents previously vaccinated for pneumonia	
Total residents for whom pneumonia vaccine contraindicated and/or resident refused	

STAFF

Total number of staff	
Total staff receiving flu vaccine	
Total staff receiving pneumonia vaccine	

Vaccine Administration Record for Adults

Resident name: _____

Birth date: _____

Number: _____

Before administering any vaccines, give the resident copies of all pertinent Vaccine Information Statements (VIS) and make sure he or she understands the risks and benefits of the vaccine(s). Always provide or update the resident's personal record card.

Vaccine	Type of Vaccine[1]	Date given (mo/day/yr)	Funding Source (F,S,P)[2]	Site[3]	Vaccine		Vaccine Information Statement (VIS)		Vaccinator[6] (Initials & Title)
					Lot#	Mfr.	Date on VIS[4]	Date Given[4]	
Tetanus, Diptheria, Pertussis (e.g., Td, Tdap) Give IM.[6]									
Hepatitis A[7] (e.g., HepB, HepA-HepB) Give IM.[6]									
Hepatitis B[7] (e.g., HepB, HepA-HepB) Give IM.[6]									
Human papillomavirus (HPV2, HPV4) Give IM.[6]									
Measles, Mumps, Rubella (MMR) Give SC.[6]									
Varicella (VAR) Give SC.[6]									
Pneumococcal (PPSV23, PCV13) Give SC or IM.[6]									
Meningococcal (e.g., MCV4, MPSV4) Give MCV4 IM.[6] Give MPSV4 SC.[6]									

See page 2 to record influenza, zoster and other vaccines (e.g., travel vaccines).

How to Complete This Record

1. Record the generic abbreviation (e.g., Tdap) or the trade name for each vaccine (see table at right).
2. Record the funding source of the vaccine given as F (federal), S (state) or P (private).
3. Record the site where vaccine was administered as RA (right arm), LA (left arm), RT (right thigh), LT (left thigh) or IN (intranasal).
4. Record the publication date of each VIS and the date the VIS was given to the resident.
5. To meet the space constraints of this form and federal requirements for documentation, your facility may want to keep a reference list of vaccinators that includes their initials and titles.
6. IM = intramuscular; SC = subcutaneous.
7. For combination vaccines, fill in a row for each antigen in the combination.

Abbreviation	Trade Name (Manufacturer)
Tdap	Adacel (sanofi pasteur), Boostrix (GlaxoSmithKline [GSK])
Td	Decavac (sanofi pasteur), generic (MA Biological Labs)
HepA	Havrix (GSK); Vaqta (Merck)
HepB	Engerix-B (GSK), Recombivax HB (Merck)
HepA-HepB	Twinrix (GSK)
HPV2	Cervarix (GSK)
HPV4	Gardasil (Merck)
MMR	MMRII (Merck)
VAR	Varivax (Merck)
PCV13	Prevnar 13 (Wyeth/Pfizer)
PPSV23	Pneumovax 23 (Merck)
MCV4	Menactra (sanofi pasteur); Menveo (Novartis)
MPSV4	Menomune (sanofi pasteur)

Vaccine Administration Record for Adults

Resident name: _____

Birth date: _____

Number: _____

Before administering any vaccines, give the resident copies of all pertinent Vaccine Information Statements (VIS) and make sure he or she understands the risks and benefits of the vaccine(s). Always provide or update the resident's personal record card.

Vaccine	Type of Vaccine[1]	Date given (mo/day/yr)	Funding Source (F,S,P)[2]	Site[3]	Vaccine		Vaccine Information Statement (VIS)		Vaccinator[5] (Initials & Title)
					Lot#	Mfr.	Date on VIS[4]	Date Given[4]	
Influenza (e.g., TIV, inactivated; live attenuated)									
Zoster (ZOS) Give SC.[6]									
Other									

See page 1 to record Tdap/Td, hepatitis A, hepatitis B, HPV, MMR, varicella, pneumococcal and meningococcal vaccines.

How to Complete This Record

1. Record the generic abbreviation (e.g., Tdap) or the trade name for each vaccine (see table at right).
2. Record the funding source of the vaccine given as F (federal), S (state) or P (private).
3. Record the site where vaccine was administered as RA (right arm), LA (left arm), RT (right thigh), LT (left thigh) or IN (intranasal).
4. Record the publication date of each VIS and the date the VIS was given to the resident.
5. To meet the space constraints of this form and federal requirements for documentation, your facility may want to keep a reference list of vaccinators that includes their initials and titles.
6. SC = subcutaneous

Abbreviation	Trade Name (Manufacturer)
IIV3 or IIV4 (Trivalent or quadrivalent inactivated vaccine)	Afluria (CSL Biotherapies); Agriflu (Novartis); Fluarix (GSK); FluLaval (GSK); Fluvirin (Novartis); Fluzone (sanofi pasteur); Fluzone High-Dose (sanofi pasteur)
ZOS (shingles)	Zostavax (Merck)

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam and American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-17-216

Supplies You May Need at an Adult Immunization Clinic

Vaccines*

- ☐ Hepatitis A
- ☐ Hepatitis B
- ☐ Hep A-Hep B (Twinrix)
- ☐ Human papillomavirus (HPV)
- ☐ Influenza, quadrivalent injectable (IIV4) *(in season)*
- ☐ Measles, mumps, rubella (MMR)
- ☐ Meningococcal
- ☐ Pneumococcal conjugate vaccine (PCV13)
- ☐ Pneumococcal polysaccharide vaccine (PPSV23)
- ☐ Tetanus-diphtheria, adult (Td)
- ☐ Tetanus, diphtheria and pertussis (Tdap)

Frozen

- ☐ Varicella
- ☐ Zoster (shingles)

Note: Do not place diluents in container with dry ice.

For instructions on how to pack and transport vaccines, go to www.immunize.org/catg.d/p3049.pdf

Vaccine Supplies*

- ☐ 2 "Sharps" disposal containers
- ☐ 1 box of 3 cc syringes
- ☐ 22-25g needles
  - ☐ ½" ☐ 1" ☐ 1½" ☐ 2"
- ☐ 1 box of medical gloves
- ☐ Alcohol wipes
- ☐ Spot bandages
- ☐ Rectangular bandages
- ☐ 1" gauze pads or cotton balls
- ☐ Thermometer and probe covers
- ☐ Certified calibrated thermometer for vaccine cooler
- ☐ Paper towels
- ☐ Bleach solution in spray bottle

Vaccine Information Statements (VISs)*

- ☐ Hepatitis A
- ☐ Hepatitis B
- ☐ HPV (Cervarix or Gardasil)
- ☐ Influenza (QIV)
- ☐ Meningococcal
- ☐ MMR
- ☐ PCV13
- ☐ PPSV23
- ☐ Td/Tdap
- ☐ Varicella
- ☐ Zoster (shingles)

Emergency Supplies*

- ☐ Standing orders for medical emergencies†
- ☐ Aqueous epinephrine USP (1:1000), in ampoules, vials of solution or prefilled syringes (including Epi-Pens)
- ☐ Diphenhydramine (e.g., Benadryl), injectable (50 mg/mL solution) and oral (12.5 mg/5 mL suspension) and 25 mg or 50 mg capsules or tablets
- ☐ 1 and 3 cc syringes with 1", 1 ½" and 2" needles for epinephrine or diphenhydramine
- ☐ Alcohol wipes
- ☐ Tourniquet
- ☐ Adult airways (small, medium and large)
- ☐ Adult-size pocket mask with one-way valve
- ☐ Oxygen (if available)
- ☐ Stethoscope
- ☐ Sphygmomanometer (adult and extra large cuffs)
- ☐ Tongue depressors
- ☐ Flashlight with extra batteries *(for examination of mouth and throat)*
- ☐ Wristwatch with ability to count seconds
- ☐ Cell phone or access to onsite phone

Immunization Clinic Documentation

- ☐ Immunization clinic standing orders and protocols†
- ☐ Vaccination administration records† *(i.e., medical records)*
- ☐ Billing forms
- ☐ *Screening Questionnaire for Adult Immunization*†
- ☐ *Summary of Recommendations for Adult Immunization*†
- ☐ *Adult Immunization Record Cards* for patients‡
- ☐ Release of Information forms
- ☐ *Notification of Vaccination Letter*† (to send to primary clinic)
- ☐ Vaccine Adverse Events Reporting (VAERS) forms
- ☐ List of clinics, phone numbers and other referral sources
- ☐ *Supplies You May Need at a Community Adult Immunization Clinic*† (this form)
- ☐ Schedules including dates and times of future clinics

Miscellaneous Office Supplies

- ☐ Calendar
- ☐ Pens, black and red
- ☐ Files
- ☐ Scissors
- ☐ Pad of paper
- ☐ Stapler/staples
- ☐ Rubber bands
- ☐ Tape
- ☐ Paper clips

*Always check the expiration dates of all vaccines, medications and medical supplies before using. In addition, be sure to check that you have the most current versions of the VISs. To obtain VISs, visit www.immunize.org/vis.

†These materials are available at www.immunize.org/printmaterials.

‡These items are available for purchase at www.immunize.org/shop.

Technical content reviewed by the Centers for Disease Control and Prevention, May 2010.

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific Quality Health

This material prepared by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam and American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy. 11SOW-MPQHF-AS-C2-17-213

This material originated from Quality Partners of Rhode Island, the QIO for Rhode Island, and has been reproduced and distributed by Mountain-Pacific Quality Health, the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Montana, Wyoming, Alaska, Hawaii and the U.S. Pacific Territories of Guam and American Samoa and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents presented do not necessarily reflect CMS policy.
11SOW-MPQHF-AS-C2-17-211