



**Arizona Healthcare-Associated Infections (HAI) Program
2014 Healthcare Worker Influenza Vaccination Toolkit**



(This page is left intentionally blank)

Introduction

The Healthcare Worker Influenza Vaccination Toolkit was developed by the Arizona Healthcare-Associated Infections (HAI) Advisory Committee's Strategies for Training, Education, and Prevention (STEP) Subcommittee in 2014. Facilities and healthcare workers are encouraged to incorporate this toolkit, with other professional resources, to assist current healthcare worker vaccination campaigns and efforts. We hope you find this toolkit useful in your ongoing influenza vaccination efforts!

Contents:

- Universal Influenza Vaccination for Arizona Healthcare Workers letter of recommendation from Arizona Department of Health Services**
 - * Deliver this letter to your C-suite and administration, in order to gain support of healthcare worker influenza vaccination campaigns and efforts
- Influenza Vaccination of Healthcare Workers Survey Summary—Arizona 2014**
 - * Use this data to support the need for ongoing efforts among Arizona healthcare facilities, in order to meet minimum standards for healthcare worker influenza vaccination rates
- “Flu Facts and How Do Vaccines Work” educational pages**
 - * Print and distribute these pages to healthcare workers, in order to address and dispel common myths and misconceptions about the influenza vaccine
- Healthcare worker influenza promotional flyers**
 - * Print and post in high traffic and easily viewable areas, in order to increase the awareness and impact of healthcare worker influenza vaccination
- “I got my flu shot. Did you?” one inch printable sticker template**
 - * Print and distribute to healthcare staff that receive their influenza vaccination, in order to recognize and empower vaccinated healthcare workers within your facility
- References and Resources**
 - * Utilize these resources, in order to initiate or expand your current vaccination campaign and policies



Acknowledgements

The objectives of Arizona's Strategies for Training, Education, and Prevention (STEP) Subcommittee are to evaluate current HAI prevention strategies utilized by the Arizona healthcare facilities and create toolkits for healthcare providers (including hospitals, long-term care facilities, assisted living facilities, dialysis centers, and ambulatory surgery centers) that will incorporate current HAI prevention, evidence, guidelines, and best practices related to infection control. In turn, these toolkits will assist in facilitating education and training about HAIs and prevention to applicable persons and healthcare disciplines.

The HAI Advisory Committee deems that the Healthcare Worker Influenza Vaccination Toolkit reflects the best available evidence and practices to support healthcare worker influenza vaccination campaigns.

The STEP Subcommittee would like to acknowledge the following partners who assisted in the development of this toolkit:

- HAI Advisory Committee
- HAI End-Stage Renal Disease (ESRD) Subcommittee
- HAI Long-Term Care Subcommittee
- Arizona Department of Health Services
- Arizona Immunization Program Office
- Maricopa County Department of Public Health
- Pima County Health Department
- The Arizona Partnership for Immunization
- Arizona State Office of Rural Health Program
- Arizona Hospital and Healthcare Association
- Health Services Advisory Group
- Phoenix Children's Hospital
- Scottsdale Healthcare
- GlaxoSmithKline
- Sanofi Pasteur
- Phoenix VA Health Care System
- CareFusion Infection Prevention





Division of Public Health Services

*Office of the Assistant Director
Public Health Preparedness Services*

150 N. 18th Avenue, Suite 100
Phoenix, Arizona 85007
(602) 364-3860
(602) 364-3266 FAX
Internet: www.azdhs.gov

JANICE K. BREWER, GOVERNOR
WILL HUMBLE, DIRECTOR

August 1, 2014

Recommendation: Universal Influenza Vaccination for Arizona Health Care Workers

Every year, Arizona's health care facilities fight a running battle against influenza. They keep children breathing, adults from developing complications and enough staff to handle the surge in patient care. These efforts are undermined by the inconsistent vaccination rate of health care workers, and it is time for this to change.

Who benefits from health care worker vaccination?

Patients: Mandatory staff vaccination reduces influenza transmission in health care facilities and patient mortality.

Staff: Higher vaccination rates reduce employee illnesses, even in the face of increased occupational exposure to influenza.

Institutions: Facilities that implement a mandatory vaccination policy dramatically reduce both their employee absenteeism and the costs of outbreak management.

Communities: Complete vaccination of a health care system exemplifies effective preventive health and reduces the morbidity of influenza in a community.

The Arizona Department of Health Services (ADHS) strongly recommend the universal influenza vaccination of health care workers in Arizona. There is no law to mandate vaccination; each facility is thus urged to reassess the strength of its vaccination policy and to implement one that best protects its patients, staff, institution and community. The alternative infection control method requiring continual mask use for unvaccinated workers is often unpalatable for staff and patients alike.

Please contact the Healthcare-Associated Infections Program (602-364-3676) for questions or resource assistance.

A handwritten signature in black ink, appearing to read "Lisa Villarroel". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lisa Villarroel, M.D., M.P.H.
Medical Director
Bureau of Epidemiology and Disease Control Services

Influenza Vaccination of Healthcare Workers Survey- Arizona 2014 Summary

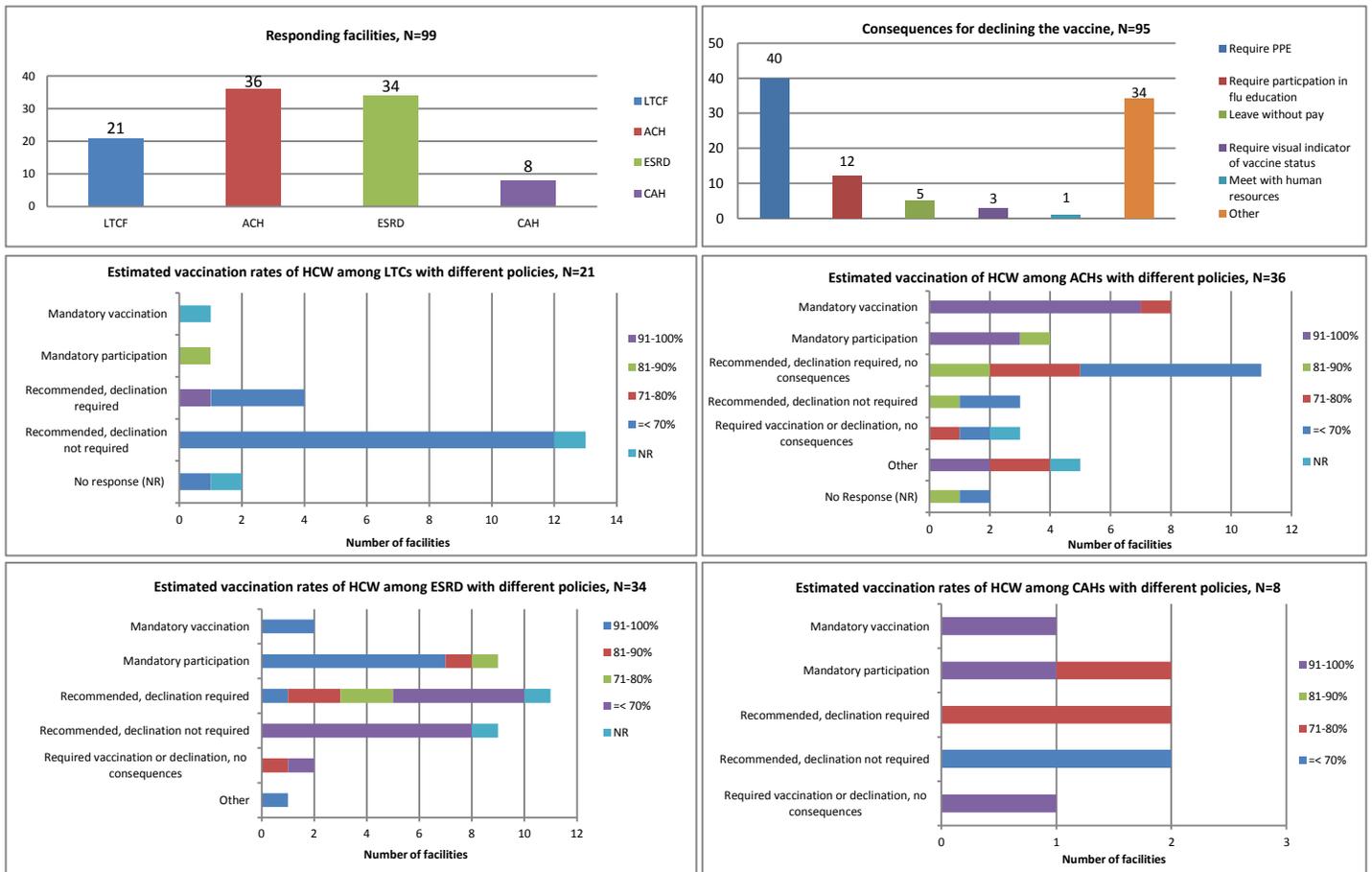
Seasonal influenza is a major contributor to morbidity and mortality each year and affects thousands. Indirect flu cost for hospitalizations and outpatient visits costs businesses approximately \$10.4 billion annually for adults (CDC, 2013). Influenza vaccination of healthcare workers (HCWs) plays a major role in reducing influenza-related illness among healthcare providers and their patients (CDC, 2013). Influenza transmission and outbreaks have been documented in all types of healthcare settings. However, the current national HCW influenza vaccination rate of 72% remains well below the HHS Healthy People 2020 target for seasonal influenza vaccination in healthcare personnel of 90%. The Arizona Healthcare-Associated Infections (HAI) Advisory Committee conducted a survey of healthcare facilities to:

- Determine current practices on influenza vaccination of healthcare workers in various healthcare settings in the state
- Assess healthcare facilities' current policies
- Identify types of documentation required and accepted for declining the vaccine
- Estimate current facility vaccination rates

A link to an anonymous electronic Survey Monkey survey was e-mailed to 378 facilities representing various healthcare settings throughout Arizona which included 184 long-term care (LTC), 62 acute care hospitals (ACH), 117 dialysis facilities (ESRD), and 15 critical access hospitals (CAH). The survey contained 13 questions, with built-in skip patterns and remained open for a total of 24 days to allow adequate time for facilities to answer the questions. Survey limitations include:

- Self-report bias, the data may be affected by the information available to the individual answering the questions; the information collected was not verified against any external sources
- 99 (26%) of the 378 healthcare facilities receiving the survey responded, so the findings may not be representative of all facilities in Arizona

Key Findings

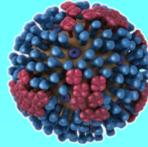


Conclusion

With fewer than 30% of responding facilities estimating that they have achieved the Healthy People 2020 target for seasonal vaccination in healthcare personnel, the survey results show a strong need for changes in influenza vaccination education policies or motivation among the HCW population. Mandatory vaccination programs successfully increase vaccination status in healthcare settings (CDC, 2013), but very few responding facilities have a mandatory influenza vaccination requirement. A majority of the participating facilities have few or no consequences for declining the influenza vaccination which may contribute to lower vaccinations rates in the facilities because there are no repercussions.

The survey shows a strong need for intervention in regards to influenza vaccination among Arizona HCWs. We recommend that healthcare facilities incorporate this summary as well as CDC recommendations and guidance concerning HCW and PPE use during influenza season in their HCW influenza campaign to educate and support their efforts. In response to the survey, the Healthcare-Associated Infections Advisory Committee has developed a healthcare worker influenza vaccination toolkit to address these needs. The toolkit will provide important educational material, a checklist on how to use the toolkit, guidance on vaccination campaigns, and related resources for a facility's healthcare team. The Arizona Department of Health Services supports the implementation of mandatory vaccination policies in healthcare facilities to increase the vaccination coverage of HCW's, increase cost savings for healthcare facilities, and in turn, provide improved health outcomes for Arizonans.

FLU FACTS



Influenza (Flu) Facts

- ✓ **Influenza (the flu) can be a serious disease.** Influenza can lead to hospitalization and even death. Anyone can get sick from the flu.
- ✓ **People with flu can spread it to others.** Influenza viruses are spread mainly by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are up to about 6 feet away or possibly be inhaled into the lungs. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth or nose.
- ✓ **Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick.** That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick. Some persons can be infected with the flu virus but have no symptoms. During this time, those persons may still spread the virus to others.
- ✓ **Some people, such as older adults, pregnant women, and very young children as well as people with certain long-term medical conditions are at high risk of serious complications from the flu.** These medical conditions include chronic lung diseases, such as asthma and chronic obstructive pulmonary disease (COPD), diabetes, heart disease, neurologic conditions and pregnancy.
- ✓ **High risk contacts and healthcare workers.** Since healthcare workers may care for or live with people at high risk for influenza-related complications, it is especially important for them to get vaccinated annually.
- ✓ **Annual vaccination is important.** Since influenza is unpredictable, flu viruses are constantly changing and immunity from vaccination declines over time. The most effective strategy of influenza prevention is annual vaccination.
- ✓ **CDC recommends an annual flu vaccine as the first and best way to protect against influenza.** This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season.

Flu Vaccine Facts

- ✓ **The seasonal flu vaccine protects against the influenza viruses that research indicates will be most common during the upcoming season.** This year's traditional flu vaccines (called trivalent vaccines) are made to protect against three strains, an influenza A (H1N1), and influenza A (H3N2), and an influenza B virus. Additionally, some vaccines (called "quadrivalent" vaccines), can also protect against a second strain of influenza B virus.
- ✓ **Flu vaccines CANNOT cause the flu.** Flu vaccines that are administered with a needle are currently made in one of two ways:
 - a) flu vaccine viruses that have been 'inactivated' and are therefore not infectious, or
 - b) with no flu viruses at all (which is the case for recombinant influenza vaccine).

The nasal spray flu vaccine does contain live viruses. However, the viruses are attenuated (weakened), and therefore cannot cause flu illness. The weakened viruses are cold-adapted, which means they are designed to only cause infection at the cooler temperatures found within the nose. The viruses cannot infect the lungs or other areas where warmer temperatures exist.

- ✓ **Flu vaccines are safe.** Serious problems from the flu vaccine are very rare. The most common side effect that a person is likely to experience is either soreness where the injection was given, or runny nose in the case of nasal spray. These side effects are generally mild and usually go away after a day or two. Visit Influenza Vaccine Safety for more information at www.cdc.gov/flu/protect/vaccine/vaccinesafety.htm.

Visit the following CDC website for more information:

www.cdc.gov/flu/healthcareworkers.htm

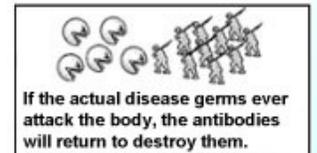
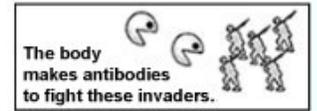
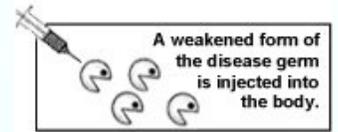


Protect your patients, your family and yourself by getting your flu vaccine today.

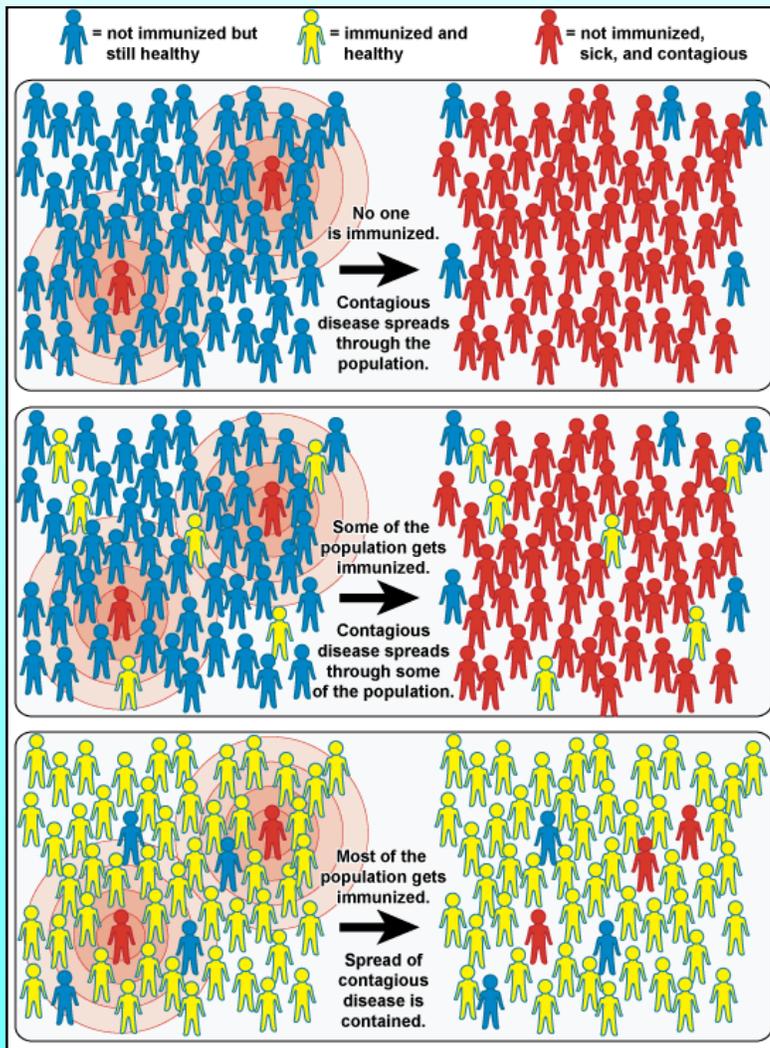
How Do Vaccines Work?



- The immune system recognizes germs that enter the body as "foreign invaders" (called antigens) and produces proteins called antibodies to fight them.
- Vaccines contain the same antigens (or parts of antigens) that cause diseases. But the antigens in vaccines are either killed, or weakened to the point that they don't cause disease.
- Antigens, however, are strong enough to make the immune system produce antibodies that lead to immunity.
- A vaccine is a safer substitute than an individual's exposure to a disease. The individual gets protection without having to get sick.
- Through vaccination, individuals can develop immunity without suffering from the actual diseases that vaccines prevent.



Courtesy:
Centers for Disease Control and Prevention



Courtesy: National Institute of Allergy and Infectious Diseases

Community Immunity ("Herd" Immunity)

Vaccines can prevent outbreaks of disease and save lives. When a critical portion of a community is immunized against a contagious disease, it is called 'herd immunity' or community immunity. When this happens, disease rarely occurs because most members of the community are protected against that disease and there is little opportunity for an outbreak even if disease is introduced into the community. Even those who are too young or not eligible for certain vaccines—such as young infants, severely immunocompromised individuals—are protected because most other people around them are immune and the spread of contagious disease doesn't occur.

- In the illustration to the left, the top box depicts a community in which no one is immunized and an outbreak occurs.
- In the middle box, some of the population is immunized but not enough to confer community immunity.
- In the bottom box, a critical portion of the population is immunized, protecting most community members.

The principle of community immunity applies to control of a variety of contagious diseases, including influenza, measles, mumps, rotavirus, and pneumococcal disease.

For more information please visit:

www.cdc.gov/vaccines/vac-gen/howvdpd.htm

www.niaid.nih.gov

WILL YOU HELP SAVE MY LIFE?



FLU
FLU
FLU
FLU
FLU

YOU CARE FOR ME. NOW PROTECT ME. GET YOUR FLU VACCINE.

Stop the flu from spreading. Annual flu deaths range from 3,000 to 49,000 per season in the US.

Protect your patients, your family and yourself by getting your flu vaccine today.

care protect vaccinate **CARE PROTECT VACCINATE** care protect vaccinate



LOCATE: Flu.gov or WhyImmunize.org

WILL YOU HELP SAVE MY LIFE?



FLU VACCINE

YOU CARE FOR ME. NOW PROTECT ME. GET YOUR FLU VACCINE.

Stop the flu from spreading. Annual flu deaths range from 3,000 to 49,000 per season in the US.

Protect your patients, your family and yourself by getting your flu vaccine today.

care protect vaccinate **CARE PROTECT VACCINATE** care protect vaccinate



LOCATE: Flu.gov or WhyImmunize.org

WILL YOU HELP SAVE MY LIFE?



FLU VACCINE

YOU CARE FOR ME. NOW PROTECT ME. GET YOUR FLU VACCINE.

Stop the flu from spreading. Annual flu deaths range from 3,000 to 49,000 per season in the US.

Protect your patients, your family and yourself by getting your flu vaccine today.

care protect vaccinate CARE PROTECT VACCINATE care protect vaccinate



LOCATE: Flu.gov or WhyImmunize.org

**I got my flu
shot.
Did you?**

References and Resources

Center for Disease Control and Prevention (CDC):

Seasonal Influenza (Flu)

www.cdc.gov/flu/

Seasonal Influenza: Flu Basics

www.cdc.gov/flu/about/disease/index.htm

Information for Health Professionals

www.cdc.gov/flu/professionals/index.htm

MMWR- Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)-United States, 2014–15 Influenza Season

www.cdc.gov/mmwr/preview/mmwrhtml/mm6332a3.htm

Influenza Training

www.cdc.gov/flu/professionals/training/index.htm

Influenza Infection Control in Health Care Facilities

www.cdc.gov/flu/professionals/infectioncontrol/index.htm

Seasonal Influenza (Flu)-Free Resources

www.cdc.gov/flu/freeresources/index.htm

Seasonal Influenza (Flu)-Information for Businesses & Employers

www.cdc.gov/flu/business/

Vaccines and Immunizations-Why Are Childhood Vaccines So Important?

www.cdc.gov/vaccines/vac-gen/howvpd.htm

Influenza Vaccination of Health-Care Personnel

www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm

National Institute of Allergy and Infectious Diseases

Community Immunity ("Herd" Immunity)

www.niaid.nih.gov/topics/Pages/communityImmunity.aspx

Association for Professionals in Infection Control and Epidemiology (APIC)

Healthcare personnel immunization

www.apic.org/Professional-Practice/Practice-Resources/Healthcare-Immunization

The Joint Commission

Influenza information

www.jointcommission.org/topics/hai_influenza.aspx

Providing a Safer Environment for Health Care Personnel and Patients Through Influenza Vaccination-Strategies from Research and Practice

www.jointcommission.org/assets/1/18/flu_monograph.pdf

Strategies for Improving Health Care Personnel Influenza Vaccination Rates

www.jointcommission.org/topics/hai_influenza.aspx

U.S. Department of Health and Human Services (HHS)

HHS Prevention Strategies-Health Care-Associated Infections

www.health.gov/hai/prevent_hai.asp

The Journal of the American Medical Association

Effectiveness and Cost-Benefit of Influenza Vaccination of Healthy Working Adults

jama.jamanetwork.com/article.aspx?articleid=193139