



**Arizona Healthcare-Associated Infections (HAI) Program
2015 Healthcare Worker Influenza Vaccination Toolkit**



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Introduction:

The Healthcare Worker Influenza Vaccination Toolkit was updated by the Strategies for Training, Education, and Prevention (STEP) Subcommittee of the Healthcare-Associated Infections (HAI) Advisory Committee in 2015. 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
- Educational influenza 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 is to evaluate current HAI prevention strategies utilized by Arizona healthcare facilities. The subcommittee is also responsible for creating 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. 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





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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

Are healthcare workers vaccinated at your facility?

In 2015, Arizona reported higher healthcare worker (HCW) influenza vaccination rates largely due to a multi-faceted approach. However, the majority of facilities did not reach the 90% or greater HCW seasonal influenza vaccination target set by Healthy People 2020.

BACKGROUND

Seasonal influenza is a major contributor to morbidity and mortality each year, affecting thousands of people and costing billions of dollars annually¹. Influenza vaccination of healthcare workers (HCWs) plays a major role in reducing influenza-related illness among healthcare providers and their patients². However, the current national HCW influenza vaccination rate of 75% remains well below the HHS Healthy People 2020 target of 90%³. HHS recommends the following strategies as ways to increase influenza vaccination rates within healthcare facilities: implementing a mandatory participation/vaccination policy, requiring proof of vaccination, receiving administrative support, and providing onsite vaccinations and education⁴. In 2014, the Arizona HAI Advisory Committee decided to focus on influenza vaccination strategies that less than 70% of facilities reported to increase vaccination rates.

METHODS

The Arizona Healthcare-Associated Infections (HAI) Advisory Committee conducted a survey in various healthcare settings in the state from March 23, 2015-June 8, 2015 asking about current:

- facility HCW influenza vaccination rate estimates
- policies and strategies for influenza vaccination of HCWs

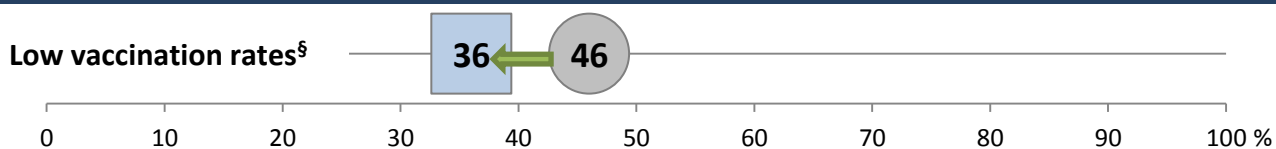
A link to an anonymous electronic Survey Monkey survey was e-mailed to 420 facilities including 65 acute care hospitals (ACH), 15 critical access hospitals (CAH), 117 dialysis facilities (ESRD), 147 long-term care (LTC), and 76 ambulatory surgical centers (ASC). One person was asked to respond for each facility.

For comparative analyses, data from the 2014 Arizona Healthcare Influenza Vaccination Survey was used. As a continuation of 2014 efforts, vaccination strategies that were reported at a rate of less than 70% were targeted.

More AZ facilities reported high HCW influenza vaccination rates in 2015 ■ than in 2014 ● ...



and fewer facilities reported low HCW influenza vaccination rates.



^αSelf-reported proportion of facilities with ≥91% of HCWs vaccinated against influenza

[§]Self-reported proportion of facilities with ≤70% of HCWs vaccinated against influenza

1. Molinari, N. (2007). The annual impact of seasonal influenza in the US: Measuring disease burden and costs. *Vaccine*, 25(27), 5086-96. Retrieved July 16, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/17544181>

2. CDC. (2015, June 11). Influenza Vaccination Information for Health Care Workers. Retrieved July 16, 2015, from <http://www.cdc.gov/flu/healthcareworkers.htm>

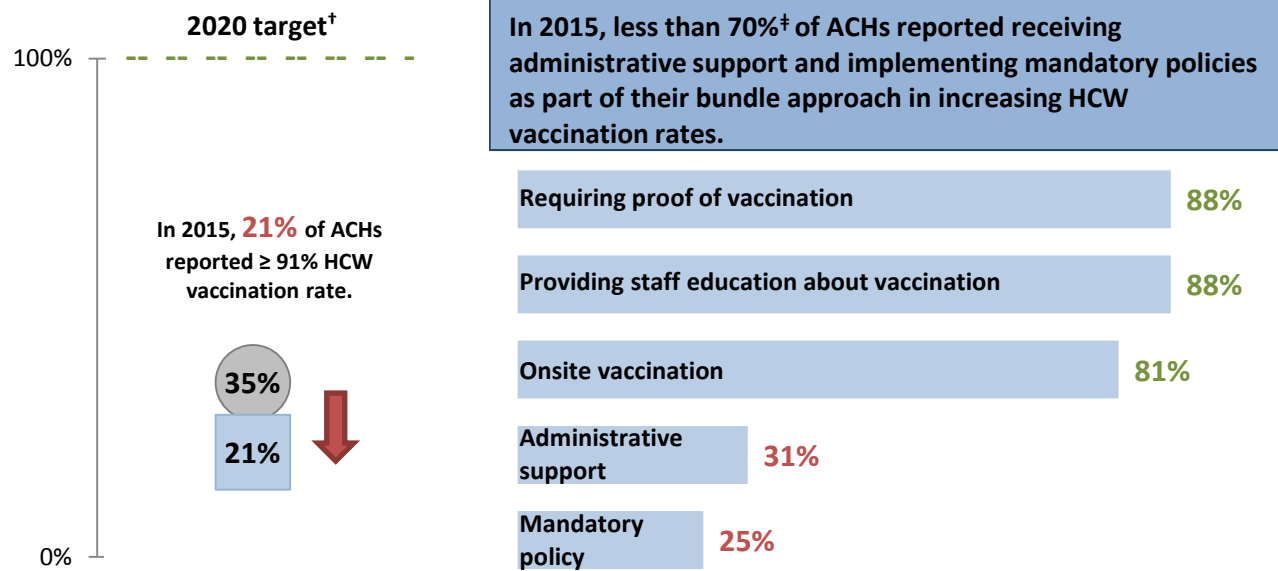
3. HHS. (n.d.). Immunization and Infectious Diseases. Retrieved July 16, 2015, from <http://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>

4. HHS. (n.d.). Recommendations on Strategies to Achieve the Healthy People 2020 Annual Influenza Vaccine Coverage Goal for Health Care Personnel. Retrieved August 6, 2015, from http://www.hhs.gov/nvpo/nvac/influenza_subgroup_final_report.pdf

ACH (Acute care hospitals)

- 2015 participation rate: 25% (n=16)
- 2014 participation rate: 58% (n=36)

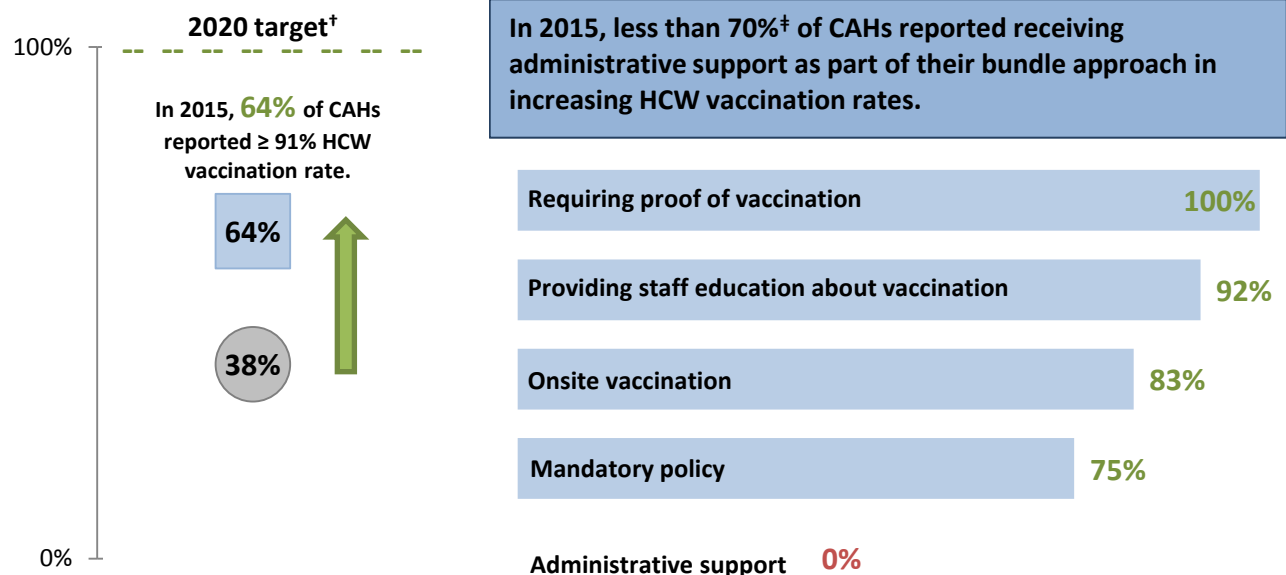
HCW influenza vaccination rates **decreased** from 2014 ● to 2015 ■ .



CAH (Critical access hospitals)

- 2015 participation rate: 80% (n=12)
- 2014 participation rate: 53% (n=8)

HCW influenza vaccination rates **increased** from 2014 ● to 2015 ■ .



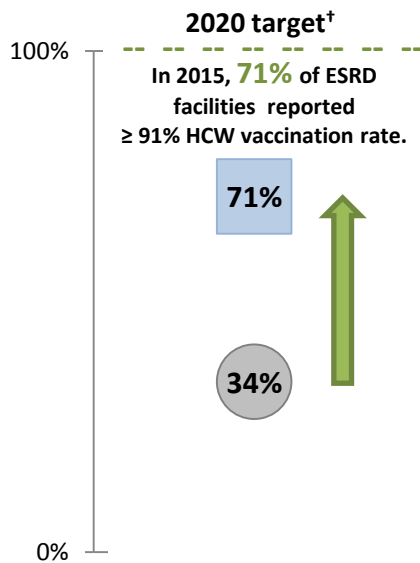
[†]Healthy People 2020 target: 100% of facilities reporting $\geq 91\%$ of HCWs vaccinated against influenza

[‡] Refer to the methods section for more information on defining vaccination strategies for future focus.

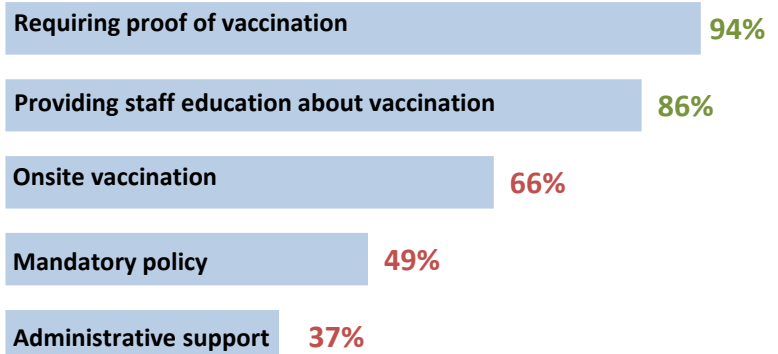
ESRD (End stage renal disease facilities)

- 2015 participation rate: 30% (n=35)
- 2014 participation rate: 29% (n=34)

HCW influenza vaccination rates **increased** from 2014 ● to 2015 ■.



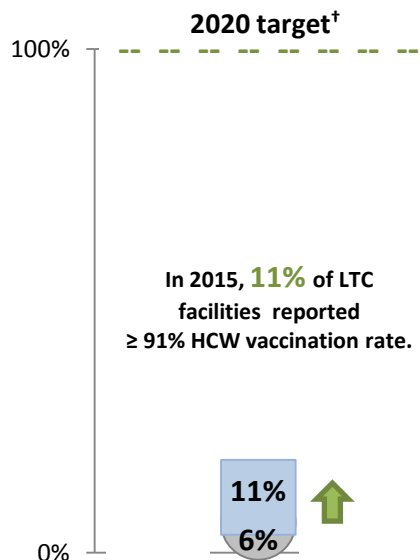
In 2015, less than 70%[‡] of ESRD facilities reported implementing onsite vaccination, mandatory policies, and administrative support as part of their bundle approach in increasing HCW vaccination rates.



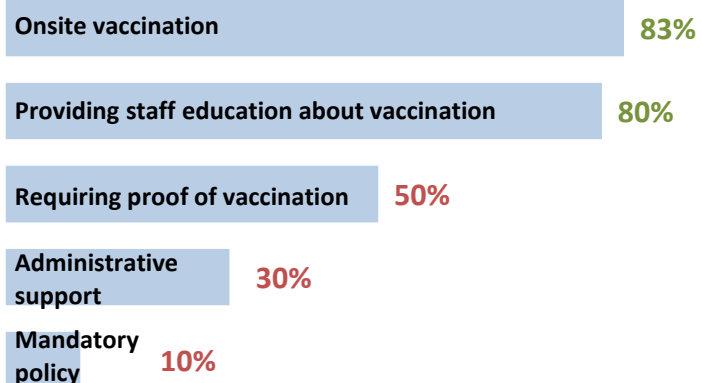
LTC (Long term care facilities)

- 2015 participation rate: 20% (n=30)
- 2014 participation rate: 11% (n=21)

HCW influenza vaccination rates **increased** from 2014 ● to 2015 ■.



In 2015, less than 70%[‡] of LTC facilities reported requiring proof of vaccination, receiving administrative support, and implementing mandatory policies as part of their bundle approach in increasing HCW vaccination rates.



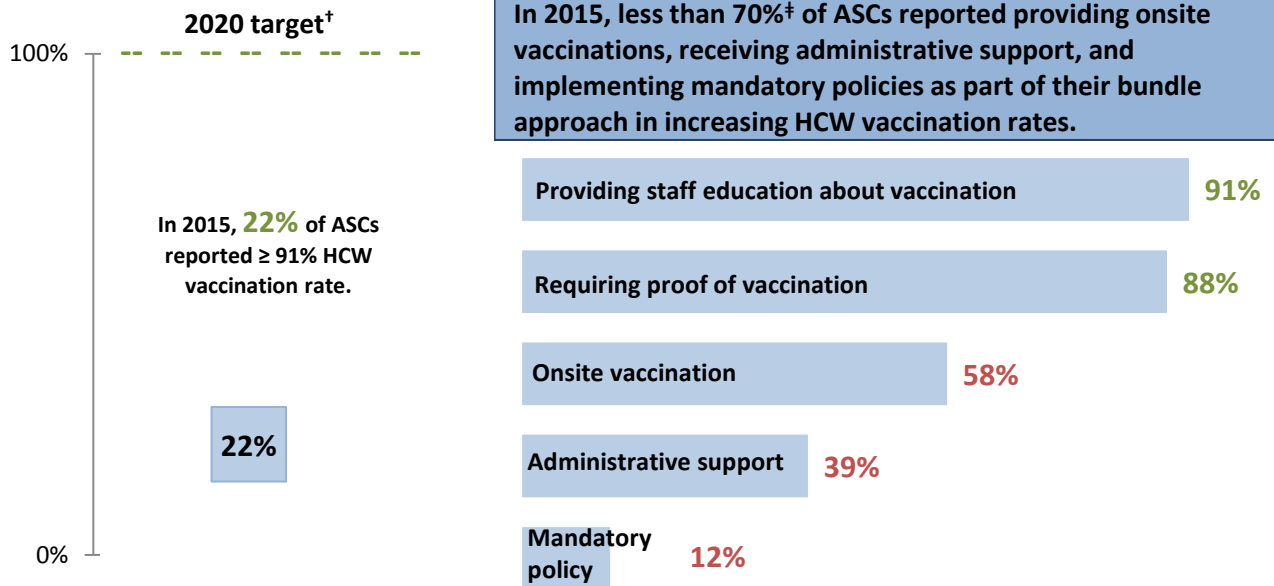
[†]Healthy People 2020 target: 100% of facilities reporting ≥91% of HCWs vaccinated against influenza

[‡] Refer to the methods section for more information on defining vaccination strategies for future focus.

ASC (Ambulatory surgical centers)

■ 2015 participation rate: 43% (n=33)
● 2014 No data available

2015 ■ was the first year ASCs participated in this survey.



[†]**Healthy People 2020 target:** 100% of facilities reporting $\geq 91\%$ of HCWs vaccinated against influenza

[‡] Refer to the methods section for more information on defining vaccination strategies for future focus.

KEY FINDINGS

- In 2015, **fewer than 40%** of all responding facilities reported achieving the **90% or greater HCW seasonal influenza vaccination** target set by Healthy People 2020.
- Healthcare facilities that implemented a multi-faceted approach of **mandatory vaccination policies, requiring proof of vaccination, and offering on-site vaccinations** reported **higher HCW influenza vaccination rates**.
- **One-third** of facilities reported receiving **administrative support** for implementing mandatory vaccination programs.

SURVEY LIMITATIONS

Findings may not be representative of all facilities in Arizona due to:

- a 30% survey response rate
- a decrease in acute care hospital participation
- self-reported data
- possible duplicate responses from multiple staff at the same facility

The HAI program, in conjunction with [professional medical societies](#), and the CDC supports the implementation of mandatory influenza vaccination programs to reach 90% HCW vaccination rates. Additional guidance about vaccination campaigns and resources can be found in the ADHS toolkit.

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.
- ✓ **Flu vaccine effectiveness can vary season to season.** However an annual flu vaccination is still the best tool currently available to protect you against the flu and its potentially serious complications. Flu vaccination keeps you healthy as well as protects those around you who may be more vulnerable to serious flu illness.



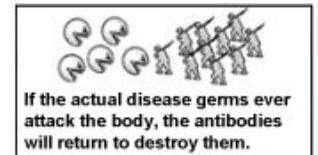
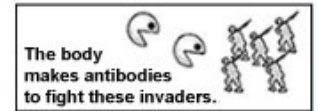
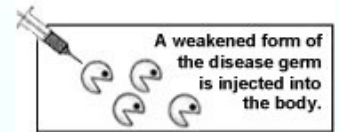
Visit the following CDC website for more information:
www.cdc.gov/flu/healthcareworkers.htm

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

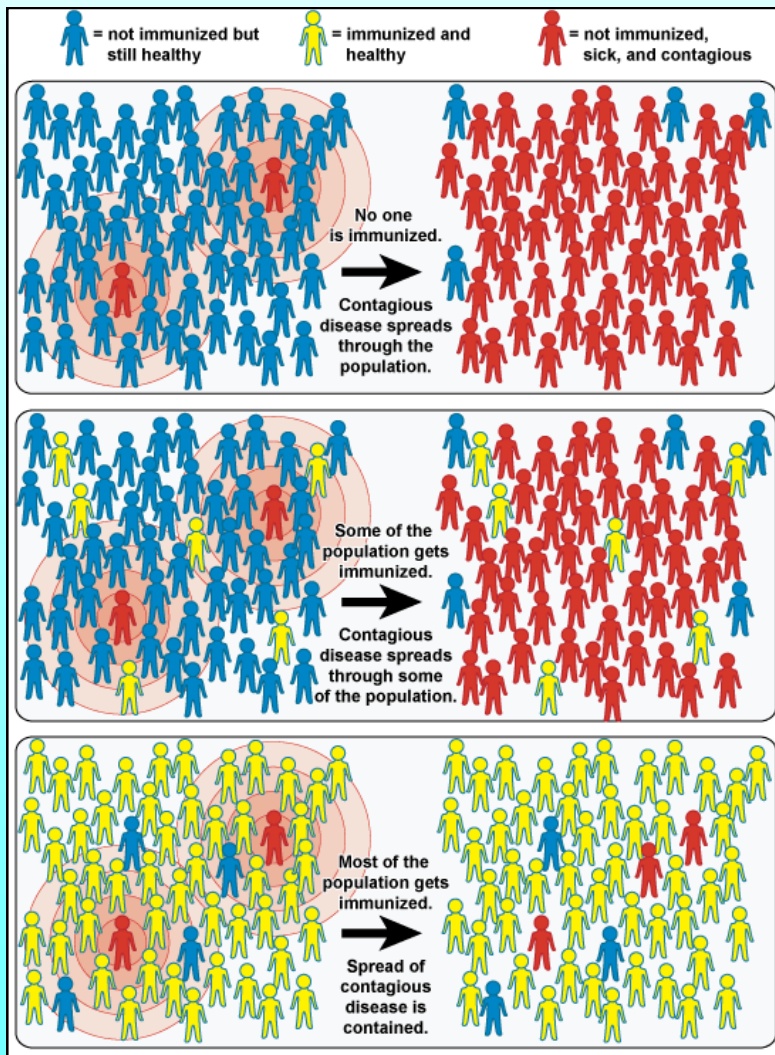
How Do Vaccines Work?



- 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/howvpd.htm
www.niaid.nih.gov

Flu Season Is Here

Get Vaccinated Today

Who should get the vaccine?

EVERYONE 6 MONTHS AND OLDER

Everyone **6 MONTHS OF AGE AND OLDER** should get the flu vaccine. Seasonal flu vaccines have a very good safety track record.



PEOPLE AT HIGH RISK

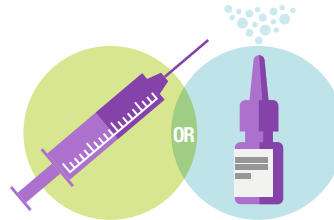
It is especially **IMPORTANT TO GET THE VACCINE IF YOU, SOMEONE YOU LIVE WITH, OR SOMEONE YOU CARE FOR IS AT HIGH RISK** of complications from the flu.

- Children & Infants
- Pregnant Women
- Seniors
- People with Disabilities
- People with Health Conditions
- Travelers & People Living Abroad

Can I get the flu from the vaccine?

NO, YOU CAN'T GET THE FLU

NO, YOU CAN'T GET THE FLU from the flu vaccine. The flu vaccine protects you from the flu, not the common cold. But you may experience some side effects.



MILD REACTIONS

MILD REACTIONS such as soreness, headaches, and fever are common side effects of the flu vaccine.



How should I get the vaccine?

There are **TWO TYPES** of vaccine, the flu shot and the nasal spray. Both protect against the same virus strains.

FLU SHOT



NASAL SPRAY



Made with inactivated (killed) flu virus



Made with weakened live flu virus



Given by needle



Given with a mist sprayed in your nose



Approved for use in healthy people older than 6 months and people with chronic health conditions



Approved for healthy people between the ages of 2 and 49, except pregnant women

When should I get the vaccine?



Get your flu shot or spray **TODAY**. Flu season usually peaks in January or February, but it can occur as late as May. **EARLY IMMUNIZATION IS THE MOST EFFECTIVE**, but it is not too late to get the vaccine in December, January or beyond.

Where can I get the vaccine?

Visit **FLU.GOV** and use the **FLU VACCINE FINDER**.

Flu Vaccine Finder

Find flu clinics near you

Everyone six months of age and older needs a flu vaccine.

Enter Zip Code

GO

powered by HealthMap

VISIT FLU.GOV

SHARE THIS WIDGET



the **benefits** of **flu vaccination** 2013-2014

The estimated number of influenza-associated **illnesses prevented** by flu vaccination during the 2013-2014 season:

7.2 million



enough people to form
a line from Maine to Oregon

The estimated number of flu-associated **medical visits prevented** by vaccination during the 2013-2014 season:

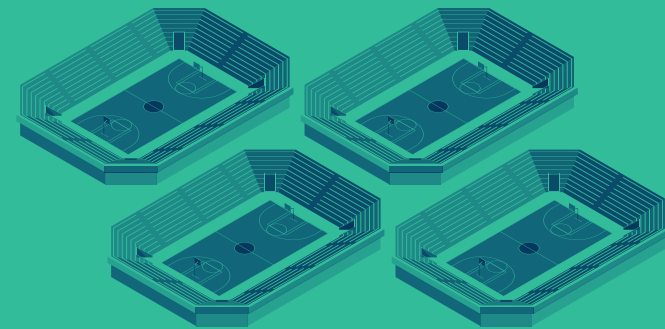
3.1 million



more than the population
of the city of Chicago

The estimated number of flu **hospitalizations prevented** during the 2013-2014 season:

90,000



enough to fill Madison Square
Garden **more than 4 times**

get **vaccinated**

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

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LOCATE: Flu.gov or WhyImmunize.org

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

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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, 2015-16 Influenza Season

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.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

A Toolkit for Long-Term Care Employers

<http://www.cdc.gov/flu/toolkit/long-term-care/>

CDC foundation business pulse-Flu prevention

<http://www.cdcfoundation.org/businesspulse/flu-prevention-infographic>

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