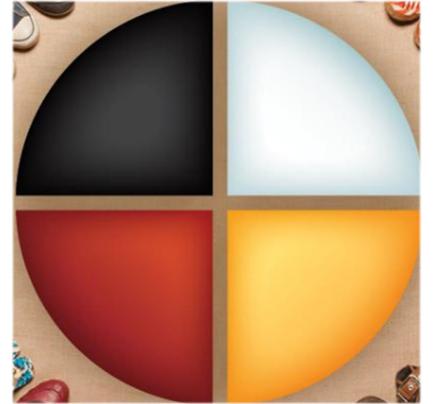


# **What CHRs Should Know Protecting the Community from Influenza**

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# ***What you should know about flu viruses***

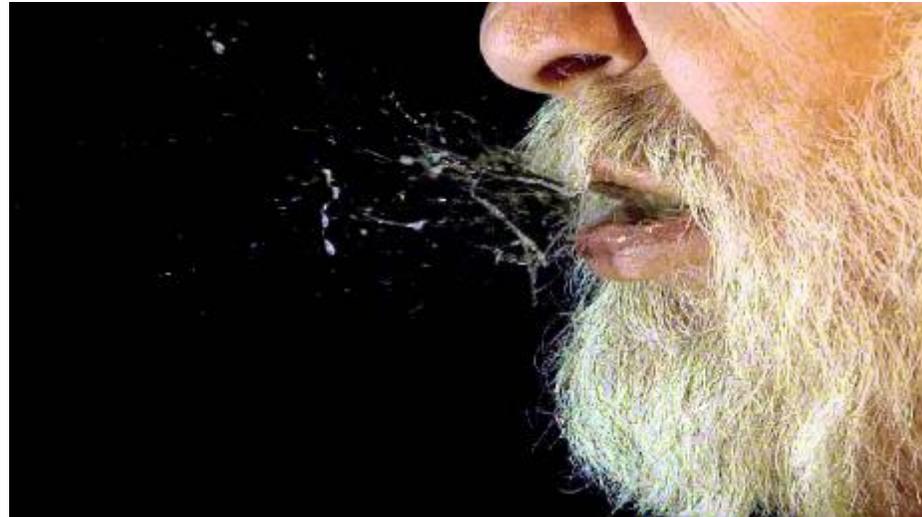
# What is influenza?

- Caused by influenza viruses
- Infects the nose, throat, and lungs
- Usually causes mild to severe illness, but can also lead to death
  - Leading cause of pneumonia
- Contagious (can catch from other people and can give it to other people)
- Best prevented by the flu vaccination



# How is the flu spread?

- Mainly spread by droplets when people cough, sneeze, or talk
- Can catch by touching your nose, eyes, or mouth after you have touched something with flu viruses on it
- Can pass flu viruses onto someone else even when you don't have symptoms





# How serious is the flu?

- Up to 49,000 deaths each year in the U.S.
- 90% of deaths occur in people 65 years and older
- Average of 200,000 people hospitalized each year due to flu-associated respiratory and heart conditions



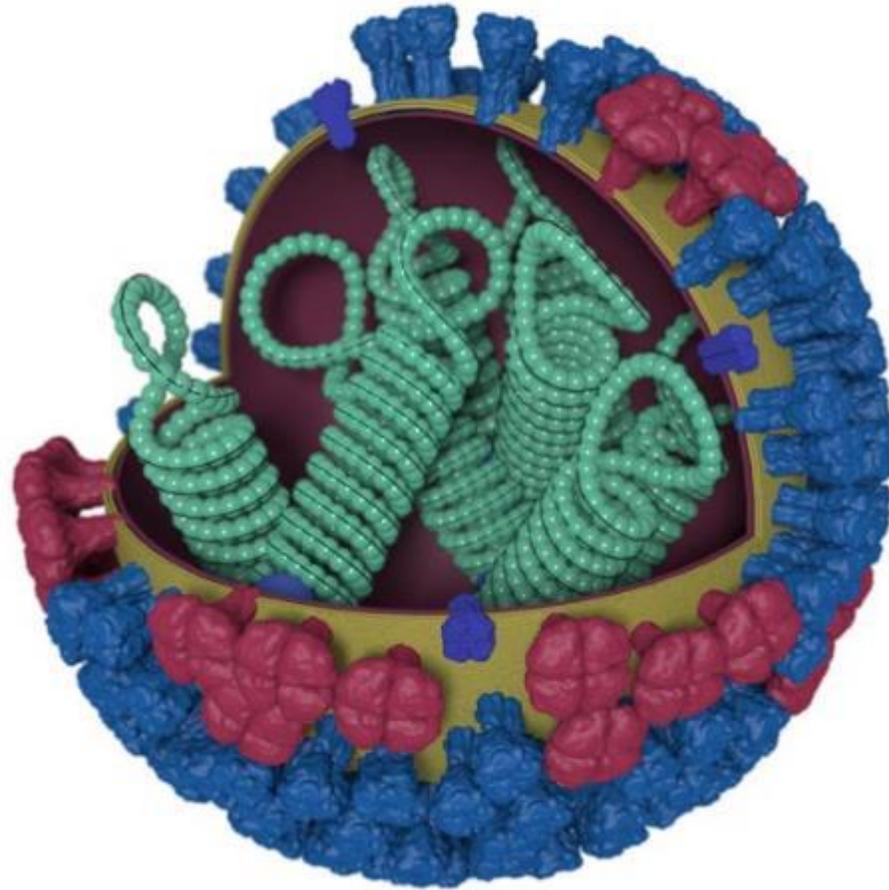
# **How are AI/AN people affected by the flu?**

- AI/AN people are at high-risk for influenza and its complications
- Influenza and pneumonia is a top 10 leading causes of death for AI/AN people
- AI/AN people die from pneumonia and influenza almost twice as much as Non-Hispanic white people do.

# **What makes someone high-risk of getting serious complications from the flu?**

- Being pregnant
- Having the following health conditions:
  - Heart disease
  - Diabetes
  - Kidney disorders
  - Liver disorders
  - Morbid obesity
  - Weakened immune system due to disease or medication
  - Other health conditions, too!
- Being younger than 5 years-old or older than 65 years-old
- Being American Indian or Alaska Native

# AN INFLUENZA VIRUS



Source: CDC. <http://www.cdc.gov/flu/images.htm>

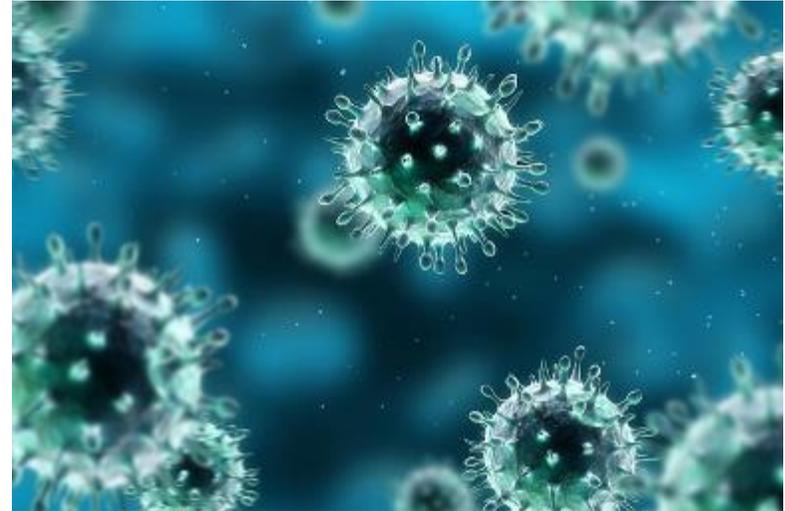
# Are there different types of flu viruses? YES.

- Three types: A, B, and C
- Influenza A viruses can infect birds, animals, and humans
  - H1N1 and H3N2 are Influenza type A viruses
- Influenza B viruses only found in humans
- Influenza type A and B viruses causes seasonal epidemics almost every winter in the United States
- Influenza type C viruses cause mild respiratory illness



# Do flu viruses stay the same? NO.

- Viruses replicate causing small genetic changes



- Because of these changes, we sometimes have to change the flu vaccine to protect against the new form of viruses

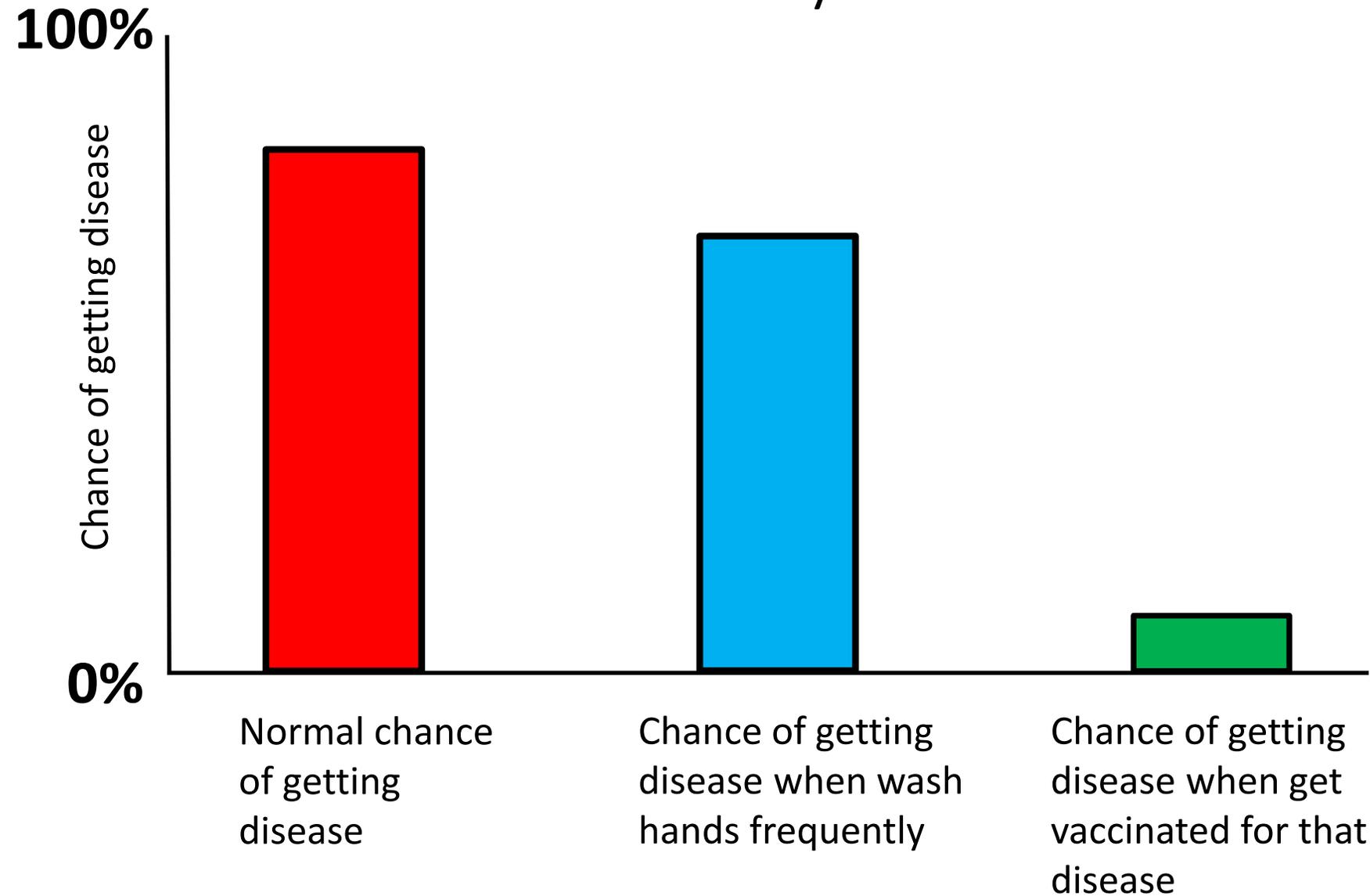


# ***What you should know about flu vaccines***

# What should I know about the flu vaccine?

|   |   |
|---|---|
| <b>Who should get the vaccine?</b>                    | <ul style="list-style-type: none"><li>▪ <b>Everyone</b> over 6 months of age</li><li>▪ High risk people, including pregnant women, elders, young children, and people with diabetes</li></ul> |
| <b>How often should people get the vaccine?</b>       | Every year (as soon as vaccine becomes available, preferably by October)  |
| <b>What disease does the vaccine protect against?</b> | Influenza   |
| <b>What symptoms does this disease cause?</b>         | Headache, chills, fever, body aches, extreme tiredness, dry cough   |

In most cases, vaccines lower your risk of getting a disease more than any other behavior does.



But I can't get a flu shot! I'm allergic to eggs.



You're in luck!  
There is an egg-free flu vaccine available!

# **Is there more than one type of flu vaccine?**

## **YES.**

Including, but not limited to:

- **Standard-dose trivalent shot**
- **High-dose trivalent shot** (for people 65 years and older)
- **Egg-free recombinant trivalent shot** (for people 18 years and older)
- **Intradermal quadrivalent shot, which uses much smaller needle than regular flu shot** (for people 18 through 64 years)
- **Quadrivalent nasal spray vaccine** (for people 2 through 49 years who aren't pregnant)
- **Quadrivalent flu shot** (some approved for people as young as 6 months)

# What are more details about the different types of flu vaccines?

## ■ Flu shot

- Made with inactivated (killed) influenza virus
- Usually injected into the muscle
- Everyone 6 months and older can get it
- “Intradermal flu vaccine” for adults, 18-64 years
  - Smaller needle than regular flu shot
  - Injected into skin, rather than muscle

## ■ Flu nasal spray

- Made with live influenza virus that has been weakened, so it can't grow
- For healthy\* people ages 2 through 49 years-old who aren't pregnant
  - \*Healthy means people who don't have an underlying medical condition, such as asthma or diabetes

# What are the side effects from the flu vaccine?

- Serious side effects are rare
- Most side effects are minor and resolve in 1-2 days

## Flu Shot

- Soreness, redness, or swelling where the shot was given
- Fever (low grade)
- Aches



## Nasal Spray

- Children
  - runny nose
  - wheezing
  - headache
  - muscle aches
  - fever
- Adults
  - runny nose
  - headache
  - sore throat
  - cough

# How does the flu vaccine affect pregnant women?



- Pregnant women pass on protection to their newborn
- Studies have shown babies born to moms who were vaccinated with flu
  - Are less likely to get admitted to the hospital for flu than babies of unvaccinated mothers <sup>1</sup>
  - Have a lower chance of catching the flu and getting admitted to the hospital for Influenza-Like-Illness <sup>2</sup>

1. Poehling, et. al. (2011). Impact of maternal immunization on influenza hospitalizations in infants. *American Journal of Obstetrics and Gynecology*. Supplement to June 2011, p. S141-148.  
2. Eick, et.al. (2011). Maternal Influenza vaccination and effect on influenza virus infection in young infants. *Arch Pediatr Adolesc Med*. 165(2), p. 104-111.

# **Additional protection of flu vaccine**





***What you should know about people  
getting vaccinated for the flu***

# What are reasons people get and don't get the flu vaccine?

## ■ Reasons for **accepting** vaccination:

- Protect self
- Protect patients
- Convenience
- Peer influence
- Prior positive experiences with receiving the flu vaccine



## ■ Reasons for **rejecting** vaccination:

- Concerns about vaccine safety or efficacy
- Belief their not at risk (healthy immune system)
- Belief their not at risk (do not understand transmission of influenza)
- Fear of needles
- Not convenient (real or perceived)

# **Why do I need a flu vaccine?**

- **Protect yourself**
  - Flu vaccination reduces sick days by 28%<sup>1</sup>
- **Protect your family**
  - If you are infected with influenza you will also expose your family
- **PROTECT YOUR COMMUNITY**
  - By getting the flu vaccine, you also protect people who can't get the vaccine and people with weak immune systems

# How effective is the flu vaccine?

- Varies from year to year
- Depends on:
  - Patient (age, health status)
  - Match between influenza strains in population and influenza strains in vaccine



# **Does the flu vaccine work? YES.**

- **Flu vaccination can keep you from getting sick from flu and protects the people around you who are more vulnerable to serious flu illness.**
- **Flu vaccination also may make your illness milder if you do get sick**
  - Can reduce the risk of more serious flu outcomes, like hospitalizations and deaths
- **When vaccine and circulating viruses are well matched, vaccine is very effective in healthy adults younger than 65 years-old**
- **Vaccine can also protect against different, but related viruses<sup>2</sup>**

# **Why wasn't last year's flu vaccine as effective as usual?**

- Last year's flu vaccine (2014-2015 flu season) did not work well to protect against some circulating H3N2 viruses.
- A flu vaccine protects against 3 or 4 viruses, so even if the protection against 1 virus is less than ideal, the vaccine may still protect against the other viruses.
- Experts must pick which viruses to use in the flu vaccine many months in advance so the vaccine can be produced and delivered on time.

# Why do some people get sick after getting the flu vaccine?

- It takes 2 weeks for the flu vaccine to start working.
- The flu vaccine only protects against flu viruses, not other types of viruses.
- Some people (the elderly, for example) may not get good protection from the flu vaccine because they have weak immune systems.



# Addressing concerns: Is the flu vaccine safe?

- You **cannot** get influenza from the vaccine
- Vaccine is safe – allergic reactions are **RARE**
- The vaccine has been used for 50 years and has been given safely to hundreds of millions of people in the U.S. and around the world
- A sore arm is the most common adverse reaction
- Persons with chronic illnesses **CAN** and **SHOULD** receive influenza vaccine
  - Including people with diabetes, heart disease and asthma
- Pregnant women **CAN** and **SHOULD** receive influenza vaccine

# **Addressing concerns: I'm healthy. Am I even at risk for the flu?**

- In one study<sup>1</sup>, 23% of healthcare workers had evidence in their bodies of influenza infection after a mild influenza season
  - 59% could not recall being sick
  - 28% could not recall any respiratory infection
- Suggests a high proportion of illness without symptoms

# Addressing concerns:



## **I hate needles!**

- Intradermal vaccines, which use a much smaller needle, and nasal spray vaccines are available
- Check with your healthcare provider and see if you can get one of these vaccines

## **I have no idea where to go for the flu vaccine. / I don't want to go to the clinic.**

- Check with your Employee Health Nurse and/or Infection Control Coordinator to find out where and when you can receive a flu vaccine
- Flu vaccines are available at some pharmacies and grocery stores

# How else can I prevent the flu?

- Cover your nose and mouth with a tissue when you cough or sneeze
  - Throw the tissue away after you use it
- Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based hand cleaner.
  - Wash hands for as long as it takes to sing the “Happy Birthday” song twice
  - Gels should be rubbed into your hands until they are dry
- Stay away as much as you can from people who are sick
- If you get the flu, stay home from work
  - Do not go near other people, so you don't make them sick
- Try not to touch your eyes, nose, or mouth (germs often spread this way)



# What can CHRs do?

- Encourage people in your community to receive the flu vaccine every year.
  - Tell people about the benefits of flu vaccines.
  - Correct misunderstandings about flu vaccines.
  - Let people know where they can receive flu vaccines.
- Work with public health nurses & local healthcare providers to target those at highest risk.



# Where can I go for more information?

- Centers for Disease Control and Prevention (CDC)
  - Posters and print materials
    - <http://www.cdc.gov/flu/freeresources/print-native.htm>
  - Public Service Announcements
    - <http://www.cdc.gov/flu/freeresources/media-psa.htm>
- Good Health TV video PSAs
  - <http://www.ndhealth.gov/Immunize/PSA/>

# **Thank you for all you do to make our communities healthy!**

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