Improving Influenza Vaccination Rates for Hispanic Adults with Diabetes and Cardiovascular Disease During COVID-19

November 5, 2020
12:00 PM - 1 PM ET
www.NHMAm.org
Welcome

Elena Rios, MD, MSPH, FACP
President & CEO
National Hispanic Medical Association
Washington, DC

Housekeeping
- Presentations to be followed by 10-15 minute discussion
- Microphones will be muted
- Type questions in chat box
- Recording available next week at www.NHMAmd.org

2020 Virtual Health Leaders and Scholars Awards Ceremony – Nov. 19

2021 NHMA National Hispanic Health Conference – Mar. 17-20, 2021
Improving Influenza Vaccination Rates for Adults with Diabetes and Cardiovascular Disease

National Hispanic Medical Association
November 5, 2020

David Kim, MD
Division of Vaccines
Office of Infectious Disease and HIV/AIDS Policy
Disclaimer and disclosure

• I have no conflict of interest
• Views expressed are my own and do not represent those of my office or agency
• Use of trade names are for identification purposes only and do not represent endorsement
Burden of influenza, 2019-20 season

- 38 million flu illnesses
- 400,000 flu hospitalizations
- 22,000 flu deaths

$3.2 billion per year direct medical costs
$11.2 billion annual economic burden

Putri et al. Vaccine 2018
Influenza vaccine composition, United States, 2020-21

- Influenza A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus*
- Influenza A/Hong Kong/2671/2019 (H3N2)-like virus
- Influenza B/Washington/02/2019 (Victoria lineage)-like virus
- Influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus (quadrivalent)

*Except in ccIIV4 and RIV4 which has influenza A/Hawaii/70/2019 (H1N1)pdm09-like virus
Seasonal influenza vaccine effectiveness, 2008-2020 influenza seasons

Seasonal influenza vaccine effectiveness over the years:
- 2008-09: 41%
- 2009-10: 56%
- 2010-11: 60%
- 2011-12: 47%
- 2012-13: 49%
- 2013-14: 52%
- 2014-15: 19%
- 2015-16: 48%
- 2016-17: 40%
- 2017-18: 38%
- 2018-19: 29%
- 2019-20: 39%
Influenza vaccination recommendations

- All persons age ≥6 months who do not have contraindications
- Vaccinate by end of October
- Particularly important now with SARS-CoV-2 co-circulation
Populations at higher risk for medical complications

- Children <5 years, adults age ≥50 years, pregnant women
- People with pulmonary, cardiovascular, renal, hepatic, neurologic, hematologic, metabolic disorders
- Immunocompromised
- Residents of nursing homes, long-term care facilities
Benefits of influenza vaccination in cardiovascular disease

- Lower mortality at 6 months (RR 0.25; CI 0.07,0.86) and 1 year (RR 0.34; CI 0.17,0.71)
- Lower composite outcome (CV death, nonfatal MI, severe ischemia) at 6 months (RR 0.50; CI 0.29,0.85) and 1 year (RR 0.59; CI 0.40,0.86)
- Reduced risk of cardiac ischemic event with randomized study of vaccine vs. placebo at 1 year (HR 0.54; CI 0.29,0.99)
- Reduced risk of composite end points with randomized study (hospitalization, heart failure, stroke) at 1 year (aHR 0.67; CI 0.51,0.86)
- Prevent major CV events (pooled effectiveness 44%; CI 25,58), deaths (pooled effectiveness 60%; CI 29,78), hospitalization (pooled effectiveness 51%, CI 16,72) in meta-analysis

A Phrommintikul et al. Eur Heart J 2011
JK Breteler et al. Vaccine 2013
MH Chiang et al. Am Heart J 2017

Benefits of annual flu vaccination as good as-- quitting smoking, use of statins, use of BP meds
Benefits of influenza vaccination in diabetes

• 30 million adults in U.S. have diabetes, at high risk for influenza complications
• ~30% hospitalization for adults with diabetes
• Reduced hospital admissions by 79% (CI 19,95)
• Prevented all-cause hospitalization (VE 58%; CI 6,81) and hospitalization due to influenza or pneumonia (VE 43%; CI 28,54) in meta-analysis

C Remschmidt et al. BMC Med 2015
Use of antivirals to treat influenza

- Treatment recommended as soon as possible for suspected or confirmed influenza who is hospitalized; has severe, complicated disease; is high risk for complications
- Consider empiric treatment based on clinical judgment if within 48 hours symptom onset
- Do not use LAIV4 if oseltamivir or zanamivir in previous 48 hours, peramivir previous 5 days, baloxavir previous 17 days
Influenza vaccination coverage estimates for persons age ≥6 months by race and ethnicity, National Immunization Survey-Flu (NIS-Flu) and Behavioral Risk Factor Surveillance System (BRFSS), 2010-11 through 2019-20 influenza seasons

- **Coverage (%)**
  - All races/ethnicity
  - White non-Hispanic
  - Black non-Hispanic
  - Hispanic

Seasonal coverage from 2010-11 to 2019-20

- **Coverage (%):**
  - 2010-11: 45.7
  - 2011-12: 46.6
  - 2012-13: 45.7
  - 2013-14: 45.7
  - 2014-15: 45.7
  - 2015-16: 45.7
  - 2016-17: 45.7
  - 2017-18: 45.7
  - 2018-19: 51.8
  - 2019-20: 54.8
Deliver vaccines safely during COVID-19 pandemic

- Vaccination is an essential medical service
- Assess the vaccination status of all patients across the life span at every health care visit
- Administer routinely recommended vaccines to children, adolescents, adults (including pregnant people)
- Delay vaccination for persons with suspected or confirmed COVID-19
- Follow guidance to prevent the spread of COVID-19 in health care settings
- Encourage vaccination at the patient’s medical home
- Implement effective strategies for catch-up vaccination
- Communicate with patients/families about how they can be safely vaccinated during the pandemic
Strategies to promote influenza vaccine uptake

- Every team member gets flu shot – one team, one voice
- **Strong** provider recommendation
- **Presumptive** (“Today you get the flu shot”) vs. participatory (“How do you feel about getting the flu shot today?”) recommendation
- **Personalized** recommendation
- Other evidence-based practices
  - Systems changes that make vaccination assessments and recommendations routine
  - Standing orders
  - Patient reminder-recall
  - Vaccination “champion” in office
My whole family got the flu shot over the weekend... we want to make sure we protect each other.

My dad has diabetes so I make sure he gets the flu shot every year... even if he gets sick with the flu, the flu shot will decrease his chance of going to the hospital by 50%.

Getting a flu shot once a year is as good for your heart as taking cholesterol medicine (or blood pressure pills) every day.
Bottom lines

• Flu bad, vaccine good
• Flu very bad for people with diabetes or cardiovascular disease, flu vaccine very good for these people
• Disparities in flu vaccination rates by race/ethnicity
• Get team vaccinated against flu every year
• Assess, recommend, administer/refer, document vaccination at every patient visit
• Strong, presumptive, personalized recommendations
• Vaccines can be administered safely during COVID-19 pandemic
BOO TO THE FLU

Get your flu vaccine by October 31

vaccines.gov

HHS.gov
INFLUENZA VACCINES & LATINOS: ADDRESSING MYTHS AND MISINFORMATION

DIANA TORRES-BURGOS, MD, MPH
HISPANIC HEALTH ADVISOR, NHHF
NHMA WEBINAR
NOVEMBER 5, 2020
No conflict of interest to disclose.
OVERVIEW

- Latinos and Flu vaccination rates
- Barriers to vaccinate among Latinos
- Debunking Myths and Misinformation
- Practice Strategies to address barriers and improve influenza vaccination rates among Latinos
ACIP/CDC recommends an annual flu vaccine for everyone 6 months and older.

High risk groups

- Chronic health conditions
  - Heart disease, asthma, diabetes, chronic kidney disease, cancer, HIV
- Young children and Seniors 65+ years
- Pregnant women
- **Racial and ethnic minorities**

https://www.cdc.gov/flu/highrisk/index.htm
INFLUENZA HOSPITALIZATION RATES BY RACE/ETHNICITY

Age-adjusted influenza-associated hospitalization rates by race and ethnicity — FluSurv-NET, 2009-10 through 2018-19

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic Black</td>
<td>68.1</td>
</tr>
<tr>
<td>Non-Hispanic American Indian or Alaska Native</td>
<td>47.5</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>44.0</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>38.3</td>
</tr>
<tr>
<td>Non-Hispanic Asian or Pacific Islander</td>
<td>32.1</td>
</tr>
</tbody>
</table>

https://www.cdc.gov/flu/highrisk/disparities-racial-ethnic-minority-groups.html
During the 2019-2020 season, the overall coverage estimate for adults (age 18 years +) was 48%.
BARRIERS

- Economic- lack of health care coverage, vaccine cost, health care access, time off from work, inconvenient office hours
- Language- LEP
- Health literacy- lack of understanding on how vaccines work, vaccine efficacy and safety
- Cultural health beliefs and practices
- Lack of trust in providers/health systems, fear
- Covid pandemic

2009 Qualitative Study evaluating factors on that affect decision on flu vaccination in a predominantly Hispanic community (Washington Heights, NY).

- Over 25% indicated the reason they did not get vaccinated is the belief that flu is not a serious enough infection. Over 11% believed the vaccine to be ineffective, 10.0% cited lack of time and 10.9% cited cost.
COMMON HISPANIC CULTURAL THEMES*

- **Familismo** (Family) - Importance of family at all levels: nuclear, extended, fictive kin (compadres). Needs of family take precedence over individual needs. Includes extended families, Multi-generational, consult on with family members when ill, identified family health decision maker.

- **Respeto** (Respect) - Proper deferential behavior towards others based on age, sex, social position, economic status, and authority. Health providers are given a high level of respect as authority figures.

- **Personalismo** (Personal) - tend to stress personal rather than institutional relationships, expect health providers to be warm, friendly, and personal, and to take an active interest in patient’s life. Display of mutual respect, trust building.

- **Confianza** (Trust) - bond of trust that you have the patient’s wellbeing at heart

- **Fatalismo** (Fatalism) means that they have an external locus of control, powerless to change, “lo que Dios diga”

*May differ based on language, acculturation, immigrant status, gender, country of origin, health literacy.

MYTH #1

“I got the flu from the flu shot.”

- No, flu vaccines cannot cause flu illness. The injected influenza vaccine are made with either inactivated (killed) viruses, or with only a single protein from the flu virus. The nasal spray vaccine contains live viruses that are attenuated (weakened) so that they will not cause illness.
- Many people misinterpret vaccine side effects (aches, pain, mild fever) as the flu.
- It take about two weeks for the flu shot to be protective against the flu. Patients can get the flu if exposed during those two weeks.

MYTH #2

“I know people who got the shot and still got sick. I don’t believe it is effective.”

- A good match between the viruses causing disease and the influenza viruses selected for the season’s vaccine provides excellent protection in healthy people.
- Older people and those with chronic illnesses are likely to develop less immunity than healthy young adults.
- Two-week window to develop immunity
- Exposure to different strains of influenza not covered in flu vaccine
- Flu vaccines will not protect against infection and illness caused by other viruses that can also cause influenza-like symptoms.
- Flu vaccination is important for high-risk individuals. According to the CDC, Flu vaccination has been shown to be associated with reduced hospitalizations among people with diabetes (79%) and chronic lung disease (52%).

http://www.immunize.org/askexperts/experts_inf.asp
http://www.immunize.org/talking-about-vaccines/ (Immunization Action Coalition)
https://www.cdc.gov/flu/about/qa/vaccineeffect.htm
https://www.cdc.gov/flu/about/qa/misconceptions.htm
MYTH # 3

“I am afraid that the vaccine can have serious side effects”

- Most individuals experience none or minor side effects following a flu shot.
- Side effects usually last 1 or 2 days and can include: soreness, redness, or swelling at site of injection, hoarseness, sore, red or itchy eyes, cough, fever, aches, headache, itching and fatigue.
- Reactions to the vaccine are very rare. According to the CDC, severe allergic reactions are estimated at less than 1 in a million doses.
- Guillain–Barré syndrome rare. More likely after flu illness than vaccine.

https://www.cdc.gov/flu/protect/vaccine/general.htm
https://www.cdc.gov/vaccinesafety/vaccines/flu-vaccine.html
MYTH #4

“I do not need the vaccine, I am healthy.”

- Can never predict what will happen. Vaccines offer the best protection.
- Some healthy people do get seriously ill causing hospitalization or death.
- You can protect the whole family.

Dr. Eduardo Azziz-Baumgartner, a medical epidemiologist with the Influenza Division of the CDC during an interview with Univision:

"This community responds better to messages targeted to protecting the family" "So if you make an appeal to an individual, such as a working male or female that is not necessarily high risk, this person may be more likely to seek vaccination if we say they’re protecting small children at home or elderly parents at home by being vaccinated."

http://abcnews.go.com/ABC_Univision/Politics/flu-vaccines-latinos-ethnic-groups/story?id=18193016
MYTH #5

“I don’t need the shot; I already got the flu.”

- Many people think they had the flu when they may have had an influenza-like-illness (ILI) or bad cold.
- There are multiple viruses known to cause ILI such as RSV, rhinovirus, adenovirus, and parainfluenza virus and human coronavirus.
- Even if you caught the flu, flu vaccination will provide coverage against other strains and reduce flu-related complications.

http://www.immunize.org/influenza/
MYTH #5

“The flu is just a bad cold, nothing serious”

- Flu can be a serious disease, particularly among young children, older adults, and people with certain chronic health conditions, such as asthma, heart disease or diabetes.
- Even among healthy children and adults flu infection can carry a risk of serious complications, hospitalization or death. Vaccination best protection in reducing the burden of disease.

http://www.immunize.org/askexperts/experts_inf.asp
http://www.immunize.org/talking-about-vaccines/ (Immunization Action Coalition)
https://www.cdc.gov/flu/about/qa/vaccineeffect.htm
MYTH #7

“**It’s too late to get the flu shot**”

- Although always better to get the flu vaccine before the flu season begins, it is never too late.
- Flu virus still circulating in community after peak season. It takes two weeks for the vaccine to give full protection.
- Even if you didn't get vaccinated and caught the flu, the flu vaccine can protect you against the other strains that are circulating in the community.

INFLUENZA AND COVID-19

- There is no evidence that getting a flu vaccination increases your risk of getting sick from a coronavirus, like the one that causes COVID-19.

- As per CDC, to reduce the overall burden of respiratory illnesses and to protect vulnerable populations at risk for severe illness, the healthcare system, and other critical infrastructure, Health care providers should administer influenza vaccines to all eligible persons, including:
  - **Essential workers**
  - **Persons at increased risk for severe illness from COVID-19:**
    - adults aged 65 years and older, residents in post-acute and long-term care facilities, and persons of all ages with certain underlying medical conditions. Severe illness from COVID-19 has been observed to disproportionately affect members of certain racial and ethnic minority groups.
  - **Persons at high risk for influenza complications:**
    - infants aged 6 months and older and young children aged <5 years, children with neurologic conditions, pregnant people, adults aged 65 years and older, and other persons with certain underlying medical conditions.
PRACTICE STRATEGIES TO IMPROVE INFLUENZA VACCINATION RATES AMONG LATINOS

- Recommend vaccine!
- Office reminders - EMR alerts, Texts
- Avoid missed office opportunities - standing orders, patient education, staff education and training
- Offer convenient office hours - after work, weekends
- Improve Health literacy
- Language services
- Know community resources if not able to offer vaccines in office - ex. DOH, public hospitals
- Bilingual staff (community health workers), staff reflective of community
- Build trust.
**KEY RECOMMENDATIONS**

<table>
<thead>
<tr>
<th>Family oriented Messages</th>
<th>Dispel myths &amp; Misconceptions</th>
<th>Vaccine protects both healthy and high-risk individuals</th>
<th>Recommend vaccine!</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best way to protect yourself and your whole family is to get vaccinated.</strong></td>
<td><strong>Prevent misunderstandings about the flu shot. Explain side effects and timing for effectiveness.</strong></td>
<td><strong>Discuss exposures and risks for healthy and vulnerable patients and family members in the household.</strong></td>
<td><strong>Provider recommendations increase likelihood of patients getting vaccinated. Implement strategies and opportunities for your patients to get the flu shot.</strong></td>
</tr>
</tbody>
</table>
RESOURCES

- https://www.cdc.gov/flu/index.htm
- https://www.cdc.gov/flu/highrisk/disparities-racial-ethnic-minority-groups.html
- https://www.cdc.gov/flu/about/burden/faq.htm
- http://www.immunize.org/talking-about-vaccines/ (Immunization Action Coalition)
- http://www.immunize.org/influenza/ (IAC)
- NHMA Toolkit to Increase Immunizations Among Hispanic Adults
NHMA Upcoming Events


