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Immunization Education: Turning a No into a Yes



Melissa Young
PharmD, BC-ADM, CDE

Clinical Pharmacy Specialist
Office of Rural Health
VA Salt Lake City Health Care System

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 - Please refer to learning goals and objectives
 - Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours
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Learning Objectives

- Recognize immunization education as part of the Diabetes Self-Management Education and Support (DSMES) curriculum and know where to find resources
- Summarize published data showing certain vaccinations can prevent serious illness in persons with diabetes (PWD)
- Apply strategies for addressing hesitancy for recommended vaccinations

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Overview

- Vaccines: Population Health Strategy
- Immunizations and DSMES
- Vaccine Recommendations
- Influenza Vaccination: Call to Action
- Tools for Diabetes Educators

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Vaccines: Population Health Strategy

For each birth cohort vaccinated... Society,

- Saves 33,000 lives
- Prevents 14 million cases of disease
- Saves \$9.9 billion in direct health care costs
- Offsets \$33.4 billion indirect costs

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Immunization and Infectious Diseases | <https://www.healthresources.gov/2018/05/01/immunization-and-infectious-diseases/>
©2018 | Download Date: 08/23/2019

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Vaccines: Continuing Challenges

- **42,000 adult deaths + 300 children per year** in the U.S. due to vaccine-preventable diseases
- **Acute respiratory infections:**
 - 8th leading cause of death in U.S.
 - Accounts for 56,000 deaths annually!

Immunization and Infectious Diseases <https://www.healthypeople.gov/2020/hpsc/deliverables/immunization-and-infectious-diseases>
CDPH# Approved June 29, 2019 #AADE19

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IMMUNIZATION AND DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES)

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Immunization and DSMES

2017 Diabetes Educator National Practice Survey

- “31% of diabetes educators offer information or discuss immunizations with people with diabetes”

<http://www.diabeteseducator.org/practice/practice-document/practice-papers>
Reiner, et al. 2018. The Diabetes Educator, 48(3), 260-268. <https://doi.org/10.1177/0145221118785446>

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Immunization and DSMES

2017 National Standards for DSMES: Standard 6 (Curriculum)
 Core Content Areas (Type 1 & 2, GDM, secondary, pregnancy complicated by diabetes) in the following topic areas:

- Pathophysiology and treatment options
- Healthy eating
- Physical activity
- Medication usage
- Monitoring, including pattern management
- Preventing, detecting and treating acute (hypo/hyper, DKA, sick days, severe weather or crisis supply management) and chronic complications (immunizations, eye, foot, dental, exams and kidney function testing as indicated)
- Healthy coping
- Problem solving

<https://www.diabeteseducator.org/files/default-source/practice-guidance/2017-national-standards-for-dsmes-core-content-areas.pdf>

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AADE 2019 Practice Paper

The thumbnail shows the title page of the practice paper. It includes the AADE logo, the title 'Vaccination Practices for Adults with Diabetes', and a brief introduction. The text on the page discusses the importance of vaccination for adults with diabetes and provides an overview of the paper's content, which includes a review of current evidence and recommendations for various vaccines.

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VACCINE RECOMMENDATIONS

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Five Important Vaccines for Persons with DM

Vaccine	Protects Against	CDC Recommendation
Influenza (Flu)	Seasonal flu virus	Everyone age 6 months and older needs a flu vaccine, every year
Td or Tdap*	Tetanus, diphtheria, and whooping cough	Recommended for all infants and children, preteens and teens, and adults
Zoster	Protects against shingles	Recommended for adults age 50+ years Zoster vaccine live (ZVL, Zostavax) Recombinant zoster vaccine (RZV, Shingrix) **
Pneumococcal	Protects against serious pneumococcal diseases	PCV13: Infants, young children, adults age 65+ years; PPSV23: Adults age 65+ years and children age 2+ years who are at increased risk
Hepatitis B	Hepatitis B	In PWD, recommended for ages 19-59 years; 60+, give at discretion of the healthcare provider

*Infants and children younger than 7 years old receive DTaP or DT
**Preferred by CDC
PCV13: 13-valent pneumococcal conjugate vaccine; PPSV23: 23-valent pneumococcal polysaccharide vaccine
Centers for Disease Control and Prevention (CDC): www.cdc.gov/vaccines/adult/rec/vac/hes@-conditions/diabetes.htm #AADE19

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Influenza (Flu) is a Serious Disease

- >80,000 deaths from flu and related complications during 2017-2018 season
- Overall hospitalization rates during 2017-2018 were the highest ever recorded in our surveillance system
 - Individuals 65+ years accounted for ~58% of reported influenza-associated hospitalizations

Garten R, et al. MMWR Morb Mortal Wkly Rep 2018;67:834-842

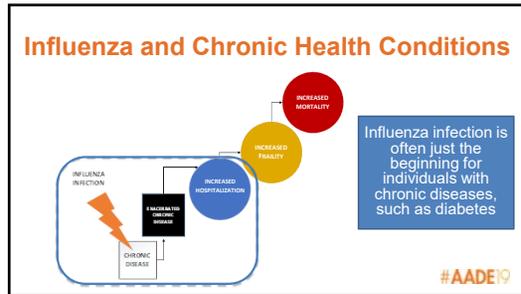
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People at High Risk for Flu Complications

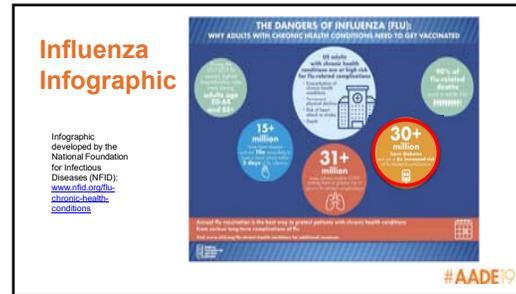
- Heart disease
- **Endocrine disorders, such as diabetes mellitus (DM)**
- Obesity
- Chronic lung disease (COPD, cystic fibrosis)
- Asthma
- Metabolic disorders
- Weakened immune system

CDC: www.cdc.gov/flu/about/diseases/high_risk.htm

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Influenza Fact Sheet

fact sheet developed by the National Foundation for Infectious Diseases (NFID): www.nfid.org/flu-chronic-health-conditions

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Influenza and Diabetes

- Influenza (flu) can cause significant and severe health complications for people with diabetes
- Interaction of flu/diabetes linked to significant morbidity and mortality, attributed to metabolic complications¹
- Comorbid conditions (e.g., renal and heart disease) complicate impact of flu in people with diabetes, and can result in **long-term disability** beyond acute flu infection²

1. Peleg AY, et al. Diabetes Metab Res Rev. 2007;Jan;23:3-13
2. Smith SA, Poland GA. Diabetes Care. 2000;23:95-108

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Influenza Vaccine Effectiveness

- Vaccine updated annually to better match circulating viruses
 - In some years, there is more drift than others
- Vaccine reduces the risk of flu illness by about 40% to 60% among the overall population
 - ~40% during 2018-2019 season
- Some protection is ALWAYS better than no protection against flu

<https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm>

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Influenza Vaccine Effectiveness

- We focus on infection rates, but even if you do get the flu, vaccination can:
 - Decrease the duration and severity of illness
 - Less days off work or school
 - Reduce hospitalization rates
 - Limit spread of infection to close contacts

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Influenza Vaccine Part of Preventive Care

- ADA Position Statement: Influenza (and pneumococcal) vaccination is an important part of preventive care¹
- Seasonal influenza vaccination significantly reduced admission rates for stroke, heart failure, and all-cause death in elderly patients with Type 2 DM over flu seasons²
- ACC, AHA and CDC recommend the annual flu vaccine as a secondary ASCVD risk reduction measure.^{3,4}

1. Diabetes Care Jan 2003; 26 (suppl 1):126-128
 2. Vainza EP et al. CMAJ 2016; 151(109)
 3. Davis MH et al. Circulation 2006; 114(14):1546-1553
 4. Centers for Disease Control and Prevention (CDC). <http://www.cdc.gov/flu/immunization/updates/immunization.htm>. Accessed May 20, 2019



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Critical Need to Increase Influenza Vaccination Rates in PWD

- Annual flu vaccine reminders are common; yet vaccination rates **remain low** for people with diabetes
- Educators should emphasize annual flu vaccination as **the most effective way** to prevent flu-related complications



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Vaccine Uptake: MADIABETES

- Type 2 diabetes, 7-year follow-up, retrospective case cohort study in Spain
 - 65.7% vaccine uptake over past year; ~ 19% no vaccine
- Barriers to uptake:
 - Men: Belief they were not at risk; Women: Fear of adverse reaction
 - Increased mean A1C
- Variables that Increased Uptake:
 - 90% agreed after Physician Recommendation based on age or health condition
 - Age (>60 years); chronic respiratory disease, increased utilization of HCS
 - Married, decreased education level, healthy behaviors



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Vaccine Uptake

- In 2014, 69% of PWD in U.S., age 65+ years received the influenza vaccine¹
- During 2017-2018 flu season...
 - Est. 61.8% of persons age 65+ received the influenza vaccine
 - Healthy People 2020 Goal for 18+ years: 70% (*)
 - 69% of persons age 65+ had ever received pneumococcal
 - Healthy People 2020 Goal for 65+ years: 90%

1. (ND) Risk and Behavior of Risk Factor Surveillance System (BRFSS), CDC Flu Vaccination Coverage, United States, Influenza Season
* Non-institutionalized



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INFLUENZA VACCINATION: CALL TO ACTION



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Influenza Vaccination: Call to Action

- Supported by AADE and 17 other organizations
- Goal to increase awareness of:
 - The dangers of influenza infection among adults with chronic health conditions
 - The benefits of annual vaccination, to ultimately improve public health and patient outcomes



www.nfhd.org/flu-chronic-health-conditions



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Improving Influenza Vaccination Rates: Challenges

- Accountability/Ownership
- Limited time and resources
- False notions about the burden of flu
- Myths and misperceptions about vaccination
- Lack of awareness



www.nfhd.org/flu-chronic-health-conditions

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Strategies to Improve Influenza Vaccination Rates

- **Insist** upon annual flu vaccination
- Incorporate into fall visits
- Assign a vaccine champion
- Set a targeted goal of 90% vaccination coverage
- Highlight benefits of flu vaccination for individuals and the community
- Set clinical reminders in EMR



www.nfhd.org/flu-chronic-health-conditions

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HOW TO TURN A NO INTO A YES

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Talking Points:
Strategies to Turn a NO Into a YES!

1. Provide a Strong, Clear Recommendation
2. Communicate about Potential Worsening of Chronic Condition (*and chronic complications*)
3. Explain Risk of Post-Infection Frailty
4. Emphasize Benefits of Disease Mitigation
5. Stress that Vaccination is a Social Responsibility

1. www.aade.org/~/media/health-care/08081605
2. www.aade.org/~/media/health-care/08081605
3. www.aade.org/~/media/health-care/08081605 #AADE19

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Strategies for Diabetes Educators to Increase Vaccination Rates (continued)

- Include influenza vaccine in annual diabetes care checklist next to the A1C lab
- Include vaccine education and/or administration in performance measures
- Add vaccination history questions to patient intake questionnaires
- Educate other health care professionals about vaccine-preventable diseases and available resources

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Strategies for Diabetes Educators to Increase Vaccination Rates

- Give talks about vaccinations/diabetes at community centers, church groups, health fairs
- Enlist peer educators/health aides to discuss increased risks for infections, in particularly the risk of influenza/diabetes interactions
- Present information in support groups within larger discussion about sick days and prevention; time with the start of flu season
- Advocate for increased vaccine access through pharmacy-based immunization programs

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AADE Campaign to Promote Annual Influenza Vaccine

- Previous promotion of National Council on Aging *Flu & You* Campaign
- Current promotion of CDC campaign *Staying Healthy with Diabetes: Why Vaccines Are Essential*
 - Promotion on website
 - Multiple AADE blog posts
 - Social media and member newsletter
- Recommendation to receive annual flu vaccination in AADE7 Self-Care Behavior™ framework

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Immunization Education



<https://www.diabeteseducatorcorp/living-with-diabetes/vaccine-resources>

- CDC animated vaccination guide
- Designed to help your patients living with diabetes stay healthy from vaccine-preventable diseases

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NFID Resources

- Educational information/tools:
 - nfid.org/flu-chronic-health-conditions
 - Infographics for healthcare professionals and patients
 - Fact Sheets by condition (diabetes, heart disease, lung disease)
 - Call to Action (September 2018)
 - Toolkit with sample social posts, graphics, newsletter/email, and website content
- Free CE webinar: nfid.org/webinars
- *Infectious Diseases in Clinical Practice* (IDCP) CME journal article (November 2018)



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