Thank you for joining

The presentation will begin shortly
Rise to Immunize™
Monthly Webinar
Influenza 101
Featuring Carrie Regnier, BSN, RN, MPH
Today's Webinar

Campaign Updates
• January webinar recording
• CDC resource
• Annual Conference 2022
• New Partners
• Data Submission

Influenza 101
• Featuring Carrie Regnier

Q&A Session
Today’s webinar recording will be available the week of Feb. 24

- Will be sent via email
- Will be available on website

(RiseToImmunize.org → “Resources” → “Webinars”)

Ask questions during the webinar using the Q&A feature

- Questions will be answered at the end of the presentation
January Webinar Recording

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>DATE</th>
<th>TOPIC</th>
<th>PRESENTER(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording Slides Only</td>
<td>Jan. 20, 2022</td>
<td>Coadministration of COVID-19 and Routine Immunizations</td>
<td>Jon McCullers, M.D. (Le Bonheur Children’s Hospital and College of Medicine for the University of Tennessee Health Science Center)</td>
</tr>
</tbody>
</table>

Now available! (RiseToImmunize.org → “Resources” → “Webinars”)
Resource of the Month

Administering More Than One Vaccine on the Same Day: Clinical Considerations
JoEllen Wolicki, BSN, RN
Nurse Educator
Immunization Services Division
Communication and Education Branch
New Partners
Thank you for submitting your data!

The blinded comparative report will be provided on March 29.
Guy Kawasaki
Chief Evangelist at Canva; Former Brand Ambassador for Mercedes-Benz; and Former Chief Evangelist at Apple

Robyn Benincasa
World Champion Eco-Challenge Adventure Racer, and New York Times Bestselling Author

Gen. Stanley McChrystal
Bestselling Author of Team of Teams and Risk: A User’s Guide; Co-founder of the McChrystal Group; Former Commander of U.S. and International Forces in Afghanistan

Craig E. Samitt, M.D., M.B.A.
Founder and CEO, ITO Advisors, LLC; Former President & CEO of Blue Cross Blue Shield of Minnesota

The Dr. Scott Hayworth and the Honorable Dr. Nan Hayworth Lecture
Today’s Speaker

Carrie Regnier, BSN, RN, MPH
Director, COVID-19, Norton Medical Group
Influenza 101

Carrie Regnier, BS, BSN, MPH, RN
Director, Covid-19 Norton Healthcare
National Advisor to Rise to Immunize™ Campaign

Photo Source: https://phil.cdc.gov/Details.aspx?pid=23258
Influenza History Quiz

• How many pandemic flu outbreaks have we seen in the past 100 years?
  – 4

• When was the first influenza vaccine developed?
  – 1940’s
  – In 1942, the first bivalent vaccine against Flu A and B was produced

• The Surgeon General recommended annual influenza vaccination for people with chronic debilitating disease, people aged 65 years or older, and pregnant women in what year?
  – 1960
Recent Flu Season Hospitalizations

Cumulative Rate of Laboratory-Confirmed Influenza Hospitalizations among cases of all ages, 2015-16 to 2021-22, MMWR Week 05

**In this figure, cumulative rates for all seasons prior to the 2021-22 season reflect end-of-season rates. For the 2021-22 season, rates for recent hospital admissions are subject to reporting delays. As hospitalization data are received each week, prior case counts and rates are updated accordingly.**

Flu Vaccine- CDC Recommendations

• Routine vaccination is recommended for anyone age 6 months or older
• The vaccine should be given end of October and continue as long as viruses are circulating locally
• Pregnant women or those trying to conceive should be vaccinated
• Covid-19 Vaccine and Flu Vaccine can be given at the same time
  – Other vaccines can be given with the flu vaccine also (in separate sites)
• Persons with an egg allergy can receive flu vaccination
  – Assess each patient individually based off current CDC guidance, their history, and your vaccine presentation
• Though data does support a greater benefit of high dose flu vaccine for those 65 and older, CDC does not give preference for one vaccine over another
  – Fluzone Quadravalent is the only high dose flu vaccine- 4x stronger than regular flu vaccine

Effect of race and ethnicity on influenza vaccine uptake among older US Medicare beneficiaries: a record-linkage cohort study

- Included 26.5M Medicare Beneficiaries- 65+
  - Claims data reviewed during 2015-2016 flu season
    - 47.4% received a seasonal flu vaccine
      - Of those, 52.7% received high dose flu vaccine
- Minority beneficiaries were less likely to receive a seasonal flu vaccine compared to white beneficiaries
  - White= 49.4%
  - Hispanic= 29.1%
  - Black= 32.6%
  - Asian= 47.6%
- Of the beneficiaries who were vaccinated, after adjusting for various social determinants of health, minority groups were 26-32% less likely to receive high dose flu vaccine relative to white beneficiaries

https://doi.org/10.1016/s2666-7568(20)30074-x
# Influenza Vaccine Products for the 2021–2022 Influenza Season

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Trade Name</th>
<th>How Supplied</th>
<th>Mercury Content (µg/L)</th>
<th>Age Range</th>
<th>CVX Code</th>
<th>Vaccine Product Billing Code</th>
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<tbody>
<tr>
<td>AstraZeneca</td>
<td>Flumist (LAIV4)</td>
<td>0.2 mL (single-use nasal spray)</td>
<td>0</td>
<td>2 through 49 years</td>
<td>149</td>
<td>90672</td>
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<tr>
<td>GlaxoSmithKline</td>
<td>Fluarix (IIV4)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>6 months &amp; older</td>
<td>150</td>
<td>90686</td>
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<tr>
<td></td>
<td>Fluvax (IIV4)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>6 months &amp; older</td>
<td>150</td>
<td>90686</td>
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<tr>
<td></td>
<td>Flublok (IIV4)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>18 years &amp; older</td>
<td>183</td>
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<td>Fluzone (IIV4)</td>
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<td>0</td>
<td>6 months &amp; older</td>
<td>150</td>
<td>90686</td>
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<tr>
<td></td>
<td>Fluzone (IIV4)</td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>6 months &amp; older</td>
<td>150</td>
<td>90686</td>
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<tr>
<td></td>
<td>Fluzone (IIV4)</td>
<td>5.0 mL (multi-dose vial)</td>
<td>25</td>
<td>6 through 35 months</td>
<td>158</td>
<td>90687</td>
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<tr>
<td></td>
<td>Fluzone (IIV4)</td>
<td>5.0 mL (multi-dose vial)</td>
<td>25</td>
<td>3 years &amp; older</td>
<td>158</td>
<td>90688</td>
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<td></td>
<td>Fluzone High-Dose (IIV4-HD)</td>
<td>0.7 mL (single-dose syringe)</td>
<td>0</td>
<td>65 years &amp; older</td>
<td>197</td>
<td>90662</td>
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<tr>
<td>Seqirus</td>
<td>Afluria (IIV4)</td>
<td>0.25 mL (single-dose syringe)</td>
<td>0</td>
<td>6 through 35 months</td>
<td>161</td>
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<td>Afluria (IIV4)</td>
<td>0.3 mL (single-dose syringe)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>150</td>
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<td></td>
<td>Afluria (IIV4)</td>
<td>5.0 mL (multi-dose vial)</td>
<td>24.5</td>
<td>6 through 35 months</td>
<td>158</td>
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<tr>
<td></td>
<td>Afluria (IIV4)</td>
<td>5.0 mL (multi-dose vial)</td>
<td>24.5</td>
<td>3 years &amp; older</td>
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<td>Fluid (aIIV4)</td>
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<td>Fluclenvax (cIIV4)</td>
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<td>25</td>
<td>6 months &amp; older</td>
<td>186</td>
<td>90756</td>
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</table>

**NOTES**
1. IIV4 = egg-based quadrivalent inactivated influenza vaccine (injectable), where necessary to refer to cell culture-based vaccine, the prefix "cc" is used (e.g., ccIV4); RIV4 = quadrivalent recombinant hemagglutinin influenza vaccine (injectable); aIIV4 = adjuvanted quadrivalent inactivated influenza vaccine.
2. An administration code should always be reported in addition to the vaccine product code. Note: Third-party payers may have specific policies and guidelines that might require providing additional information on their claim forms.
3. Dosing for infants and children age 6 through 35 months.
   - Afluria 0.25 mL
   - Fluarix 0.5 mL
   - Fluclenvax 0.5 mL
   - Fluvax 0.3 mL
   - Fluzone 0.23 mL or 0.3 mL
4. Afluria is approved by the Food and Drug Administration for intramuscular administration with the PharmaJet Stratin Needles-free Injection System for persons age 18 through 64 years.

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Flu Vaccine Measurement Constraints

- Timing (What Season Are You Measuring?)
- Populations (Visits vs Attributed)
- Patient Age Groups
- Patient Reported vs Actually Vaccinated
- Refusals Count for Some Measures
- Small Samplings
## Benchmarks for Influenza Vaccine

<table>
<thead>
<tr>
<th>Benchmark Source</th>
<th>Age Group</th>
<th>Timeframe</th>
<th>Performance</th>
</tr>
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<tbody>
<tr>
<td>Behavioral Risk Factor Surveillance System (BRFSS)(^1)</td>
<td>18+</td>
<td>2020-2021</td>
<td>50.2%</td>
</tr>
<tr>
<td>CAHPS Commercial HMO(^2)</td>
<td>18-64</td>
<td>2020</td>
<td>56.5%</td>
</tr>
<tr>
<td>CAHPS Commercial PPO(^2)</td>
<td>18-64</td>
<td>2020</td>
<td>57.7%</td>
</tr>
<tr>
<td>CAHPS Medicaid HMO(^2)</td>
<td>18-64</td>
<td>2020</td>
<td>40%</td>
</tr>
<tr>
<td>CAHPS Medicare HMO(^2)</td>
<td>65+</td>
<td>2020</td>
<td>73.3%</td>
</tr>
<tr>
<td>CAHPS Medicare PPO(^2)</td>
<td>65+</td>
<td>2020</td>
<td>75%</td>
</tr>
<tr>
<td>Healthy People 2030(^3)</td>
<td>6mos+</td>
<td>2017-2018</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

All Benchmark Sources Noted Are Patient Reported

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\(^3\)Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary, U.S. Department of Health and Human Services. (n.d.). Increase the proportion of people who get the flu vaccine every year - IID-09. Increase the proportion of people who get the flu vaccine every year - IID-09 - Healthy People 2030. Retrieved February 8, 2022, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination/increase-proportion-people-who-get-flu-vaccine-every-year-iid-09
Figure 4. Flu Vaccination Coverage by Age Group, Adults 18 years and older, United States, 2010–2021

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
Error bars represent 95% confidence intervals around the estimates.
Figure 5. Flu Vaccination Coverage by State, Adults 18 years and older, United States, 2020–21 Season

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
Error bars represent 95% confidence intervals around the estimates.
Florida estimate was 38.4% but excluded from the figure because this estimate represents vaccinations only through November. For the 2019-20 season among adults 18+ years in Florida, coverage increased from 31.7% by end-November to 41.8% by end-May.
Figure 6. Flu Vaccination Coverage by Racial/Ethnic Group, Adults 18 years and older, United States, 2010–2021

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
Error bars represent 95% confidence intervals around the estimates.
Figure 8. Place of Flu Vaccination, Adults 18 years and older, United States, 2020–21 Season
NFID 2021 Survey- Knowledge, Attitudes, and Practices Toward Flu Vaccination

- Both healthcare professionals (HCP) and adults with chronic conditions were surveyed
- Only 45% of chronic condition patients had received their flu shot by early November
  - Only 31% of HCPs say they recommend the flu shot to all chronic condition patients
  - 44% of HCPs recommend the flu shot to most chronic condition patients
- There is varying perception of counseling for flu complications with chronic disease
  - 48% of chronic condition patients report never being told flu makes them high risk or would complicate their condition
  - But 77% of HCPs report they do tell patients flu puts them at high risk for complications
  - 71% of HCPs report they tell patients it would complicate their condition
Communicating the Benefits of Influenza Vaccine during COVID-19

Influenza (flu) severity varies from year to year, but flu always brings serious consequences. Flu outbreaks were limited in the 2020-2021 season due to widespread use of COVID-19 prevention measures like masks and social distancing. But flu viruses never went completely away. As COVID-19 prevention measures are relaxed, it’s just a matter of time before flu increases, bringing with it serious complications like pneumonia and heart attacks.

Flu vaccination is the best way to prevent flu and its complications. Everyone age 6 months and older is recommended to get a yearly flu vaccine. This can markedly lower the risk of influenza-related illness, hospitalization, and death. And because flu and COVID-19 share many symptoms, preventing flu means fewer people will need to seek medical care and testing for flu as well as COVID-19, saving time, money, and stress. Flu vaccine may be given at the same time as COVID-19 vaccine. Take advantage of every opportunity to remind patients about the importance of flu vaccination.

With or without the pandemic, a strong recommendation for vaccination with a presumptive approach is best practice.
A megastudy of text-based nudges encouraging patients to get vaccinated at an upcoming doctor’s appointment

- Penn Medicine and Geisinger Health Systems tested 19 different text messages to increase flu vaccine rates
- Intervention Group- 47K patients
  - Scheduled for PCP appointment Sept-Dec
  - No history of allergy to flu vaccine
  - Cell phone number in record
  - No flu shot the previous year
- Most Effective- 4.6 percentage point boost in vaccination
  - Flu Shot Reserved
- Least Effective
  - Jokes/Artful Language

Text Nudge Example

Figure S1. Text messages sent to patients in our top-performing intervention.

72 Hours Before Appointment

John, this is a message from Penn Medicine about your upcoming appointment. Text & data rates apply. Reply stop to opt out at any time.

You have an appt w/ Dr. Smith on 10/01 at 11:00 AM & it’s flu season. A flu vaccine is available for you. Protect yourself & your family’s health!

Look out for a vaccine reminder message before your appt. You can opt out of a reminder by texting back OPT OUT.

24 Hours Before Appointment

PENN MED: John, this is a reminder that a flu vaccine has been reserved for your appt with Dr. Smith.

Please ask your doctor for the shot to make sure you receive it.
CDC- National Influenza Vaccination Week

2021 NIVW Digital Media Toolkit

From December 5-11, 2021 we will be observing National Influenza Vaccination Week, reminding everyone 6 months and older that there’s still time to get a flu vaccine. Included below are CDC’s NIVW resources, vaccination messages, and activities you can use to share key flu information with your networks.

1. **Social Media Content**: Use our suggested Twitter, Facebook, Instagram and LinkedIn copy to spread the word. Schedule content to remind your networks about the importance of flu vaccination throughout the week. Use #FightFlu to join the conversation all week long and tag us at @CDCFlu on Twitter!

2. **Shareable Assets**: Share why you get an annual flu vaccine and encourage others to do the same with customizable photo frames and social story templates.

3. **Twitter Chat With the Coalition to Stop Flu**

4. **Template Media Release**

5. **Sample Newsletter Blurb**: Include our sample copy in your email newsletter or other communications to let others know about NIVW and the upcoming activities.

6. **Patient Reminder Messages**: Remind patients at your practice to get their annual flu vaccine by sharing these messages through your patient portal or other reminders.

7. **Printable Poster & Flyer**

We hope you will join us this year as we encourage everyone—especially those at higher risk—to protect themselves and their loved ones from flu this season by getting a flu vaccine.

Resources - Immunize.org
Campaign Plank Applications- Flu

- Start planning your flu vaccination strategy in early summer or even earlier
  - Prebook happens in beginning of year
- Review your access to flu vaccines
  - Are there enough access points?
  - Where can patients be directed to get shot if not in that office?
- Collaborate with medical science liaisons
  - Set up provider and staff vaccine education sessions
- Have clinical staff huddle with provider prior to visits to determine who can get vaccinated (even for some sick visits)
- Offer and vaccinate patients prior to provider coming in exam room using a strong recommendation
- Reconcile immunizations on every visit
- Allow patients to report flu vaccines through patient portal
- Set up transparent reports so everyone can see progress on vaccinating
- Use media to show your leadership, providers, and local celebrities being vaccinated
- Stratify your population and focus on population specific strategies- SDOH, race/ethnicity
Upcoming Webinar

Topic: Pneumococcal 101

Date/ Time: Thursday, March 17th at 2pm EST

Presenter: Frank Colangelo, M.D., FACP, M.S.-HQS, Premier Medical Associates, P.C.