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School Nurse Update

#3 9/24/19

IN THIS ISSUE

Fall greetings!

For those of you in the midst of immunization compliance I received news from the Department of Health Services (DHS) that the **online Report to the Local Public Health Department was updated and schools entering their data now have an option to have a copy of the report emailed to them.** If your school has already reached the 40th school day and entered your report to REDcap you may contact me and I will connect you with someone at DHS who can get you a copy of your report for your records.

I have included information in this Update on DPI's **Building the Heart of Successful Schools Conference.** This is a lesser known conference which I **highly recommend school nurses ask their districts to allow them to attend** along with other pupil services personnel. Of particular interest for school nurses is the November 4th preconference on **Effectively Responding to Self-Injury in Schools.**

I have attended **two excellent webinars on vaping and e-cigarettes** in the past month. **In PRACTICE POINTS,** I provide links to these recorded webinars and propose this **public health crisis provides school nurses unique opportunities that other healthcare professionals do not have.** Additionally, this Update contains many suggestions for **other resources to educate your students, staff and parents and to [help addicted teens quit.](#)**

Once immunization compliance and care plans are completed many school nurses turn to vision screening. Prevent Blindness' **vision screening resources** may help you improve your screening program, making it more evidenced based.

Speaking of **evidenced based practice,** check out the **School Nurses in the News** section. **Janesville school nurses'** efforts in collecting and sharing their data is highlighted!

Positive Childhood Experiences May Act as buffer

More New Glucagon Products

New Peanut Allergy Treatment

Pharmacists Teach About Drug Abuse

PRACTICE POINTS- Vaping Health Crisis an Opportunity for School Nurses

SAVE THE DATE

DPI New School Nurse Orientation- October 17-18, 2019 Stevens Point Holiday Inn
[Registration now open!](#)

DPI Building the Heart of Successful Schools - December 4-6, 2019 Wilderness Resort, Wisconsin Dells
[Registration now open!](#)

Wisconsin Association of School Nurses Annual Conference - Chula Vista Wisconsin Dells April 20-22, 2020.



Positive Childhood Experiences May Buffer Against Health Effects of Adverse Ones

Plenty of research shows that [adverse childhood experiences](#) can lead to depression and other health problems later in life. But researcher [Christina Bethell](#) wondered whether positive experiences in childhood could counter that....

We analyzed data from the Wisconsin Behavioral Risk Factor Survey [of 6,188 people] – a representative sample of all adults age 18 and older in the entire state....

Getting into the numbers, we found that having higher counts of those positive experiences was associated with 72% lower odds of having depression or poor mental health overall as an adult. We also found that those with higher levels of positive experiences were over 3 1/2 times more likely to have all the social and emotional support they needed as an adult....

What are the lessons people can take from these findings?

Every moment matters. Every interaction with a child has a reaction in that child. Even as we keep working to address the many social and cultural factors we need to address to prevent negative experiences, we should be focused on proactive promotion of the positive. In particular, there's a need to promote that "through any door" kind way of being – like happened in my childhood [with Mrs. Raccoon]. So that wherever a child goes – to school, early care, walking around their community, to a doctor – they're met with warm adults who purposely try to see and respond to them and meet their needs for care and guidance. [Read more...](#)

DPI News

The **2019 Building the Heart of Successful Schools Conference** brochure is now available online. The brochure contains detailed descriptions of the keynote addresses, breakouts as well as an at-a-glance agenda.

The brochure, as well as lodging and registration information for the full conference, along with 4 preconference sessions, can be found at: <https://dpi.wi.gov/sspw/conference>.

The Office of Children's Mental Health Trauma Informed Care (TIC) Workgroup is offering another TIC workshop in its series:

Enhancing Family Engagement by Understanding Cultural and Historical Trauma
Monday, Nov. 4, 2019 | 1 – 4 pm

The flyer for this workshop is attached to the Update.

More New Glucagon Products

Xeris Pharmaceuticals, Inc. has [received regulatory approval from the U.S. Food and Drug Administration \(FDA\)](#) for GVOKE™ (glucagon) injection, its ready-to-use, room-temperature stable liquid glucagon for the treatment of severe hypoglycemia in pediatric and adult patients with diabetes ages 2 years and above.

GVOKE is the first glucagon product approved that can be administered via a prefilled syringe (GVOKE PFS) or auto-injector (GVOKE HypoPen™), vastly reducing the steps to prepare and administer glucagon in the event of severe hypoglycemia, or dangerously low blood sugar levels. [More information...](#)

DPI will post the instructions for use on the DPI Medication Administration website to be used for training purposes. The GVOKE HypoPen™ is expected to be available in 2020.



Forecasted funding opportunities in Adolescent Health

The Wisconsin Department of Health Services (DHS) Adolescent Health Program will be announcing two separate funding opportunities this fall.

The first is the Sexual Violence Prevention Program (SVPP), funded by the [Rape Prevention and Education grant](#). This grant funds primary prevention strategies to prevent sexual violence. These funds will support community-level strategies that align with approaches in the Center for Disease Control and Prevention's (CDC) [STOP SV Technical Package to Prevent Sexual Violence](#). The community-level strategies will include a focus on partnerships and collaboration. The anticipated project start date is February 1, 2020. Renewal funding after Year 1 is planned for a maximum of three additional years. Grant funding is expressly dependent upon the availability of funds to DHS from a federal funding appropriation.

The second opportunity funds additional partners to implement the [Personal Responsibility Education Program \(PREP\)](#). This Department of Health and Human Services Family and Youth Services Bureau (FYSB) grant funds agencies to educate young people with the goal of preventing pregnancy and sexually transmitted infections. PREP prepares teens for adulthood by offering programs with proven positive outcomes in counties with high teen birth rates.

Be on the lookout for these requests for applications that will be announced this fall (2019).

Wisconsin Epi Express (WEE) Newsletter is Here!

The WEE newsletter is a report on current communicable disease issues and program updates from the Bureau of Communicable Diseases (BCD). This newsletter is published quarterly and distributed electronically.

Check out the [new issue](#)! For previous issues, please view the [Epi Express webpage](#).

CDC Healthy Schools

The CDC Healthy Schools website has a new look that is designed to help you discover, access, view, and share content more easily. Whether you frequently visit our site from your mobile phone, tablet, laptop, or desktop computer, you will find that our format is evolving to meet your digital needs. Browse the site to learn more about [CDC Healthy Schools](#) and the work we do to promote the health and well-being of children and adolescents.

[No new measles cases reported to CDC in week ending September 12; total cases for 2019 remain at 1,241 across 31 states](#)

News from the National Association of School Nurses...

Podcast: Improving the Nutrition of Children With Autism Spectrum Disorder

NASN School Nurse Editor, Cynthia Galemore, interviews authors Constance McIntosh, Jayanthi Kandiah, and Naomi Rachel Boucher about their article, "Practical Considerations for School Nurses in Improving the Nutrition of Children With Autism Spectrum Disorder."

[Listen to the Podcast.](#)



In partnership with the Girl Scouts of Wisconsin Southeast, Project ADAM is proud to offer a patch program that will ensure schools are prepared for a sudden cardiac arrest event.

Junior Girl Scout troops and above can receive the patch by:

- Partnering with their local school to receive the Heart Safe School designation, or
- Helping their school maintain the requirements for the Heart Safe School designation

Girl Scouts outside this area can still take this on as a service project and/or adopt this patch as well. Click [here](#) for more information. School nurses may want to share this with area Girl Scout leaders.



Connecting Health and Education So Children Can Learn and Thrive

Building effective policy advocacy campaigns, creating programs that support sustainable systemic changes, and engaging parents to identify and advocate for critical issues are all key to supporting healthy schools and communities. [Read the Article](#)

From the American Academy of Pediatrics

[School Attendance, Truancy & Chronic Absenteeism: What Parents Need to Know](#)

[Can biracial children get sickle cell disease?](#)

[AAP publishes its influenza recommendations for 2019–2020 season](#)

Resources for Drug Abuse Prevention

As part of CVS Health's ongoing commitment to help educate the public about the challenges surrounding addiction, CVS Health created Pharmacists Teach, a no-cost educational prevention program that provides students and parents with information about prescription drug misuse and abuse. Pharmacists can come into your schools to educate alongside school nurses and health educators. [Read more...](#)

Issues Currently Affecting Student Health - Vaping

AAP commends federal proposal to ban unauthorized flavored e-cigarettes

Federal officials said non-tobacco-flavored e-cigarettes including mint and menthol would not be allowed to be sold without Food and Drug Administration (FDA) review, a move AAP President Kyle E. Yasuda, M.D., FAAP, called bold and decisive.

"Pediatricians have been raising the alarm with increased urgency about the toll of e-cigarettes on their teenage patients, which ranges from wheezing and coughing to compromised lung function, asthma exacerbation and most recently, to seizures, respiratory distress and death," Dr. Yasuda said in a [statement](#). "This is a public health emergency and we are pleased to see the federal government leading efforts to help address it."

Resources

- AAP Julius B. Richmond Center of Excellence e-cigarette website, <http://bit.ly/1QGYEVI>
- AAP policy *E-Cigarettes and Similar Devices*, <http://bit.ly/30om1wJ>
- CDC e-cigarette website, <http://bit.ly/34c7ZAv>
- FDA's The Real Cost youth e-cigarette prevention campaign, <https://www.fda.gov/tobacco-products/real-cost-campaign>
- Information for parents from HealthyChildren.org about e-cigarettes, <http://bit.ly/2SPHgDf>
- *Pediatrics* e-cigarette article collection, <http://bit.ly/2zx4Dty>
- Surgeon general's interactive website about e-cigarettes geared toward parents and others who work with youths, <http://bit.ly/2L43YGw>

More E-cigarette/Vaping Resources

www.scholastic.com/youthvapingrisks

<https://www.fda.gov/>

CDC Fact sheet for parents:

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/OSH-E-Cigarettes-and-Youth-What-Parents-Need-to-Know-20190327-508.pdf

lung.org/e-cigs

American Lung Association "The Vape Talk"

<https://www.lung.org/stop-smoking/vape-talk/>

INDEPTH: An Alternative to Teen Nicotine

Suspension or Citation <https://www.lung.org/stop-smoking/helping-teens-quit/indepth.html>

Helping Teens Quit <https://www.lung.org/stop-smoking/helping-teens-quit/>



School Nurses in the News

Janesville school nurses use their health services data and stories to inform school board and public.
[Read story.](#)

FDA Committee Recommends Approval for New Peanut Allergy Treatment

A closely watched but controversial treatment for peanut allergies took a big step closer to becoming widely available. Recently, an advisory committee of the U.S. Food and Drug Administration voted 7-2 to approve Palforzia, a standardized peanut powder product, to help reduce allergic reactions to peanuts for patients ages 4 to 17 as part of oral immunotherapy protocol.

[View this on NPR.org](#)



New portable oxygen device on the market by RapidOxygen™
<https://rapidoxygen.com/product-info>



Vision Screenings for School Success

For many children with a vision problem, correction is as simple as a pair of prescription glasses and has an incredible impact on their success in the classroom and beyond. Research has shown that just six weeks of vision correction can improve a child's standardized tests scores to match the scores of their peers who do not have a vision problem ([Roch-Levecq A, Arch Ophthal 2008](#)).

A comprehensive vision screening program is important for students success in school. Prevent Blindness Wisconsin has tools to help you start or strengthen your vision screening program. Our [Vision Screening Toolkits](#) offer resources to plan, implement, and follow-up on vision screenings. Our Children's Vision Screener Trainings certify you as a Children's Vision Screener. For any other questions regarding children's vision screening, please contact Shelby at Shelby@pbwi.org.



New CE Courses for Nurses

[Are Menstrual Cups Safe?](#) CE / CME / ABIM MOC

Part-time Department of Health
Services Project Aware Coordinator
Position

More information can be found at:

https://careers.peopleclick.com/careers/p/client_medcollegewi/external_staff/gateway.do?functionName=viewFromLink&jobPostId=13501&localeCode=en-us

During the past month, I have had the opportunity to listen to two excellent webinars on the topic of vaping and e-cigarettes. I have included the links to the recorded webinars at the end of these Practice Points. I highly recommend taking a couple of hours to listen to them!

What struck me as I listened is just how acute and how severe this public health crisis is. Yes, the use of e-cigarettes and the exponential increase in the number of teens using these products is a public health crisis. One, that school nurses are particularly well positioned to address and intervene. That was my second aha moment. Here we have a disease (nicotine addiction), threatening the youth of our nation, and the healthcare providers who are in the best position to influence the health habits of those at risk are school nurses. School nurses need to seize this opportunity!

Shockingly, I learned that in the past two years the use of Electronic Nicotine Delivery Systems (ENDS) by high school students has increased by 135%. One out of four teens have used ENDS. My third aha moment - ENDS are what e-cigarettes are – they deliver nicotine a highly addictive substance. Call it “vaping” or “juuling” or any other verb, but what occurs is the delivery of nicotine via aerosol. We know, nicotine is particularly detrimental to the developing brain.

What scientists and public health officials are now discovering are the effects of the other chemicals and oils in these ENDS products. Oils and flavorings approved for oral consumption have untoward effects on lung tissue when inhaled. We are also discovering that similar to tobacco cigarette use, there are health consequences caused by “second-hand” exposure to the aerosolization of these oils and carcinogenic chemicals.

After years of decreasing the number of Americans who use tobacco and nicotine products and preventing American youth from a lifetime of addiction, we are now seeing this trend reverse. When I read articles and listen to webinars such as the ones I mentioned, I note the opportunities to influence and prevent youth from starting to use these products and correct their misconceptions (harmless, do not contain nicotine, better for you than tobacco products, only water vapor, are not addictive). Using what public health officials have learned over 40 years of tobacco cessation efforts, there are definitive educational strategies we can use, policies that can be implemented, and evidenced based cessation programs available for ENDS.

School nurses are well positioned to do prevention education, elicit parent support, hang posters, influence school policies, encourage non-punitive measures for violations of athletic codes and refer students to cessation programs. If you do any sort of tobacco prevention presentations to elementary, middle, or high school students you simply must include information on ENDS products and the health consequences of vaping. School nurses have unique relationships with students. Leverage those relationships to influence the health choices of your students.

Truly consider that public health officials and clinical healthcare providers do not have the reach and potential of school nurses. I think about Lillian Wald the founder of both public health nursing and school nursing in the United States. In the early 1900’s infections and communicable diseases prevented students from attending school and reaching their potential. Lillian Wald took action. Today products marketed to youth that affect brain development, create addiction, and have other yet unknown health consequences prevent our youth from reaching their full potential. What action will you take?

[Allergy & Asthma Network’s “Vaping What We need to Know”](#)

[American Lung Association’s “E-cigarettes & School Wellness Policies: Resources for Schools”](#)



Enhancing Family Engagement by Understanding Cultural and Historical Trauma

Explore how people are served differently depending on their culture or history.

children.wi.gov
Office of Children's
Mental Health

Monday, November 4, 2019 • 1 pm – 4 pm

AGENDA

Panel presentation (originates in Madison, streamed to other locations) | Panel Q&A | Facilitated local discussions

To Register

<https://www.surveymoz.com/s3/5121741/TIC>

Registration is limited so register early.

For more information contact:

Karen.Katz@wisconsin.gov

Trauma-Informed Care Workshop Series

February 3, 2020

Vicarious Trauma | Secondary Trauma | Self Care

Workshop Locations

Appleton

Fox Valley Technical College
1825 N. Bluemound Dr., Room E130 (off entrance 10)
Appleton, WI 54912

Ashland

Ashland County Health and Human Services
630 Sanborn Ave., Oredock Room
Ashland, WI 54806

Eau Claire

Department of Health Services Western Regional Office
610 Gibson St., Suite 2, Room 123
Eau Claire, WI 54701

La Crosse

Administration Center
212 6th Street North, Room 0430
La Crosse, WI 54601

Madison – Panel Broadcast Originates

Department of Health Services
1 W. Wilson St., Room 751
Madison, WI 53703

Milwaukee

Southside Health Center
1639 S. 23rd St., Carol Graham Conference Room
Milwaukee, WI 53204

Rhineland

Northern Regional Office, 2187 North Stevens
Rhineland, WI 54501

Sparta

Monroe County Justice Center
112 S Court St., Monroe County Board Assembly
Room #1200 (use Oak St. entrance), Sparta, WI 54656

Viroqua

Erlandson Building (large conference room)
318 Fairlane Dr., Viroqua, WI 54665

Waukesha

State Office Building
141 NW Barstow St., West Building, Room 151
Waukesha, WI 53188

Wausau

Marathon County Health Department
1000 Lake View Dr., Suite 100, Maple/Oak Conference Room
Wausau, WI 54403

*This workshop is intended for those with an understanding of trauma-informed care.
It is not an introduction or beginner-level trauma-informed care training.*

RISE, Rogers InHealth, and WISE invite your team to:



Compassion Resilience:

A Toolkit for Schools, Human Service and Community Organizations

Facilitator/Administrator Team Training

October 25th, 2019 at RISE

2120 Fordem Avenue

Madison, WI 53704

8:00am - 3:30pm

We want to show up with compassion every day.

Compassion Fatigue is a normal response when we care about people in distress.

Help yourself and your colleagues by learning the skills and supports that build resilience.

As leaders, empower your staff to manage the daily stresses of the teaching and helping professions.

The Compassion Resilience Toolkit is a flexibly implemented set of resources to build awareness of compassion fatigue and strategies to increase compassion resilience in adults from a system and individual perspective. The resources include activities for large group, small group or team-based use as well as for individual reflection. Included in the 12 sections are activities for leaders and staff on realistic expectations, setting compassionate boundaries, building a culture of compassion, self-care strategies, and links to further learning.

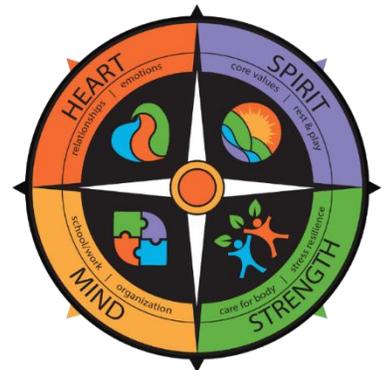
The Training of Facilitators and the Administrative Leader prepares you to bring the toolkit resources to your colleagues. **Attend as a team to ideally include: one administrator and 2-3 people who will facilitate with staff.** The day includes clarification of leadership roles, rationale for the work, a look at how to inspire culture change through the toolkit, and tips for implementing the toolkit resources matched to the realities of your current organizational commitments and goals.

REGISTER your team by emailing Alexis at alexis.essien@rogersbh.org; please provide team member names and their email addresses.

COST: \$400 per team of up to 5 people from an organization.

Lunch will be catered and is \$15/person.

Group size is limited to 30 people.



The materials are easy to access and free! www.compassionresiliencetoolkit.org

Developed in partnership with:



E-cigarettes and Youth: What Parents Need to Know



WHAT ARE E-CIGARETTES?

Electronic cigarettes (e-cigarettes) are battery-powered devices that deliver nicotine, flavorings, and other ingredients to the user. Using e-cigarettes is sometimes called “vaping.” E-cigarettes do not create harmless “water vapor” – they create an aerosol that can contain harmful chemicals.

HOW MANY YOUTH ARE USING E-CIGARETTES?

- E-cigarettes have been the most commonly used tobacco product among U.S. youth since 2014.
- In 2018, CDC and FDA data showed that more than 3.6 million U.S. youth, including 1 in 5 high school students and 1 in 20 middle school students, were past-month e-cigarette users.
- During 2017 and 2018, e-cigarette use skyrocketed among youth, leading the U.S. Surgeon General to call the use of these products among youth an epidemic in the United States.

WHAT ARE THE RISKS FOR YOUTH?

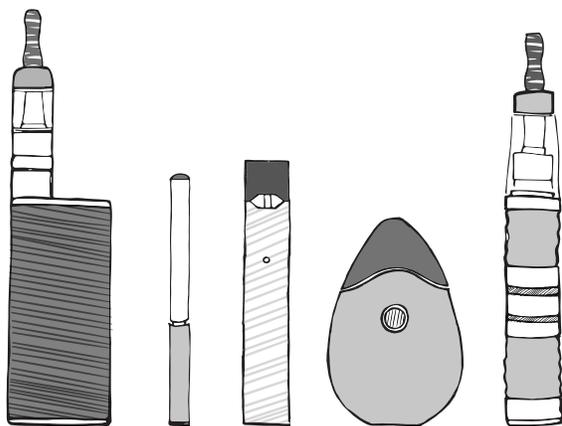
- Most e-cigarettes contain nicotine, which is highly addictive. Nicotine exposure during adolescence can:
 - » Harm brain development, which continues until about age 25.
 - » Impact learning, memory, and attention.
 - » Increase risk for future addiction to other drugs.
- Young people who use e-cigarettes may be more likely to go on to use regular cigarettes.
- Many e-cigarettes come in kid-friendly flavors – including mango, fruit, and crème – which make e-cigarettes more appealing to young people.
- E-cigarette aerosol is not harmless. It can contain harmful substances, including:
 - » Nicotine
 - » Ultrafine particles
 - » Cancer-causing chemicals
 - » Flavorings that have been linked to lung disease
 - » Volatile organic compounds
 - » Heavy metals such as nickel, tin, and lead





WHAT DO E-CIGARETTES LOOK LIKE?

- E-cigarettes come in many shapes and sizes. Some look like regular cigarettes, cigars, or pipes. Larger e-cigarettes such as tank systems – or “mods” – do not look like other tobacco products.
- Some e-cigarettes look like other items commonly used by youth, such as pens and other everyday items. New e-cigarettes shaped like USB flash drives are popular among youth, including JUUL and the PAX Era, which looks like JUUL and delivers marijuana.



WHAT CAN YOU DO AS A PARENT OR CAREGIVER?

As a parent or caregiver, you have an important role in protecting children from e-cigarettes.

- » Talk to your child or teen about why e-cigarettes are harmful for them. It’s never too late.
- » Set a good example by being tobacco-free.
- » Learn about the different shapes and types of e-cigarettes and the risks of e-cigarette use for young people at www.CDC.gov/e-cigarettes.

ABOUT USB FLASH DRIVE-SHAPED E-CIGARETTES

As a parent or caregiver, you may have heard about the use of USB flash drive-shaped e-cigarettes, including JUUL (pronounced “jewel”). JUUL is the top-selling e-cigarette brand in the United States.

JUUL is being used by students in schools, including in classrooms and bathrooms. JUUL’s nicotine liquid refills are called “pods.” According to the manufacturer, a single JUUL pod can contain as much nicotine as a pack of 20 regular cigarettes.

JUUL delivers nicotine in a new form called “nicotine salts,” which can make it less harsh on the throat and easier to use by youth. JUUL also comes in flavors that can appeal to youth.



Make a Strong Flu Vaccine Recommendation

FIGHT FLU



Information for Health Care Professionals

CDC recommends everyone 6 months and older get an influenza (flu) vaccine every year. Flu vaccine has been shown to prevent millions of illnesses, tens of thousands of hospitalizations and thousands of deaths each year.

Your Vaccine Recommendation is Critical

As a health care professional (HCP), your strong recommendation is a critical factor in whether your patients get an influenza vaccine. Research indicates that adults are more likely to get their flu vaccine if their doctor or health care professional recommends it to them. Most adults believe vaccines are important, but they need a reminder from you to get vaccinated.



When to Vaccinate

- CDC recommends that vaccination should be offered by the end of October. However, vaccination should continue throughout flu season as long as influenza viruses are circulating, even into January or later.
- If you do not offer vaccine at your facility, make a flu vaccine referral, and then follow up with each patient during subsequent appointments to ensure they got vaccinated. If the patient remains unvaccinated, repeat the recommendation/referral and try to identify and address any questions or concerns.

How to Make a Strong Flu Vaccine Recommendation

Based on years of research into vaccine motivators, CDC has developed a mnemonic device to help HCPs make a strong vaccine recommendation. This method known as “SHARE” can help you to make a strong vaccine recommendation and provide important information to help patients make informed decisions about vaccinations.

S- SHARE the reasons why an influenza vaccine is right for the patient given his or her age, health status, lifestyle, occupation, or other risk factors CDC recommends annual vaccination for everyone 6 months and older with any licensed, age-appropriate flu vaccine with no preference expressed for one vaccine over another.

“This vaccine can protect you and your family from getting sick from flu. By getting the vaccine today, you’ll be protecting yourself and the people around you who may be more vulnerable to serious flu illness, like your children and parents.”

H- HIGHLIGHT positive experiences with influenza vaccines (personal or in your practice), as appropriate, to reinforce the benefits and strengthen confidence in flu vaccination.

“The CDC recommends to tell your patients that CDC and you recommend they get an influenza vaccine each year.”



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

A- ADDRESS patient questions and any concerns about influenza vaccines, including for example, side effects, safety, and vaccine effectiveness, in plain and understandable language.

“A flu vaccine cannot cause flu infection. The most common side effects of an influenza vaccine are mild, like redness, swelling, soreness, or a low-grade fever for a flu shot. This should go away within a few days.”

R- REMIND patients that influenza vaccines protect them and their loved ones from serious flu illness and flu-related complications.

“Flu activity is going to start to pick up, and CDC says to expect more cases in the coming months. That is why I want to make sure I help protect you and your loved ones.”

E- EXPLAIN the potential costs of getting the flu, including serious health effects and time lost (such as missing work or family obligations).

“It’s important to get vaccinated this season because flu vaccination can reduce potential flu illnesses, doctor visits, and missed work and school due to flu.”

Types of Vaccines Available

For the 2019-2020 flu season, providers may choose to administer any licensed, age-appropriate flu vaccine — inactivated influenza vaccine (IIV3 or IIV4), recombinant influenza vaccine (RIV4) or live attenuated influenza vaccine (LAIV4):

Vaccine type	Vaccine description	Recommended for*
Quadrivalent (4-component) Inactivated Influenza Vaccine (IIV4)	Injectable inactivated vaccine containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common	People 6 months and older
Live Attenuated Influenza Vaccine (LAIV4)	Intranasal live attenuated vaccine containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common	Healthy non-pregnant people 2 through 49 years of age
Quadrivalent Cell Culture-Based Inactivated Influenza Vaccine (ccIIV4)	Injectable inactivated influenza vaccine manufactured using cell culture rather than eggs, containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common	People 4 years and older
Quadrivalent Recombinant influenza Vaccine (RIV4)	Injectable influenza vaccine produced without the use of influenza viruses or eggs; contains the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common	Adults 18 years and older
Trivalent Adjuvanted Inactivated Influenza Vaccine (aIIV3)	Injectable inactivated influenza vaccine containing MF59 adjuvant, designed to help promote a stronger immune response in older adults; contains the influenza A(H1N1), (H3N2) and one influenza B virus predicted to be most common	Adults 65 years and older
Trivalent High-Dose Inactivated Influenza Vaccine (HD-IIV3)	Injectable inactivated influenza vaccine containing four times the antigen of a standard-dose influenza vaccine, designed to help promote a stronger immune response in older adults; contains the influenza A(H1N1), (H3N2) and one influenza B virus predicted to be most common	Adults 65 years and older

* Licensed ages vary for different brands; consult package insert for appropriate ages for specific vaccines

For more information, visit: www.cdc.gov/flu
or call **1-800-CDC-INFO**