



overview

Women's Health Overview

Is it Time for Your Next Vaccine?

"We all need to be protected against infectious diseases, but each of us has differing needs according to our age and health."

In the heat of a Nebraska July, it's hard to imagine that in less than two months influenza vaccine will start to arrive for the 2020-2021 season, but it will. Pharmacies and provider offices across the state will begin to administer influenza vaccine at the end of August. Many of us have questions about when to get the flu shot, what other vaccines we may need and when there will be a vaccine against SARS-CoV-2, the virus that causes COVID-19.

Information released by the Centers for Disease Control and Prevention (CDC) at the end of May highlighted that many Americans were falling behind on their vaccinations due to quarantine and social distancing. Thankfully, you never have to start a vaccine series all over from the beginning. But vaccines can't work if you

don't get them! Now is the time to call your pharmacy or medical provider to ask about any delays that you or your children have had over the past few months. Did you remember to get that second dose of shingles vaccine? Has it been 10 years since your last tetanus booster? Did you have a birthday that makes you eligible for the pneumococcal pneumonia vaccine? If you have diabetes, are you protected against hepatitis?

While the CDC publishes a schedule for childhood and adult vaccinations, it is sometimes hard to understand what that means for you and your family. We all need to be protected against infectious diseases, but each of us has differing needs according to our age and health. Your pharmacist or health care provider can help you make sense of the CDC recommendations and tell you how these vaccines can protect you and those you care about against disease.

Your child's pediatrician is the best person to manage your child's early vaccinations. Yes, pharmacists can give them if necessary, but there are many other

see Vaccines pg. 4

Gardasil Updates

It is unfortunate that overall vaccination rates have dropped dramatically during the pandemic as preventive care has been postponed. When well woman care resumes, we encourage you to consider whether you are a candidate for the Gardasil 9 series. Gardasil is a three-shot series against the majority of cancer-causing human papillomavirus (HPV) subtypes that can infect men and women. HPV is the most common sexually transmitted infection (STI).

The link between HPV infection and genital cancers is well established. When it was first approved in 2006, Gardasil was indicated for females and males 9 to 26 years of age. More than a year ago, the FDA extended the age for which this vaccine can provide benefit up to 45 years. This means that insurance typically covers the injections as a preventive service. This month the FDA officially added prevention of head and neck cancers to Gardasil's benefits. The Olson Center offers Gardasil 9. Our providers are here to answer your questions and help you make a decision about this vaccination.

Contributed by **Sonja Kinney, MD**
Medical Director, Olson Center for Women's Health
UNMC Department of OB-GYN



From the chairman

Since March, the ever-changing landscape of health care continues to be rocked by the COVID-19 pandemic. It has required us to re-evaluate our priorities and how we provide care in this new world. In the interests of our patients' and staff's safety, we have made difficult decisions about visitors to the hospital as well as those accompanying persons during outpatient visits. Hopefully these rules will adjust as the prevalence of COVID-19 decreases. A positive change has been the use of previously underutilized technology to provide new methods of care. Surprising to some, this has been received positively by many of our patients and even more surprisingly, by many of our providers. In addition to standard telehealth options, the use of home monitoring has allowed providers insight into what actually happens when patients are at home. This is clearly more relevant to assessments of health than those made in the artificial environment of the clinic or hospital. Using technology in this way is a change many of us hope becomes permanent.

It is timely that this issue focuses on disease prevention through vaccination. There is considerable evidence that rates of vaccination have reached concerning low levels since the pandemic. Well child and well woman visits have dramatically decreased. Patients, concerned about the safety of the hospital, are deferring visits. As the disease wanes, it is important there be increased emphasis on vaccination for both children and women. The new indications for Gardasil 9 are exciting and offer us greater chances to reduce the incidence of HPV infection and cervical cancer.

With the increased emphasis on safety (including hand washing, social distancing and masking), our health system is safer than it was before COVID-19. Please discuss vaccinations with your providers. It is an easy way to safeguard your health and the health of your loved ones.

Carl V. Smith, MD, FACOG
Chairman
Department of Obstetrics and Gynecology
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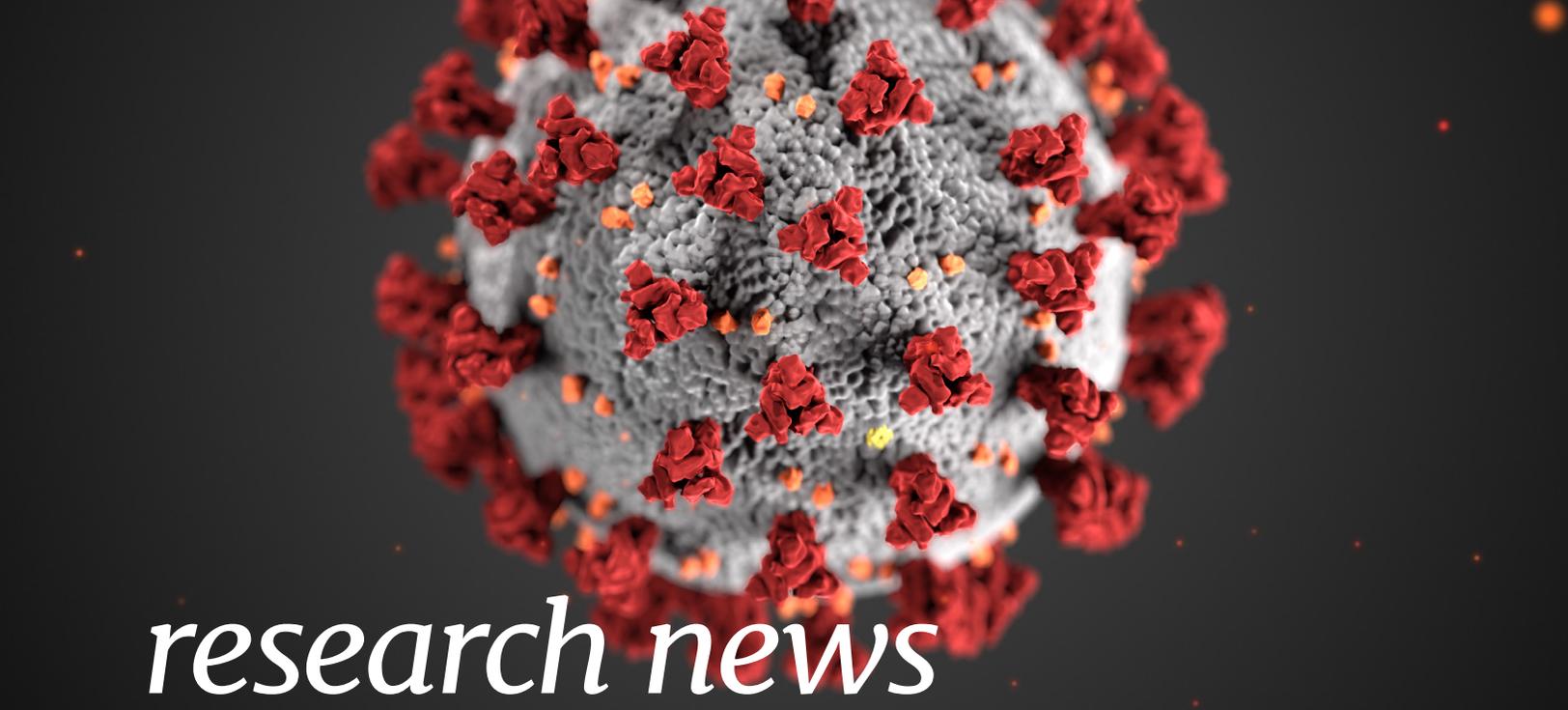
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An alternative electronic version of the newsletter is available. If you would like to receive this electronic version in addition to the print version, or instead of, please email your request to ljmolczyk@unmc.edu.



research news

COVID-19 Rapid Response Grantees Named

The UNMC College of Medicine has provided funds to catalyze and energize nine research projects designed to address and mitigate the cause and consequences of the COVID-19 pandemic. A 10th project was funded by the Lageschulte and Weese New Frontiers in Medical Research Fund.

The rapid response grants were designed to include, but were not limited to, studies on the virus, diagnostic modalities or implementation, therapeutics, prevention, utilization of samples collected from subjects, and clinical research, that can inform safety as well as real-time decision making for professionals tasked with care of patients.

“These grants are typified by their focus on critical gaps in our knowledge to help patients as well as providers,” says Howard Fox, MD, PhD, senior associate dean for research and development. Dr. Fox notes that though the process was rapid, proposals underwent a rigorous review.

Jingwei Xie, PhD, Department of Surgery, received funding to develop nanofiber swabs for the

capture and extraction of COVID-19 samples. The new nanofiber swabs are expected to detect COVID-19 more accurately and earlier than the current available swabs. In addition, the swabs can be used for collecting biological samples from other locations in the body such as the gastrointestinal tract, vagina, surgical sites and chronic wounds.

Dalia ElGamal, PhD, and St. Patrick Reid, PhD, in the Department of Pathology and Microbiology, received funding for a project to repurpose an existing group of drugs, called BRD4 inhibitors, in hopes of translating this therapy to patients with COVID-19. The BRD4 inhibitors possess anti-cancer and anti-inflammatory properties. Studies with these drugs point to promising effects on enhancing immune function and protecting cells from infection by the novel coronavirus.

Siddappa Byrareddy, PhD, Department of Pharmacology and Experimental Neuroscience, in collaboration with Dr. Reid received funding from the Lageschulte and Weese New Frontiers in Medical Research Fund to identify new compounds that can inhibit

COVID-19. This study offers a unique opportunity to learn what the virus needs from the cell in order to infect and cause disease. The investigators hope to identify new drugs to treat those infected with COVID-19 by targeting proteins in the host cell and not the virus.

The virus interacts with the protein angiotensin converting enzyme-2 (ACE2) in order to enter cells. A project by Sushil Kumar, PhD, Department of Biochemistry and Molecular Biology, is designed to understand the nature of this interaction and a project by Irving Zucker, PhD, Cellular and Integrative Physiology, examines how ACE2 potentiates adverse neural and cardiovascular events following coronaviral infection.

A full list of supported projects is available at unmc.edu/news.cfm?match=25656.

Contributed by John S. Davis, PhD
UNMC Department of OB-GYN

aspects of a pediatric visit that shouldn't be missed. This article will focus on adults.

The adult vaccine recommendations are:

Annual influenza vaccine: Influenza vaccine for adults comes in two forms – the standard influenza vaccine and a high dose vaccine containing more of the antigen that stimulates your immune response. Generally, high dose is recommended for those over the age of 65 and for some patients with special medical needs.

Tetanus, diphtheria, pertussis (Tdap): This vaccine needs to be given every 10 years for life. You may need to be vaccinated in less than 10 years if you have a new baby in the family or if you get a cut or wound.

Measles, mumps and rubella (MMR): If you're not already done, you should complete this series of vaccines. Some adults will be old enough that they don't need this vaccine. Many people born before 1968 were infected with these diseases and may have developed immunity. Your pharmacist or provider can help you decide.

Shingles (Shingrix): Even if you received the older shingles vaccine (Zostavax), you should get the newer (Shingrix) vaccine. This is a two vaccine series.

Pneumococcal pneumonia: There are two kinds of pneumococcal vaccine. One is given to children and patients with special health conditions. The other is intended for patients over the age of 50. Some patients will need both vaccines, up to a total of three vaccinations. Others will only need one kind of vaccine but may still need two doses.

There are other vaccines traditionally given to teens that also apply to adults, such as the human papillomavirus (HPV) vaccine, which prevents many types of cancer and can be given up to the age of 45. Adults in certain careers may need to prove they are immune to chicken pox, or they should be vaccinated.

There is currently no vaccine for COVID-19 and there will not likely be one until some time in 2021. The process of vaccine approval isn't the slow part of this development. Scientists are already working on a vaccine that will stimulate our immune systems without making us sick. They then need to show that the vaccine is safe and that it causes us to create antibodies against the virus. Lastly, it will take months to make enough vaccine to have a public health impact. Anyone who has ever tried to double or quadruple a recipe knows it's not always as easy as just multiplying by four! Imagine trying to go from making 100 doses of vaccine to run tests and then ramping up to make 110 million doses of vaccine.

Even with no COVID-19 vaccine in the near future, there are some vaccines that help protect your lungs from other diseases that may complicate a COVID-19 infection. Because COVID-19 attacks the lungs, it is important to be vaccinated against other diseases that also attack the lungs, especially pneumococcal pneumonia and influenza. It is never too early to get a flu vaccine. This year, an increased demand for vaccine is predicted because the COVID-19 virus will continue to circulate through influenza season.

Contributed by **Ally Dering-Anderson, PharmD, RP, FAPhA**
*Department of Pharmacy Practice and Science
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Mission Statement

The mission of the Olson Center for Women's Health is to provide a national comprehensive health science center at the University of Nebraska Medical Center (UNMC). Based in the Department of Obstetrics and Gynecology, the center enables UNMC to make distinctive strides in education, research, and service through innovative approaches to women's health issues.

Want More Information?

Visit our website: **OlsonCenter.com**

Learn more about our health care providers, services, and programs available at the Olson Center for Women's Health. Our website also offers women's health information. Here are a few topics:

- Breastfeeding
- Breast health and disease
- Cardiovascular health
- Gastrointestinal health
- Gynecologic health
- Reproductive endocrinology/infertility
- Pregnancy
- Wellness
- Incontinence

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Boosting Your Immunity with Nutrition

Proper nutrition is the foundation of good health. Having a healthy diet can support and even improve your immune system. Balanced eating, including a daily variety of foods from all five food groups, provides all the nutrients your body needs. In general, people who are malnourished or lacking essential nutrients are more likely to get sick. Some vitamins and minerals may improve your immune health.

Vitamins

Beta-carotene is an antioxidant that can reduce inflammation and boost immune function by increasing disease-fighting cells within the body. Good sources for beta-carotene are tomatoes, sweet potatoes, spinach, kale, broccoli, carrots and mangoes.

Vitamin C, also an antioxidant, helps the immune system by contributing to antibody formation. Good sources include citrus fruits, berries, melons, tomatoes, bell peppers and broccoli.

Vitamin D is required by the immune system to fight off invading bacteria and viruses. Good sources of vitamin D are milk, fatty fish, egg and juices fortified with vitamin D.

Vitamin E aids in the production of antibodies. Some good sources include sunflower seeds, avocado,

spinach, peanuts, hazelnuts, almonds, broccoli and asparagus.

Minerals

Zinc boosts your immune and metabolism functions, and is also important in wound healing. Food sources for zinc include lean meat, seafood, milk, grains, beans, seeds, nuts and fortified breakfast cereals.

Iron helps your body carry oxygen to cells. Heme iron is absorbed best. Good sources include beef, chicken, liver and turkey.

Selenium is an antioxidant that protects cells from damage. Good sources include Brazil nuts, walnuts, tuna, cod, red snapper, herring, beef, poultry and whole grains.

Make plans to attend the 23rd Annual Omaha Women's Health and Wellness Conference on Oct. 9, 2020 as Meghan McLarney, RD, LMNT, will explain more on the effect of plant-based diets on our immunity. Go to omahawomenshealthandwellness.com for conference updates or call 402.559.6345.

Contributed by **Jaime Stevens, RD, LMNT**
Olson Center for Women's Health



23rd Annual

Omaha Women's Health & Wellness Conference

Pouring From an Empty Cup: Prioritizing Self-care While Caring for Others
Friday, Oct. 9, 2020 | 8 a.m. to 4:30 p.m. | Virtual Event

We are committed to your safety. Due to the COVID-19 pandemic, this year's conference will be an online-only event.

Call the Olson Center for Women's Health at 402.559.6345 or go to omahawomenshealthandwellness.com for more information.



OLSON CENTER FOR WOMEN'S HEALTH

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olsoncenter.com

current events

Olson Center Welcomes New Clinic Manager

The Olson Center for Women's Health is pleased to welcome Lindsey M. Davis as clinic manager. Previously, Lindsey managed the Nebraska Medicine ENT, Allergy and Audiology clinic.

Davis says she has always wanted to support women's health and is excited about her new role.

"The Olson Center for Women's Health encompasses strength, education and support for so many people within our community," she says. "I knew I wanted to be a part of their extraordinary delivery of care. I am excited to work hard with my team so we can deliver the best patient care possible."

Mitzi Johnson, who served the Olson Center for over seven years as clinic manager, has taken a new role as ambulatory application manager in the Enterprise Applications Department of Nebraska Medicine. In her new role, Johnson will lead a team of analysts who build, support and configure the One Chart patient care application.

"I have really enjoyed my tenure in the Olson Center," she says. "I have grown as a leader and health care professional because of my leaders: Rick Blum, Dr. Sonja Kinney and Dr. Carl Smith. They have supported, coached and mentored me over the years and I am truly grateful. My team has been a true inspiration as well. I have enjoyed watching them grow over the years, and they have helped me to be more confident, have more fun and uplifted me personally in ways they may never know. I will truly miss them all."

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