

# *Discover* Health

West Chester Campus

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# Eliminating Epileptic Seizures

Sarah Allen has lived with epilepsy nearly her entire life. At 18 months old, she had a seizure triggered by a high fever. At age 5, she was diagnosed with focal onset epilepsy, the most common form.

“I used to have multiple seizures every day; medication brought the occurrence down to five or six seizures a month,” says Sarah. “I’ve tried every single medication that could potentially treat my seizure type.”

As a child, Sarah was shy, choosing not to share her diagnosis with friends or classmates until she was close with them. “My seizures aren’t overtly noticeable unless someone is looking at me directly. Someone sitting behind me wouldn’t necessarily know that anything is abnormal, let alone that I’m having a seizure,” Sarah explains. “It was hard to explain epilepsy to my peers, and I just wanted to be a normal kid. In high school, everyone was getting their driver’s licenses and were excited to have that freedom, and I couldn’t relate.”

“My seizures are like zoning out — I have an altered perception of reality. I am aware of my surroundings, but it’s slightly distorted from what is actually happening. I become partially disassociated. I can respond, but not necessarily in a coherent way,” Sarah adds. “My hands fidget, my lips smack some and my eyes flutter.”

At age 25, Sarah underwent a partial resection of the abnormal portion of the brain to treat her seizures at another medical center and was seizure-free for several months. After a while, it became clear that the surgical procedure had not cured her disorder. “I broke down in tears after the first noticeable seizure happened following my surgery; I was just so disappointed and frustrated.”

Sarah decided to seek support from UC Health, home to Greater Cincinnati’s only Level IV epilepsy center, the highest accreditation possible from the National Association of Epilepsy Centers. She began seeing Sheetal Malik, MD, UC Health neurologist and associate professor in the Department of Neurology at the University of Cincinnati College of Medicine.

With Sarah’s extensive medical history, many tests were required to zero in on what exactly was causing her seizures. She had imaging tests including PET scans and MRIs. While some patients go straight to surgery, patients like Sarah need to undergo inpatient epilepsy monitoring to pinpoint the source of the seizures and guide proper treatment.

UC Health’s experienced team has been performing epilepsy monitoring for more than 30 years. At West Chester Hospital’s

Epilepsy Monitoring Unit, one of two such units offered by UC Health, an electroencephalogram (EEG) was used to evaluate the electrical activity happening within Sarah’s brain.

“We use multiple advanced tests to determine the specific types of electrical surges, what they mean and where they’re occurring in the brain,” states Michael Privitera, MD, director of the Epilepsy Center at the UC Gardner Neuroscience Institute and professor in the Department of Neurology for the UC College of Medicine. “Sarah’s test results revealed that a tiny portion of abnormal brain had been left behind after her first craniotomy. While it was difficult to see on scans, with our advanced testing, we were confident it was the source of her continued seizures and the best treatment was a second craniotomy.”

Dr. Malik also encouraged Sarah to have the surgery, and in 2020, she received the second resection surgery at West Chester Hospital. She has been seizure-free for more than six months.

Working in biostatistics and epidemiology, Sarah’s future is bright, and she is excited for many things, including one day receiving her driver’s license. She has begun playing the piano again, something she loves but her seizures had made it too difficult to do. She and her husband, Thurman, recently decided to replace their old, out-of-tune piano with a new one.

Sarah credits her strong support system of friends and family for helping her through the journey. “My family has been incredible from the very beginning. It must have been hard for my parents, but they were always so supportive, and they continue to be there for me.”

She encourages others who have epilepsy to keep searching for treatments and to never give up.



**Michael Privitera, MD**  
Director, UC Health  
Epilepsy Center



**Sheetal Malik, MD**  
Neurologist

## Discover More

*With more than 30 years of experience and nine specialty-trained epileptologists, UC Health is at the forefront of epilepsy care, discovering new ways to both diagnose and treat patients and significantly improve the lives of people with epilepsy in our community.*

*To receive the name of a neurologist who specializes in epilepsy on the UC Health West Chester Campus, call 513-298-DOCS (3627).  
Learn more at [uchealth.com/epilepsy](https://www.uchealth.com/epilepsy).*



*After having surgery at West Chester Hospital, Sarah Allen has not experienced epileptic seizures.*

# New Therapies Are Reducing Chronic Migraine Pain

Migraine attacks aren't "just headaches" — they are the second-most disabling disease in the U.S.

The National Center for Health Statistics (NCHS) recently published a study on the prevalence of migraines and severe headaches in the U.S. Headache is consistently the fourth most-common reason for emergency department visits, accounting for about 3% of visits annually.

"My No. 1 goal is to eliminate, or at the very least, minimize a patient's disability," says Saad Kanaan, MD, UC Health neurologist at the UC Gardner Neuroscience Institute Headache & Facial Pain Center and assistant professor in the Department of Neurology and Rehabilitation Medicine at the University of Cincinnati College of Medicine.

"I want to help reduce the number of headache-related emergency and urgent care visits." In an emergency room (ER) setting, doctors strive to alleviate the immediate pain and suffering. "Migraine patients may not see a headache specialist and may be treated with a narcotic pain medication."

Dr. Kanaan, who sees patients at UC Health's Dayton Neurology Clinic, explains that narcotics aren't an effective treatment for migraines because, while they offer temporary relief, the medications are known to trigger "rebound" (or medication overuse) headaches.

"At our Dayton office, we offer acute migraine treatments that provide immediate relief without triggering rebound headaches. For example, if a patient has had a migraine for 48 hours and they've taken all the medication they can, instead of going to the ER, they can come to us and receive an IV infusion," Dr. Kanaan explains.

The infusion contents are patient-specific, using combinations of fluids, anti-nausea medications, anti-inflammatories, steroids and migraine relief medications. The medications are intended for rescue therapy; while not preventive, they help prevent unnecessary ER visits.

Before an appointment with Dr. Kanaan, patients receive detailed information and questionnaires (via mail or electronically) so they may complete their medication and treatment history when it's convenient for them, eliminating unnecessary pressure on the day of their appointment.

"We see patients who have been to multiple physicians and who have tried numerous medications and treatments, so we dig deep into that history and gauge what they have and have not tried," says Dr. Kanaan. "As a headache specialist, I find that they haven't tried everything. I tell them, 'I know it feels like you've tried it all, but we still have options — there are effective treatments that may benefit you.'"

Prevention medications take time to work, unlike the immediate relief of painkillers. Dr. Kanaan stresses the importance of keeping a positive mindset and not giving up during the treatment process using preventive medications. Structural changes have to happen within the brain, chemicals in the body need to restore balance and those changes take time and consistency.

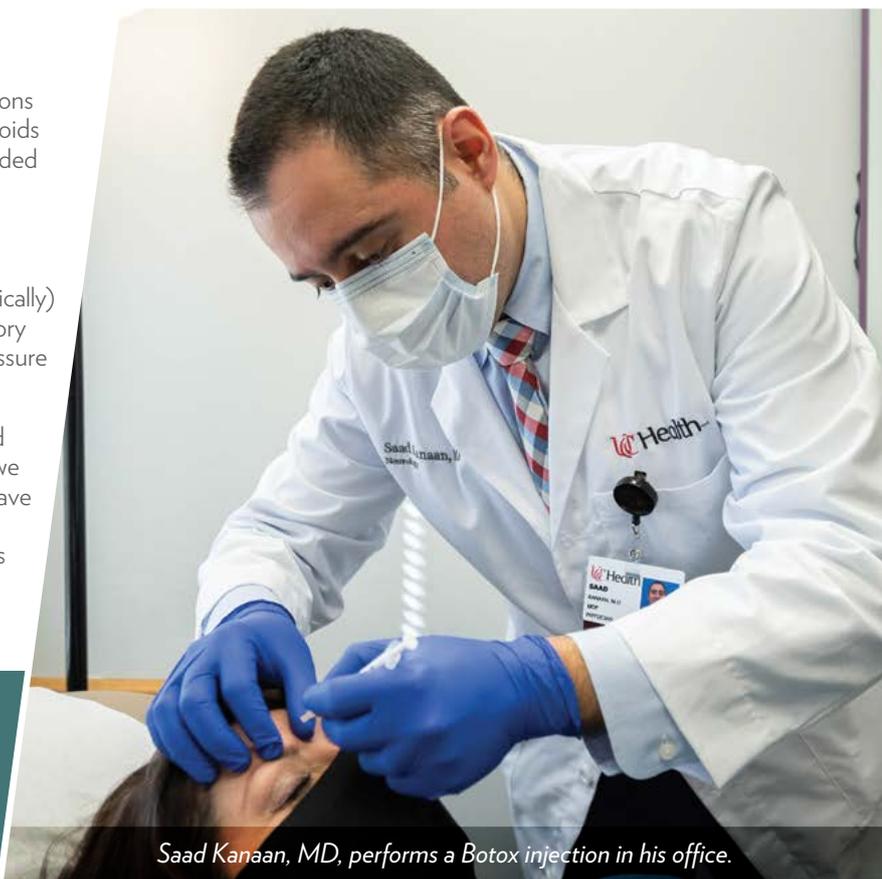
"Neurologists truly understand the pain and frustration that migraine patients live with. I've had patients break down in tears in my office because they finally feel validated," says Dr. Kanaan. "We know their pain is real, and our job is to find the right treatment options to alleviate their suffering."

UC Health's robust research foundation allows neurologists access to the latest developments in headache treatment.

"New information is coming in quickly and expanding the field, so when patients choose to see a headache specialist, they are assured we are up to date with the latest information," says Dr. Kanaan. "At UC Health, we are deeply involved in all aspects — from research to clinical trials, and we are confident in all the therapies we offer."

UC Health's neurology office in Dayton, located at 1 Elizabeth Place on Edwin C. Moses Boulevard, allows people to receive care closer to home, without having to travel.

Dr. Kanaan says, "I've dedicated my career to helping this specific group of people because I deeply understand and will do my best to help improve their lives."



Saad Kanaan, MD, performs a Botox injection in his office.

## Discover More

For the name of a UC Health headache specialist, call 513-298-DOCS (3627). Learn more at [uhealth.com/en/neuroscience-institute/headache-and-facial-pain-center](https://uhealth.com/en/neuroscience-institute/headache-and-facial-pain-center).

# Back to Life from Cardiac Arrest



Will Achberger, 56, considers himself lucky. He's happily married to his high school sweetheart and is a successful family business owner. On Jan. 19, 2020, Will's life changed in an unexpected, dramatic way.

It was a Sunday. Will took his dog for a walk, but then returned home with what felt like sudden and severe flu-like symptoms including chills, sweating and vomiting.

Will's wife, Beth, came upstairs and to her surprise, Will, who rarely sits still, was curled up in bed. She knew right away that something was terribly wrong.

Will was unconscious and did not have a pulse. Panic-stricken, Beth immediately called 911 while their daughter, Amy, performed chest compressions, relying on the 911 dispatcher's instructions.

Naseer Khan, MD, UC Health interventional cardiologist and assistant professor in the Department of Internal Medicine at UC College of Medicine, cannot emphasize enough the importance of performing timely CPR.

"Will was experiencing a sudden cardiac arrest, a life-threatening condition," Dr. Khan explained. "If CPR is performed within the first few minutes, you increase the

chances of survival — although the mortality rate still remains very high."

His daughter continued chest compressions while they waited for emergency medical services (EMS).

Once on-site, paramedics continued CPR for 30 minutes. During medical transport, Will was connected to a cardiopulmonary assistive device that continued compressions and his heart was shocked five times by a defibrillator, before arriving at UC Health's West Chester Hospital.

## No Pulse, Quick Action, Expert Care

"When Will arrived, things didn't look promising," Dr. Khan said.

"Our team checked his pulse, and there was none. He was not responding. He was not breathing. The bedside echocardiography also showed meager to almost no cardiac activity."



**Naseer Khan, MD**  
Cardiologist



**Mohamed Effat, MD**  
Cardiologist

The emergency care team ordered blood-work to help determine the best course of treatment. Compressions continued as he was given potassium, magnesium and calcium based on his lab results.

Even with this immediate care, Will still was not sustaining a heartbeat. His care team discussed with his family the possibility of having a poor prognosis, with long-term effects such as brain damage being a real, probable outcome.

While digesting this grim news, Beth pleaded with his care team, "Please keep doing what you can for him."

Will was quickly transferred into the cardiac catheterization laboratory (cath lab). Dr. Khan suspected that Will had a clot in the heart artery, and within minutes, his suspicions were confirmed. Will's left anterior descending artery (LAD) had critical blockage. Blood flow to the left side of the heart had stopped, causing his heart to stop beating.



*The Achbergers are a close-knit family, all working within the family business. From left to right: Amy, his daughter, Will (holding Bentley), Beth, his wife and son, Sean.*



Called the “widow maker artery,” the LAD supplies a large portion of the heart muscles. People who have blockage in this artery sometimes don’t survive long enough to make it to the hospital.

“We were able to open the artery and place a stent within 15 minutes of Will’s arrival to the cath lab,” Dr. Khan said. “The stent established blood flow to the heart, giving it a chance to start pumping again, hopefully returning to a healthier functionality.”

Due to Dr. Khan’s quick thinking and the skilled cath lab team, Will’s heart activity showed such strong improvement that he required fewer medications. While Will’s circumstances were promising, his care team still wanted to monitor his condition, given the near-fatal event he just survived.

Will was transferred to UC Medical Center, where he could receive immediate attention should his condition worsen or if he needed open-heart surgery. Mohamed Effat, MD, UC Health interventional cardiologist and professor in the Department of Internal Medicine, administered and directed Will’s care in the Cardiovascular Intensive Care Unit.

Continuing to show remarkable recovery, Will was able to breathe on his own and was removed from the ventilator. He remained at UC Medical Center for five days before returning home.

### Defying the Odds

Dr. Khan says that cardiac arrest has a mortality rate of 50%. Will’s case, however, is unique. He was unconscious, had no pulse and was not breathing for multiple hours.

“Will’s case is a highly fatal case,” Dr. Khan explained. “With him being down for so long, mortality is close to 70-80%. Despite his high mortality rate, he was very successful.”

Dr. Khan recommends taking these warning signs seriously: Cold sweats, nausea, heartburn, abdominal pain, pressure in the chest or arms that may spread to the neck, jaw or back, shortness of breath, fatigue and lightheadedness or dizziness. These are symptoms of a heart attack, which can lead to cardiac arrest.

*“I am so grateful for my care team at UC Health,” Will said. “I feel like I had the upper hand in overcoming what happened. I definitely feel like I’ve been given a second life now.”*

### Discover More

*To receive the name of a cardiologist on the UC Health West Chester Campus, please call 513-298-DOCS (3627). For more information, visit [uchealth.com/heart](http://uchealth.com/heart).*



# Immunotherapy Offers Hope for Mesothelioma

Did you know that most of the body's internal organs are covered in layers of tissue called mesothelium, which produces fluid that allows our organs to safely slide together when we are breathing and moving?

Mesothelioma, an aggressive cancer that develops in the mesothelium, is caused by asbestos — a mineral comprised of needle-like fibers. When inhaled into the lungs, asbestos lodges itself and migrates into the pleural lining. Eventually those fibers wreak havoc, causing inflammation and damaging cells until they turn cancerous.

“Fortunately, malignant pleural mesothelioma (MPM) is extremely rare — there are about 1,500 new cases each year in the U.S. Interestingly, a large amount of those cases are here in Ohio,” says Robert M. Van Haren, MD, UC Health thoracic surgeon and assistant professor in the Department of Surgery at the University of Cincinnati College of Medicine.

“It is difficult to diagnose it because patients' symptoms are often common across many disorders including shortness of breath and chest pain. Additionally, MPM has a long latency period (the time between asbestos exposure and the start of symptoms) before diagnosis.”



**Robert M. Van Haren, MD**  
Thoracic Surgeon

The average mesothelioma latency period is 40 years, but the cancer can show as early as 10 to 15 years after heavier asbestos exposures. With no approved screening for mesothelioma in existence, detecting the disease requires symptoms, risk factors and patient history. If you've had exposure to asbestos, it's worth discussing with your healthcare provider.

UC Health's Lung Cancer Center is the only one in the Greater Cincinnati region that offers comprehensive care for mesothelioma, including systemic therapy, radiation and surgery. Our experts continually search for new treatments to improve outcomes for those who have mesothelioma.

“Regular biopsies that look at pleural fluid from thoracentesis often don't detect MPM, so we perform what's called a pleural biopsy in the operating room. It's a delicate procedure that removes a small piece of the pleura,” Dr. Van Haren says. “Our biological pathologists look at the biopsied tissue under a microscope and identify MPM based on the specific pleuritic strains that are present.”

Treatment is determined by:

- The level or stage of cancer.
- Whether the cancer is localized or metastatic (spread to other areas of the body).
- A patient's medical comorbidities and what they can tolerate in terms of therapy/procedures.

Patients with localized disease who are considered otherwise healthy are good surgical candidates. Their treatment involves a combination of surgery, chemotherapy and radiation therapy.

Although there is no cure for MPM, new advancements in treatment are giving hope to patients and enabling increased awareness of the deadly disease.

“Two new medications were FDA-approved for treatment of malignant pleural mesothelioma in October of 2020, marking the first advancement for MPM in the last 16 years — it's very exciting,” says Dr. Van Haren. “At UC Health, we are always searching for even better options to treat patients with this complex disease.”

The new medications (OPDIVO® and YERVOY®) are newly considered as the first-line treatment for “unresectable” malignant pleural mesothelioma — meaning it cannot be removed surgically. This treatment process, called immunotherapy, is offered on the UC Health West Chester Campus.

## What is Immunotherapy?

Immunotherapy uses medication to increase the body's own immune system, helping it attack and kill cancer cells. The medications are a type of monoclonal antibody — called immune checkpoint inhibitors — which “highlight” cancer cells so the immune system is able to recognize them and attack.

Specializing in thoracic surgery, with focused expertise using minimally invasive techniques such as robotic surgery and comprehensive multidisciplinary care for aggressive cancers, Dr. Van Haren works alongside a team of surgeons and oncologists, offering highly specialized care for mesothelioma — and other lung cancers as well. Dr. Van Haren is actively involved in research, searching for ways to improve patient outcomes after surgery and to reduce disparities in care for minority groups diagnosed with mesothelioma cancers.

“Treatment of MPM can potentially have many complications, so it is important that patients are seen by professionals who have as much experience as possible,” Dr. Van Haren says. “At UC Health, we are able to confidently provide our patients with their best outcomes.”

## Discover More

For the name of a thoracic surgeon on the UC Health West Chester Campus, call 513-298-DOCS (3627).  
Learn more at [uchealth.com/en/conditions/mesothelioma](http://uchealth.com/en/conditions/mesothelioma).

# Three Strikes, But She's Not Out

Jacqui Foust lived 39 years without breaking a single bone in her body — until she broke three in one day.

Jacqui was balancing life as a wife and mother of three teenagers on her journey to becoming a licensed hair stylist. In April 2020, she had graduated and was preparing for the state board exam to receive her cosmetology license.

With a new career on the horizon, it all came to an abrupt halt two months later.

The first phase of Ohio's COVID-19 Responsible Return plan was underway, allowing limited-contact sports to return. Excited to return to some normalcy, Jacqui was eager to attend her son Nicholas' baseball game.

While relaxing in a chair with her flip-flops off, Nicholas came to bat, hitting a pop-up fly ball, which was headed directly at Jacqui.

"I thought it was going to hit me, so I jumped out of my chair, barefoot, and tried to get out of the way," recalled Jacqui. "While looking up, I stepped on a curb, heard a loud 'pop, pop,' and then fell to the ground."

It wasn't until later she learned that her foot rotated so much that it broke her tibia (shinbone), fibula (which runs parallel to the shinbone) and ankle.

When paramedics arrived, they stabilized Jacqui and prepared her for transportation. Having never broken a bone before, Jacqui was confused and scared, with no idea what to expect next.

"I was taken by ambulance to UC Health's West Chester Hospital," Jacqui said. The emergency care team took X-rays, and it was clear that due to the severity of the breaks in her lower leg and ankle, Jacqui would undoubtedly need surgery.

"Learning that I needed surgery only intensified my fear," Jacqui said. Moments later, panic turned to relief when Tonya L. Dixon, MD, UC Health orthopaedic surgeon and assistant professor in the Department of Orthopaedic Surgery at the University of Cincinnati College of Medicine, walked into her room.

Dr. Dixon, the only female African-American orthopaedic surgeon in Cincinnati, has advanced training in surgical and non-surgical care of the foot and ankle, one of the most complex structures of the human body.

"Dr. Dixon put me completely at ease, didn't rush what she was saying and explained everything so well,"

Jacqui said. "I was so comforted and grateful to her for the time she spent with me."

It was Dr. Dixon's expertise and compassionate bedside manner that prepared and got Jacqui through surgery. After spending three days in the hospital, she started the road to recovery.

"Jacqui's injury was severe because not only was it a break at her ankle that needed surgery, but she also broke her tibia which made her leg unstable," Dr. Dixon explained. "She required a nail that was placed inside her tibia to fix the leg, and then plates and screws to stabilize her ankle."

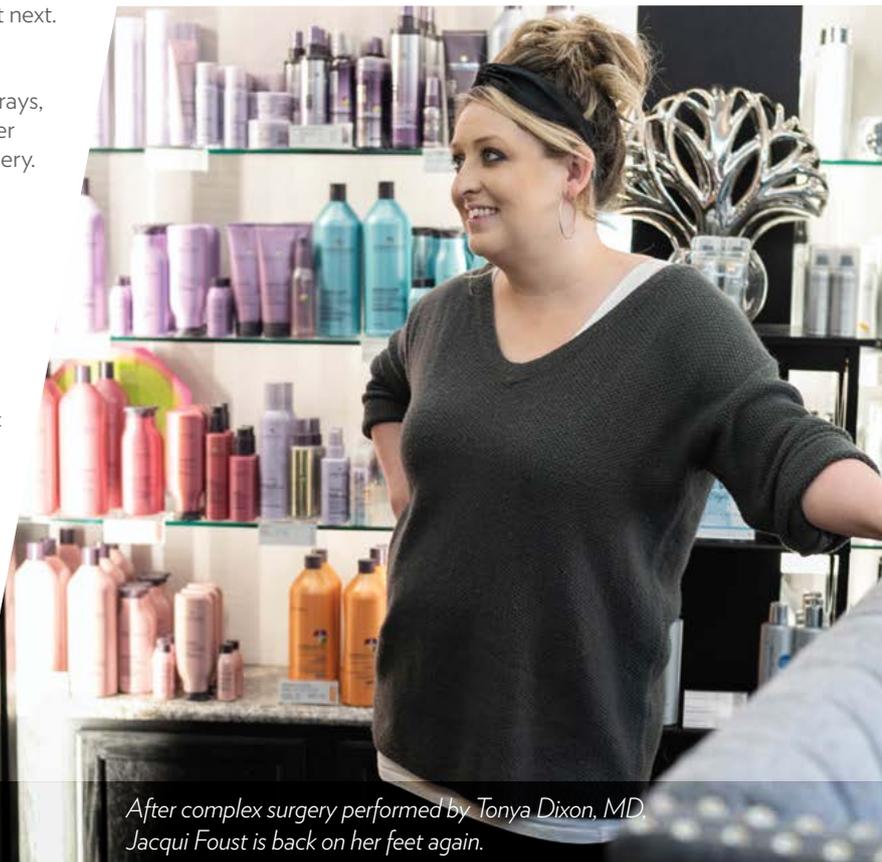
Given the severity of her injuries, it was no surprise that her recovery was difficult — both mentally and physically.

Physically, Jacqui was prohibited from bearing weight on her leg for six weeks. Her world essentially turned upside down, as she quickly transitioned from being an independent mom, to having to rely on her husband and kids for what felt like everything.

After six weeks, she started physical therapy, which she has since completed. Today, Jacqui continues to build strength in her leg, walking regularly and enjoying her mobility. She successfully received her cosmetology license and is happily working six to eight hours a day on her feet.



**Tonya Dixon, MD**  
Orthopaedic Surgeon



After complex surgery performed by Tonya Dixon, MD, Jacqui Foust is back on her feet again.

## Discover More

To receive the name of an orthopaedic surgeon on the UC Health West Chester Campus, please call 513-298-DOCS (3627). To learn more, visit [uchealth.com/en/orthopaedics-and-sports-medicine](https://www.uchealth.com/en/orthopaedics-and-sports-medicine).

## Q&A: How to Have a Safe Pregnancy During the COVID-19 Pandemic

With Emily DeFranco, DO, Director, UC Health Maternal Fetal Medicine and Professor, UC College of Medicine

### For women who are trying to become pregnant, do you recommend they take the COVID-19 vaccine?

The COVID-19 vaccine hasn't been studied for safety specifically in pregnancy; however, in non-pregnant people the vaccine was highly effective to prevent COVID-19 infection. There are no known safety concerns to date. There is no known advantage to delaying vaccination among women who are trying to become pregnant.

### If a woman is pregnant, what are the risks versus benefits to receiving the vaccine?

We do not yet know if there are risks of vaccination during pregnancy. Pregnant women are at higher risk of severe illness from COVID-19 if they become infected. Therefore, experts suspect that the benefits of the vaccine outweigh any theoretic risk. Future trials are planned in pregnant women to test whether this assumption is true. Getting vaccinated during pregnancy is a personal choice.

### What are the side effects of the vaccine and how can it affect pregnant women and their babies?

The most common symptoms experienced by the trial participants were pain at the injection site, fatigue, low grade fever and body aches. Based on available data among vaccinated pregnant women, side effects from the COVID-19 vaccine appear to be similar to those experienced by non-pregnant individuals.

### Discover More

For the name of a physician specialist on the UC Health West Chester Campus, please call 513-298-DOCS (3627). To learn more, visit [uchealth.com/maternal-fetal-medicine](http://uchealth.com/maternal-fetal-medicine).

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### What do doctors know about the COVID-19 vaccine and its effects on pregnant women?

The COVID-19 vaccine hasn't been studied for safety specifically among pregnant women. However, based on limited reported information from pregnant women who have received the vaccine, early data does not indicate any safety concerns. Data from animal studies also has not demonstrated safety concerns during pregnancy.

### If a woman has received the vaccine, is it safe for her to try to become pregnant?

Vaccine manufacturers are monitoring women who became pregnant after receiving vaccines through their respective trials and their outcomes will be reported in the future. There are no known safety concerns to date. If a woman becomes pregnant after the first dose of the COVID-19 vaccine series, it is recommended that the second dose is administered as indicated.

### What is your advice for pregnant women during the pandemic?

Obtain prenatal care per your doctor's recommendations. Follow recommended guidelines to prevent the spread of COVID-19. Limit visitors after you and the baby return home.



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