

Vital Signs

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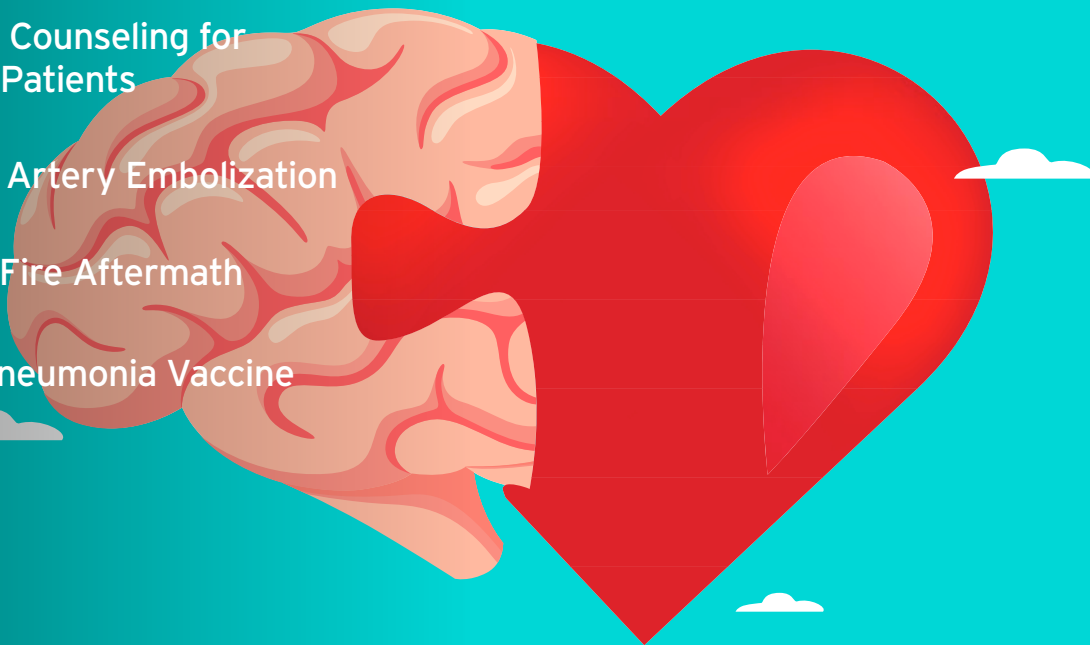


Illustration: iStock

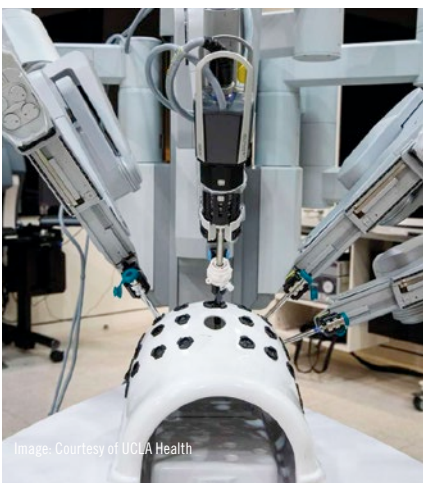


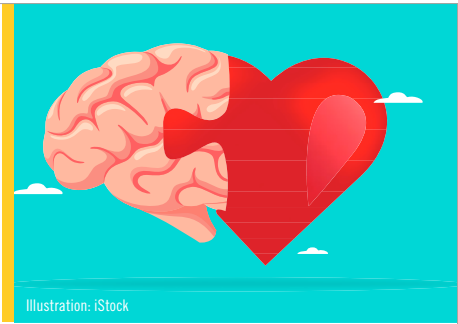
Image: Courtesy of UCLA Health

Robotic surgery opens door to kidney transplantation for obese patients

For hundreds of thousands of people in the U.S. with end-stage renal disease who require regular kidney dialysis treatments to stay alive, transplantation can be transformative – both from the standpoint of expected lifespan and quality of life. But for individuals whose body mass index (BMI) is in the 35-to-45 range, the life-changing surgery is often considered too high-risk.

With the introduction of robotic kidney transplantation at UCLA Health last year, patients whose obesity would have previously put them on “hold” status may now be

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UCLA Health offers burn care

UCLA Health now offers comprehensive services for adults and children with burn injuries. Located on the UCLA West Valley Medical Center campus, the UCLA Health Regional Burn Center is one of the few programs in the Los Angeles area providing the highest level of burn care available. Our expert

team delivers leading-edge, comprehensive services to help patients achieve optimal outcomes.



For more information, scan the QR code or go to: <https://ucla.in/burn-center>



UCLA Health establishes Long COVID program

About one-in-three people who had coronavirus develops symptoms of Long COVID — symptoms that linger for weeks or months after a COVID-19 infection, causing problems in multiple organs and body systems. To address these issues, UCLA Health has established a multidisciplinary program with specialists who are uniquely qualified to diagnose, manage and treat symptoms of Long COVID.



For more information about the UCLA Health Long COVID program, scan the QR code or go to: <https://ucla.in/long-covid>

The Men’s Clinic at UCLA Health is Opening in a New Location

The Men’s Clinic at UCLA Health is moving to a new location in Santa Monica. The state-of-the-art facility is designed to provide expert, comprehensive care tailored to men’s health and well-being. From advanced treatments for male fertility and testosterone therapy to specialized care for erectile restoration and vasectomy procedures, the clinic’s dedicated team is focused on improving the way men access health services.



For more information about The Men’s Clinic at UCLA Health, scan the QR Code or go to: www.uclahealth.org/locations/mens-clinic

How Air Quality Affects Health

This winter’s fires in Pacific Palisades, Altadena and other local areas heightened awareness of air quality issues among Southern California residents. Although the fires have abated, some health risks linger. Augustine Chung, MD, a UCLA Health pulmonologist in Westwood, and Reza Ronaghi, MD, a UCLA Health interventional pulmonologist in Santa Monica, discuss how smoke and other pollutants impact the body and steps that can reduce harm.

What are the health effects of poor air quality, including those caused by wildfire smoke?

Dr. Chung says potential damage depends on proximity to the source of poor air quality, its concentration and the duration of exposure. For example, living or working near a polluting factory or freeway poses more danger than short-term exposure to wildfire smoke. “Our bodies are built to filter out the particles that we breathe, but some microbes, dust and debris can enter the lungs and damage lung tissue,” he says. The risks vary between those who have lung diseases such as asthma, bronchiectasis and lung scarring and those who don’t. “People with sensitive lungs are most susceptible to harm because their normal clearing mechanisms are impaired, leading to worsening of their underlying disease,” Dr. Chung says. Smoke and pollution can cause acute inflammation or irritation in the airways, leading to coughing,

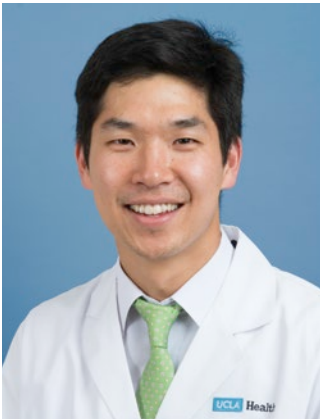
chest pain, shortness of breath and watery eyes for both groups, but those symptoms generally dissipate a few days following exposure for those with healthy lung tissue.

What causes these effects?

Particulates measuring between 2.5 and 10 microns (less than a tenth the size of a grain of sand) can penetrate deeper into the small airways of the lungs, potentially causing more damage than larger particles. Smoke can include particles of ash or other burned materials, as well as high concentrations of harmful substances such as carbon monoxide and other volatile organic compounds. Particles smaller than 2.5 microns can enter the bloodstream, potentially leading to health issues down the line.

What steps can help minimize exposure to particles and toxins?

“During an active fire, try to get as far away as possible from areas with smoke or poor air quality,” Dr. Ronaghi says. “If that’s not possible, stay indoors as much as possible, making sure to close windows and other connections to the outside.” Use a filter rated MERV13 or higher for the home’s HVAC system and set it to recirculate mode. Dr. Ronaghi also recommends using portable air purifiers with HEPA-grade air filters



Dr. Augustine Chung.
Photos: UCLA Health



Dr. Reza Ronaghi.



and following manufacturer recommendations regarding the appropriately sized machine for the room. “While fires are burning, avoid vacuuming, dusting or other activities that might cause particles in the house to become airborne. If you need to go outside, wear a mask of at least N95 filtration.” He urges those returning to burned areas, who may be exposed to rubble or damage, to wear protective gear including masks, gloves, gowns and eyewear.

What else should people know?

“Keep an eye on air quality, especially as we get into spring and summer when pollution can become more of a factor,” Dr. Ronaghi says. Airnow.gov, run by the EPA, and the South Coast Air Quality Management District (AQMD) post air quality levels. To access South Coast AQMD information, visit AQMD.gov and select “Air Quality.” “National and local air quality has improved a lot over the past 30 years or so,” says Dr. Chung. “But it’s always wise to protect your lungs.”

To find a UCLA Health location near you, scan the QR code or go to: maps.uclahealth.org





Heart and mind: The critical connection between stress and cardiovascular health

The heart, often symbolized as the seat of emotion, is profoundly connected to our mental state, and the intricate relationship between emotional well-being and cardiovascular health has garnered the attention of medical

professionals, who believe that stress is a key risk factor for heart disease.

In the wake of the extraordinary wildfires that ravaged Los Angeles this winter, addressing stress-related cardiovascular disease is

particularly salient. At UCLA Health, the Women’s Cardiovascular Center and the Cardiopulmonary Rehabilitation Center offer, in addition to physical exercise, psychological interventions for patients who have experienced

a cardiac event. The goal, says Anne Saltzman, PsyD, a cardiac psychologist who is on-site to provide counseling before or after a patient’s appointment with their cardiologist, is to help patients regain a sense of trust in their heart. “That trust is not complete unless we address two things: the stress in their lives and the trauma of having a life-threatening event,” she says.

Stress, while a normal part of everyday life, becomes toxic when it persists unchecked. And that, Dr. Saltzman says, has become particularly true for women, who may feel increased pressure in both the home and workplace. “The incidence of heart disease for young women in the U.S. is going up,” and along with it the death rate, she says. “We cannot dismiss the possibility that this is related to high levels of stress.”

Patients with heart disease are a diverse population, ranging from those with hypertension to survivors of a heart attack or cardiac arrest. Regardless of where they fall on the spectrum, the emotional toll of heart disease is universal, and challenging to manage. “Even when patients recover well, it’s emotionally very difficult to handle the fact that your heart is actually suffering,” Dr. Saltzman says.

There is a common narrative among patients who struggle to understand how stress has affected their cardiac health.


There is a common narrative among patients who struggle to understand how stress has affected their cardiac health, she says. Time and again, upon delving into their histories, a pattern emerges linking emotional or stressful life events — such as divorce or the loss of a loved one — to their heart condition.

Likewise, the recent Los Angeles wildfires have contributed to elevated stress for patients. Dr. Saltzman describes the fires as “the perfect storm” for trauma. “Trauma is defined by two key elements — the unexpected and the life-threatening — and the wildfires embodied both, creating a very difficult experience for those directly impacted,” she says. With this in mind, Dr. Saltzman started offering counseling support specifically tailored for cardiac patients who were directly affected by the wildfires.


Understanding the science behind stress and heart disease helps shed light on their connection, Dr. Saltzman says. “When you have a feeling of, ‘I’m alone in the world,’ the message from the brain is that you are in danger. Stress goes up, and the cardiovascular system tenses, generating a cascade of biological reactions that, when repeated and chronic, becomes a cardiac risk factor.”


How can people — both women and men — mitigate the effects of stress and emotional turmoil on their hearts? The answer, Dr. Saltzman says, is in a multidisciplinary approach that includes lifestyle changes, stress-management techniques and, when necessary, psychological support. It is common knowledge that regular physical activity, a balanced diet, sufficient sleep and relaxation techniques such as meditation or deep-breathing exercises are foundational.

“However,” Dr. Saltzman says, “we too often forget the vital importance of cultivating strong social-support networks, and seeking professional help can be vital in navigating the emotional challenges that accompany heart disease.”




For more information about the **UCLA Health Women’s Cardiovascular Center**, scan the QR code or go to: ucla.in/women-heart





For more information about the **Cardiopulmonary Rehabilitation Center at UCLA**, scan the QR code or go to: ucla.in/cardiac-pulmonary-rehabilitation



Virtual technology throws open door to genetic counseling for cancer patients

An online genetic counseling tool implemented by UCLA Health has significantly increased the percentage of cancer patients who are undergoing recommended germline testing. The tool — GENETECA (Genetics Education and Testing for Cancer) — provides faster and more streamlined access, enabling patients with cancer to use a secure online portal to learn about testing and give consent without first seeing a genetic counselor, explains Beth Karlan, MD, director of Cancer Population Genetics at the UCLA Health Jonsson Comprehensive Cancer Center.

“Genetic testing empowers patients to get the best medicine and make the best choices to improve their lives,” Dr. Karlan says.

The increased access to genetic testing has been a boon for both patients and providers. For patients with a positive result, the information can shape their treatment and eligibility for clinical trials. The model also allows genetic counselors to focus their time on those individuals who test positive and those who have further questions, an important consideration in light of the limited genetics workforce.

“Bottom line, more patients are getting medically indicated testing,” Dr. Karlan says. “And more physicians are now able to use that information to prescribe effective targeted treatments.”

The results of genetic testing also inform

patients’ family members about their cancer risks so they can be proactive in their own cancer screening and prevention. For now, GENETECA is available only to people with cancer, but their family members can seek genetic counseling and testing at UCLA Health through the standard process.

A 2023 study published in the *Journal of the American Medical Association* found that only 6.8% of more than 1 million patients with cancer underwent genetic testing within two years of diagnosis. The rates were especially low among Asian, Black and Latino patients.

At UCLA Health, only 22% of patients with pancreatic cancer underwent recommended genetic testing when it required an in-person appointment with a genetic counselor. Getting a timely appointment, taking time off work, driving to a medical center and paying a parking fee were all potential barriers, especially for cancer patients on active treatment.

Within 18 months of launching GENETECA in late 2020, that figure jumped to 94%, Dr. Karlan says. “That’s more patients who find out that they have a BRCA mutation and can get a PARP inhibitor, or a Lynch syndrome gene mutation and can get immunotherapy,” Dr. Karlan says. “It’s really opened up access and provided physicians with important information for patients and their families.”

UCLA Health sees approximately 17,000 new cancer patients a year, with roughly two-thirds of them meeting current criteria for genetic testing based on National Comprehensive Cancer Network (NCCN) guidelines. Patients referred for testing use the MyChart portal to access GENETECA from a doctor’s office or at home. They watch a short, animated video, available in multiple languages, that explains genetic testing in clear and simple terms. They can then give consent and go to the lab without delay or have a saliva test kit sent to their home. If people have additional questions before deciding to get tested, they can still meet with a genetic counselor. But most patients prefer the expedited process, Dr. Karlan says.

GENETECA allows genetic counselors to primarily meet with the people who test positive, which is only 5%-10% of the patients with cancer, and they can focus their efforts on assuring the health implications of the testing results are understood. “This way, the genetic counselors can focus their time and use health system resources to have the greatest impact on improving patient outcomes,” she says.

Dr. Karlan says UCLA Health computer engineers are working to expand the tool to

“More patients are getting medically indicated testing. And more physicians are now able to use that information to prescribe effective targeted treatments.”

include an interactive virtual assistant that can answer questions and offer the most current scientific data to patients in real time. “Large language models and AI can ‘learn’ newly published data and incorporate new guidelines more quickly,” she says.

Dr. Karlan says that targeted therapies already have significantly improved outcomes in ovarian, fallopian tube and uterine cancers with hereditary components. “Personalized medicine is the right drug for the right patient at the right time,” she says. “Genetic testing empowers patients to get the best medicine and make the best choices to improve their lives.”

For instance, nearly a quarter of patients with ovarian cancer have a genetic predisposition and qualify for a PARP inhibitor. “PARP inhibitors have improved overall survival for individuals with a BRCA mutation who take it as maintenance therapy after completing their standard surgery and chemotherapy,” Dr. Karlan says. For uterine cancers, Lynch syndrome and other genetic factors typically make tumors more susceptible to immunotherapy that has improved outcomes and longer-term survival for those patients as well.

In addition to influencing choices among available treatments, GENETECA can help enable patients to qualify for clinical trials of new targeted therapies. “Our goal is to use GENETECA as a model to marry emerging technology with this very human piece of personalized medicine to allow broader access and better outcomes,” Dr. Karlan says.



For more information about cancer genetics, testing and counseling, scan the QR code or go to: <https://ucla.in/cancer-genetics>



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Robotic surgery opens door to kidney transplantation for obese patients

potential candidates. “Getting a new kidney can make a huge difference in the lives of people whose kidney failure forces them to undergo regular dialysis treatments,” says renal transplant surgeon Nima Nassiri, MD, who performed the first robotic kidney transplant in Westwood last July. “Providing this opportunity for patients who would otherwise be on hold represents a significant advancement.”

The UCLA Kidney Transplant Program is one of the highest-volume programs of its kind in the world, having performed more than 8,000 transplants.

The major challenge in transplanting patients with a high BMI is the risk associated with surgically accessing the blood vessels in the abdomen. “Having a larger space to get through increases the risk of wound infections, which can lead to long-term complications for patients who are on immunosuppression, and in most cases also have diabetes, setting them up for infections,” Dr. Nassiri says.

Robotic surgery has become common for urologic procedures over the last 25 years, most notably for patients undergoing radical prostatectomy to treat prostate cancer. Robotic kidney transplantation is a minimally invasive procedure in which the surgeon controls robotic arms from a console, allowing for greater manual dexterity through a smaller incision.

“The improved visualization in a deep abdomen for patients with high BMI is a significant advantage,” Dr. Nassiri explains. “In addition, the incisions are much smaller, and in locations less prone to infections. Robotic kidney transplantation has also been shown to have lower analgesic requirements, shorter hospital stays and faster recovery.”

The UCLA Kidney Transplant Program is one of the highest-volume programs of its kind in the world, having performed more than 8,000 transplants. While the program is evaluating patients with BMIs as high as 45, not everyone is eligible. For example, patients with significant vascular disease are still viewed as too high-risk to undergo transplantation.

Making individuals with high BMI eligible for the robotic transplant procedure has led to several patients being activated from the transplant waiting list. Previously, these patients would have been excluded until they lost weight. “The problem is that it’s incredibly hard for any obese person to lose weight, especially when they’re on dialysis,” Dr. Nassiri says. “In my experience, these patients are already dieting and exercising as best they can.”

Dr. Nassiri notes that for people older than 50 who are on dialysis and have diabetes — the majority of patients who could benefit from kidney transplantation — the five-year survival rate is just 50%. “Kidney transplantation significantly improves both survival and quality of life, irrespective of the patient’s BMI,” Dr. Nassiri says. “Getting these patients off of the waitlist is our top priority, and we are doing that by offering this kind of tailored approach.”



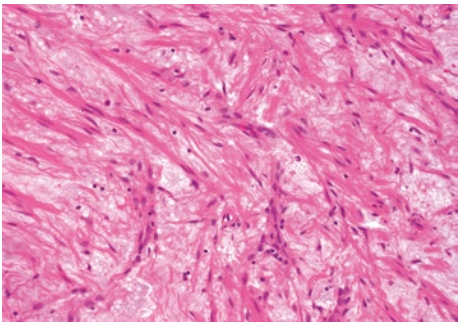
For more information about the UCLA Health Kidney Transplant Program, scan the QR code or go to: <https://ucla.in/kidney-transplant>



Dr. Beth Karlan, director of Cancer Population Genetics for the UCLA Health Jonsson Comprehensive Cancer Center, is developing ways to reduce barriers to genetic testing.

Photo: Joshua Sudock

Uterine artery embolization provides a non-surgical approach to treating fibroids



Leiomyoma (fibroid) of the uterus is an extremely common benign smooth muscle growth.
Image: Science Source

As many as one-quarter of women will develop symptomatic uterine fibroids. Often, those with particularly troublesome cases undergo hysterectomy — major surgery to remove the uterus.

For many women, there is a better option, says Shenise Gilyard, MD, a UCLA Health interventional radiologist and expert in uterine artery embolization (UAE), a minimally invasive approach to treating fibroids.

During UAE, an interventional radiologist makes a small incision to access an artery in the top of the leg or the wrist and passes a catheter into the uterine arteries. Tiny gelatine-like particles are injected into the blood vessels of the uterus, blocking blood flow to the fibroid and causing it to wither.

While not every patient is a candidate for UAE, a nonsurgical approach to treating fibroids when, if possible, preferable, Dr. Gilyard says. “Sometimes the only option a patient is offered is hysterectomy,” she says. “That’s a big surgery, and there can be complications. It can take weeks to months to recover.”

Uterine fibroids are non-cancerous growths in the muscles of the uterus that can range from pea-size to six inches in diameter. They vary significantly among patients in terms of number, location, size and how fast they grow. Fibroids most commonly occur in women in their 30s or 40s. “Fibroids are extremely common,” Dr. Gilyard says. “They’re more common in Black women, affecting up to 80% of women, although we don’t know why.”

While fibroids sometimes cause no symptoms, large fibroids typically require some kind of treatment. They can detract from quality of life, causing heavy menstrual bleeding as well as pain, bloating, cramping and constipation. Fibroids can interfere with fertility and can increase the risk of miscarriage. “Sometimes women bleed so much they become anemic or even need blood transfusions,” Dr. Gilyard says.


Sometimes women are prescribed

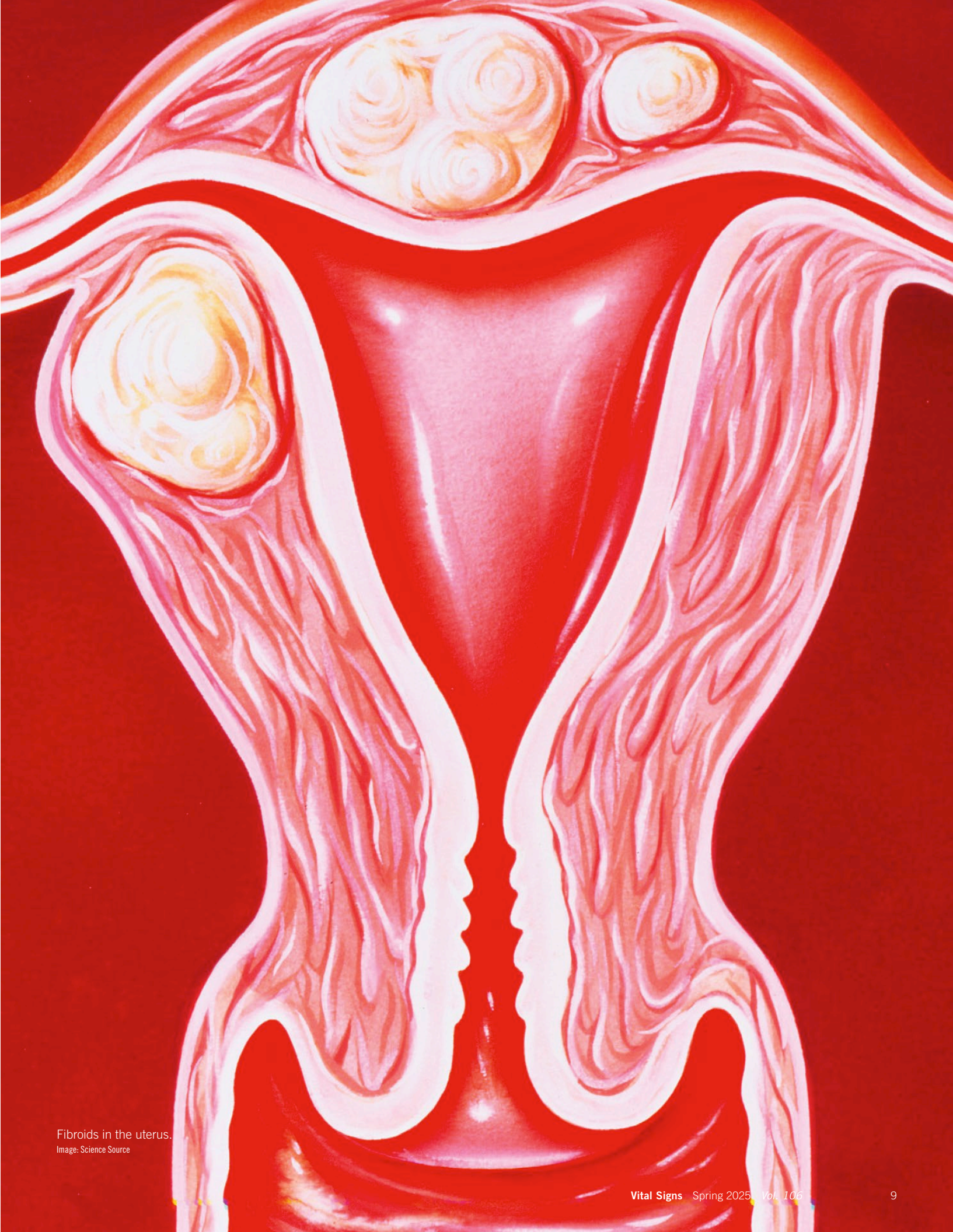
medications to control bleeding and pain, but often a procedure is necessary. One alternative to hysterectomy is a surgery called myomectomy to remove just the fibroids from the uterus. Myomectomy recovery can take several weeks, however, and the fibroids may grow back.

Many women worry about the impact of fibroid treatment on their fertility, Dr. Gilyard notes. Both myomectomy and UAE can impact fertility, although it is still possible to become pregnant. Physicians should carefully assess each individual case before advising patients on treatment, she says. “At UCLA, patients undergo a comprehensive, multidisciplinary workup to understand the condition and provide options.”

Patients receive ultrasound and MRI, which provides detailed images, to pinpoint the exact cause of the bleeding. If any tests point to possible cancer, the patient should have surgery, Dr. Gilyard says. For fibroids that are deeply embedded in the uterus, myomectomy may be the best option. But many other patients can undergo UAE. “UAE is very effective for patients experiencing bleeding,” she says. “It resolves the symptoms in more than 90% of cases. The recovery time is 24-to-48 hours. I’ve had women say ‘I wish I had done this sooner. You’ve given me my life back.’”

Women with symptomatic fibroids should ask about UAE, Dr. Gilyard advises. “Studies show one-in-five women believe hysterectomy is the only option,” she says. “There is definitely a knowledge gap where people don’t know UAE exists, and they don’t know to ask for other options.”

 For more information about uterine artery embolization at UCLA Health, scan the QR code or go to: ucla.in/uterine-artery-embolization



Fibroids in the uterus.
Image: Science Source

“Fibroids are extremely common. They’re more common in Black women, affecting up to 80% of women, although we don’t know why.”



Sense of loss lingers after the L.A. fires

There's a term for the particular pain of environmental change: "solastalgia." Solastalgia refers to the distress caused by the destruction or disappearance of treasured natural spaces.

The unprecedented devastation of the L.A. wildfires has led to widespread trauma across Southern California and beyond. There's the trauma of losing homes, schools and landmarks; the trauma of witnessing massive destruction in our communities and painful losses experienced by neighbors and friends; and the sadness of losing beloved landscapes.

There's a term for the particular pain of environmental change: "solastalgia." Coined in 2007 by an Australian professor, solastalgia refers to the distress caused by the destruction or disappearance of treasured natural spaces. It's "the loss of psychological, emotional or spiritual well-being that comes from being surrounded by a place you love

and cherish," says David Eisenman, MD, director of the Center for Public Health and Disasters and co-director of the Center for Healthy Climate Solutions at UCLA.


This feeling of solastalgia can add to the direct and vicarious trauma of the fires, experts say. "The known phenomena about natural disasters and catastrophic events in general is that the closer you are to it physically, the more potential psychological impact," says UCLA Health psychologist Emanuel Maidenberg, PhD. Experiencing, or even witnessing, wildfire destruction "makes us understand that we're more vulnerable than we're willing to think about most of the time," Dr. Maidenberg says.

The feeling of solastalgia resonates with

Angelenos because the diverse natural surroundings are something many love about the city. "A lot of us live here because of the landscape," Dr. Eisenman says. "It's part of our reason for living here. It's our icon and it's our loved resource. Like Notre Dame for Parisians, our great symbol burned."

A small study with survivors of the 2018 Camp Fire in Northern California found that community-based forest therapy programs can be a source of trauma-informed mental health care after natural disasters and can help treat solastalgia by decreasing symptoms of PTSD, depression, stress and anxiety.

Community connection is another salve for grief and trauma, says Vickie Mays, PhD, a psychology professor with UCLA Fielding School of Public Health. Dr. Mays says it is helpful for communities to develop rituals and ways to come together after disaster as part of the healing process. In the aftermath of the L.A.

 For more information about UCLA Health programs for wildfire recovery and support, scan the QR code or go to: www.uclahealth.org/wildfire-resources



More than 16,000 homes and other structures were destroyed in the devastating fires.
Image: Ted Soqui/SIPA USA (Sipa via AP Images)



CDC lowers age for adult pneumonia vaccine

The U.S. Centers for Disease Control and Prevention (CDC) has lowered the recommended age for adults to be vaccinated against pneumococcal disease from 65 to 50 years old. “Lowering the age for pneumococcal vaccination gives more adults the opportunity to protect themselves from pneumococcal disease at the age when risk of infection substantially increases,” the CDC said in a statement.

The change in CDC recommendations is based on epidemiological observations, says Shangxin Yang, PhD, a UCLA Health clinical microbiologist. Many of the risk factors for developing pneumococcal disease, a serious bacterial infection that can be spread through direct contact with respiratory secretions, are common in people ages 50 to 64, he says, including diabetes; chronic heart, liver or lung disease; weakened immune system; cigarette smoking; and excessive alcohol consumption.

“At least 40% of people in this age group have at least one of the medical conditions that will put them at a high risk of developing invasive or more severe infections,” Dr. Yang says. “This is probably an underrecognized population that has pretty high risk factors, but has not been taken care of from a prevention standpoint.”

Pneumococcal disease is the main cause of pneumonia, which is most serious for children younger than 5 and adults ages 65 and older. It can also cause meningitis and bloodstream infections. Pneumococcal vaccination is among the standard childhood immunizations recommended by the CDC, protecting young children when they are most vulnerable to serious illness.

Pneumococcal bacteria infect more than 900,000 Americans each year, according to the American Lung Association. The best way to prevent pneumococcal disease is through vaccination, the CDC said.

Lowering the recommended vaccination age can also help protect Black Americans, who studies show tend to suffer high pneumococcal infection rates at younger ages, Dr. Yang says.

The newest pneumococcal vaccines protect



Photo: iStock

against 21 pathogenic variations of the bacteria, he adds. For most people ages 50 and older, a single dose of the vaccine will provide lifelong protection.

“The prevalence of risk factors in this age group (50-64) is more than we realized,” Dr. Yang says. “When people turn 50, they still think they are young and healthy. But they may already have conditions brewing that put them at risk.”



For more information about UCLA Health infectious disease services, scan the QR code or go to: ucla.in/infectious-diseases



ASK THE DOCTORS

The essential role of vitamin B12

“Ask the Doctors” is a nationally syndicated column written by Eve Glazier, MD, president of the UCLA Health Faculty Practice Group, and Elizabeth Ko, MD, medical director of the UCLA Health Integrative Medicine Collaborative.



Drs. Elizabeth Ko and Eve Glazier.
Photo: Juliane Backman

DEAR DOCTORS: I was surprised when a blood test at my annual checkup found I’m low in B vitamins, especially B12. My doctor gave me a shot, and the fatigue that I had been feeling went away. Why is B12 so important? What kinds of foods do you need to be eating to have enough of it?

DEAR READER: Vitamin B12 is what is known as an essential nutrient. That means two things. First, an essential nutrient is a chemical compound that is crucial to the proper functioning of the body, and thus to good health. The other thing that is important to understand

about an essential nutrient is that the body either isn’t able to manufacture it or doesn’t produce it in the quantity needed. As a result, essential nutrients must be acquired through diet.

Although B12 is often referred to as a stand-alone vitamin, it is actually one of a group of eight B vitamins. Known as the B complex, these vitamins work individually and also as a group to maintain health and well-being. They help make nutrients available to the body, are important in maintaining brain function and also in the production of energy. B12 plays a crucial role in the manufacture of red blood cells, keeps nerve fibers throughout the body healthy, helps the

body convert protein, carbs and fat into energy and plays a key role the synthesis of DNA.

A B12 deficiency can cause the general fatigue that you were experiencing. It can also lead to certain types of anemia, malfunction or even structural damage of the nerves, muscle weakness and gastrointestinal issues. Additional symptoms can include tingling or numbness in the feet and hands, problems with vision, changes to balance and mobility, pale or jaundiced skin, a sore or swollen tongue, problems with sleep and changes to memory or cognition.

The body can store B12 in the liver. However, the supply is limited and, thus,

must be replenished. Red meat, fish, shellfish, eggs, poultry, milk and other dairy products all contain varying amounts of vitamin B12. Prepared products, including breakfast cereals, non-dairy milks, nutritional yeast and meat substitutes are fortified with B12. The nutrient is also available in vitamin tablets, nutritional supplements, and, as your own doctor delivered it, as an injection. Vegans and vegetarians, who don’t eat animal products, must make a special effort to get adequate B12 in their diets.

A diet rich in B12 is only half of the equation. The body must also be able to properly digest the foods that contain it. As a result, adults over the age of 50, who begin to produce fewer digestive enzymes; people who have undergone weight loss surgery; and those living with certain medical conditions, such as Crohn’s disease, can struggle with absorption. The long-term use of heartburn medications, which reduce production of the stomach acid needed to absorb B12, can also contribute to B12 deficiency. If anyone suspects they may have a B12 deficiency, we encourage them to check in with their doctor.



Illustration: Maitreyee Kalaskar



To Ask the Doctors, e-mail: askthedoctors@mednet.ucla.edu

Community Health Programs

MAY / JUNE / JULY / AUGUST / 2025 COMMUNITY CALENDAR EVENTS

UCLA Health offers community programs and events to help our neighbors lead healthier lives through wellness education. Go to uclahealth.org/events for more information.

CARE PLANNING

Advance Care Planning

Advance care planning is a gift you give your loved ones who might otherwise struggle to make choices about your care in the event you are unable to. This session provides an introduction to care planning.

When: Wednesdays, May 21, Jun. 18, Jul. 23 and Aug. 13, 6:00 – 7:00 pm

Where: Teleconference sessions

Register: ACP@mednet.ucla.edu

DIABETES

Living with Type 2 Diabetes (monthly)

These ADA-certified self-care classes will help you gain important skills, knowledge and confidence to successfully manage your diabetes. Sessions will cover risk reduction, nutrition, medications and being active.

When: Thursdays through August, 10:30 am – noon

Where: Teleconference sessions

Info & registration: diabeteseducation@mednet.ucla.edu

Integrative Approaches to Diabetes

Are you interested in managing your diabetes more holistically? Integrative medicine blends conventional treatments with mind-body-spirit and lifestyle approaches to improve diabetes and blood sugar control. Dr. Rashmi Mullur, a board-certified physician in endocrinology and integrative medicine, will teach you integrative approaches and mind-body techniques to better manage your health.

When: Tuesdays through August, 10 am – noon

Where: Teleconference sessions

Info & registration: 310-828-1050 or diabeteseducation@mednet.ucla.edu

HEALTH EMERGENCIES

Save-a-Life Workshop

Learn how to save a life! Learn the signs and symptoms of common emergencies like choking, heart attack, stroke and allergic reactions. Lifesaving skills like hands-only CPR, stopping severe bleeding and calling 9-1-1 — what to know, say and do — will all be covered.

When: Tuesdays, Jul. 8 and Oct. 7, noon – 1 pm

Where: Teleconference sessions

RSVP: cpc.mednet.ucla.edu/save-a-life

MULTIPLE SCLEROSIS

REACH to Achieve Program (ongoing)

This weekly wellness program focuses on fitness, memory, emotional well-being, recreation, nutrition and health education for individuals living with multiple sclerosis.

Where: Marilyn Hilton MS Achievement Center and via Zoom

Info & application: 310-267-4071 or 310-341-5459

CogniFitness

A four-week program for those with MS who are experiencing mild cognitive problems. Learn strategies to improve concentration, memory, organization, problem-solving and critical-thinking skills.

When: Saturdays in June/July, 10 am – noon

Where: Teleconference sessions

Info & application: 310-267-4071 or 310-341-5459

Exercise and MS

Learn from an MS exercise specialist how to use exercise to improve your overall wellness and help manage your MS symptoms. This 12-week program is for those who can easily walk 25 feet without a cane or walker.

When: Mondays, starting in June

Where: Marilyn Hilton MS Achievement Center

Info & application: 310-267-4071 or 310-341-5459

PODIATRY

Heel and Ankle Pain

Gary Briskin, DPM, will discuss common causes of heel and ankle pain, as well as surgical and nonsurgical therapies.

When: Tuesday, May 20, 5:45 – 6:45 pm

Where: Teleconference session

RSVP: 310-828-0011 to receive Zoom invitation

Bunions and Bunion Surgery

Bob Baravarian, DPM, will discuss bunions and the latest surgical and nonsurgical treatments.

When: Tuesday, Jun. 17, 5:45 – 6:45 pm

Where: Teleconference session

RSVP: 310-828-0011 to receive Zoom invitation

Ankle Arthritis and Ankle Replacement

Bob Baravarian, DPM, will discuss the latest advances in treating foot and ankle arthritis, including injection joint lubrication, arthroscopic cleanup, joint-preservation surgery, fusion surgery and ankle-replacement surgery.

When: Tuesday, Jul. 15, 5:45 – 6:45 pm

Where: Teleconference session

RSVP: 310-828-0011 to receive Zoom invitation

Heel and Ankle Pain

Gary Briskin, DPM, will discuss common causes of heel and ankle pain, as well as surgical and nonsurgical therapies.

When: Tuesday, Aug. 19, 5:45 – 6:45 pm

Where: Teleconference session

RSVP: 310-828-0011 to receive Zoom invitation

STRESS REDUCTION

Mindfulness Classes and Events (ongoing)

UCLA Mindful offers classes, workshops and events for the public to learn mindfulness techniques and practices to reduce stress and promote well-being. Free meditations and classes Monday through Thursday at varying times.

Where: Teleconference sessions

Info: uclahealth.org/uclamindful



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Vital Signs

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How Air Quality Affects Health

This winter's fires in Pacific Palisades, Altadena and other local areas heightened awareness of air-quality issues among Southern California residents. Although the fires have abated, health risks linger. Gregory B. Bierer, MD, a UCLA Health pulmonary care physician in Redondo Beach, discusses how smoke and other pollutants impact the body and steps to reduce harm.

What are the health effects of poor air quality, including those caused by wildfire smoke?

Dr. Bierer explains that health effects depend on proximity to the source of poor air quality, its concentration and the duration of exposure. These effects also vary between people with underlying lung disease and those without. "For those with lung diseases such as asthma or COPD (chronic obstructive pulmonary disease), exposure to toxins and smoke from fires increases the risk of lung inflammation and exacerbations. These patients may need additional medication, or even a trip to the emergency room," he says. "People without lung disease may still experience airway inflammation that causes coughing or shortness of breath, but symptoms will resolve over time. We've seen from studies of firefighters that exposure can reduce lung function for several months, but the condition improves later."



Dr. Gregory B. Bierer.
Photo: UCLA Health

What causes these health effects?

"Particulates measuring between 2.5 and 10 microns can penetrate deep into the small airways of the lungs, making them potentially more damaging," Dr. Bierer says. "Smoke can include particles of ash and other burned materials, along with high concentrations of harmful substances such as carbon monoxide and other volatile organic compounds from items like burned batteries or plastics."

What steps can help minimize exposure to particles and toxins?

"If possible, leave the area during a fire," Dr. Bierer advises. "When outside, wear an N95 or P95 mask to filter out particulate matter. The P95 also protects against oil-based vapors. In your car, keep the air on recirculate to prevent outside air from entering. If you can smell smoke, there's some level of danger to your lungs."

When staying in an area affected by smoke, keep doors and windows closed. Run the fan or air conditioner on recirculation mode to filter and circulate air through the home's air filter, which should be rated MERV 13 or higher. Dr. Bierer advises having air purifiers with HEPA-rated filters in different rooms, and making sure the machines are appropriate for each room's size.

What websites provide information on air quality?

Both Airnow.gov, run by the EPA, and the South Coast Air Quality Management District (AQMD) post air quality levels. To access South Coast AQMD information, visit AQMD.gov and select "Air Quality." "Some potential factors aren't measured, but this gives a solid indication of the measurable ones," Dr. Bierer says.



Photo: iStock

What else should readers know?

"I strongly advise readers to follow the advice of public officials and the teams cleaning up the burned areas," Dr. Bierer says. "The cleanup process will stir up ash and other substances, causing the air concentration to be potentially more dangerous than the exposure during the fire itself. The Clean Air Coalition presented data from the 2018 Paradise fire in Northern California showing the presence of harmful compounds such as benzene even eight months afterward. I feel for people wanting to return to their neighborhoods, but it won't be safe until cleanup has substantially progressed."



To find a UCLA Health location near you, scan the QR code or go to: maps.uclahealth.org



How Air Quality Affects Health

This winter's fires in Pacific Palisades, Altadena and other local areas heightened awareness of air-quality issues among Southern California residents. Although the fires have abated, health risks linger. Tamana Ahmadi, MD, a UCLA Health pulmonary critical care physician in Encino, discusses how smoke and other pollutants impact the body and steps to reduce harm.

What are the health effects of poor air quality, including those caused by wildfire smoke?

Dr. Ahmadi notes that the effects of fire smoke depend on proximity to the source of poor air quality, its concentration and the duration of exposure. The potential for harm increases for those with underlying lung or cardiovascular disease. Smoke and pollution can cause inflammation or irritation in the airways. "This can exacerbate underlying lung disease such as asthma or COPD (chronic obstructive pulmonary disease), triggering symptoms such as coughing, wheezing and shortness of breath" she says. "Air pollution may trigger abnormal heart rhythm and heart attack in patients with cardiovascular disease. Other vulnerable groups include pregnant women, infants and children. Air pollution is linked with adverse perinatal effects on the fetus," Dr. Ahmadi says. "Children and infants are more susceptible to long-term health risks, due to higher air intake

per pound of body weight and have immature immune systems. People without lung disease may still experience airway inflammation, but it generally resolves over time."

What causes these health effects?

Particles smaller than 2.5 microns can linger and penetrate deep into the airway surfaces and potentially enter the blood stream. "Wildfire smoke contains toxic chemicals; particle matter suspended during burning of structures can contain lead, asbestos, heavy metals and volatile organic compounds" says Dr. Ahmadi. "Again, dose and duration are important factors."

What steps can help minimize exposure to particles and toxins?

"Pay attention to the hyper-local air quality indices, which reflect hour-to-hour concentrations and winds," Dr. Ahmadi advises. Airnow.gov, run by the EPA, and the South Coast Air Quality Management District (AQMD) post air quality levels. To access the South Coast AQMD information, visit AQMD.gov and select "Air Quality." When air quality is poor, such as during a fire, Dr. Ahmadi urges people to leave the area or stay indoors. "Staying inside with the windows closed can reduce exposure by about half," she says. If compatible with your home's HVAC system, use high-efficiency filters rated MERV 13 or higher, and when the outdoor air quality is poor, run the fan or air conditioner in recirculation mode. Portable HEPA filters are very efficient in filtering small particles, but Dr. Ahmadi notes they can be costly and require keeping up with manufacturer guidelines regarding appropriate room size and how often to replace the filter.



Dr. Tamana Ahmadi.
Photo: UCLA Health



Photo: iStock

When outdoors, wear an N95 mask to filter out particulate matter. "Make sure the mask fits well and seals around the nose and mouth," she says. "Some governmental agencies recommend having two straps rather than one."

What else should readers know?

"During cleanup, toxic particles and chemicals can get stirred up into the air," Dr. Ahmadi says. "Follow the instructions of public officials and the teams cleaning up the burned areas."



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How Air Quality Affects Health

This winter's fires in Pacific Palisades, Altadena and other local areas heightened awareness of air-quality issues among Southern California residents. Although the fires have abated, some health risks linger. Roxana Y. Hixson, MD, a UCLA Health pulmonologist and critical care physician in Santa Clarita, discusses how smoke and other pollutants impact the body and steps to reduce harm.

What are the health effects of poor air quality, including those caused by wildfire smoke, and who is most likely to be affected?

Dr. Hixson says symptoms and potential damage depend on proximity to the source of poor air quality, its concentration and the duration of exposure. "Symptoms can range from minor eye irritation and coughing to wheezing, shortness of breath and difficulty breathing. For people with healthy lung tissue, these symptoms generally resolve a few days after exposure. However, people with chronic lung diseases such as asthma and COPD are more likely to experience symptoms, and exposure to airborne particulates can cause exacerbation or flare-ups of those conditions."

Certain populations are more vulnerable to the effects of poor air quality besides those with underlying lung disease, Dr. Hixson notes. "Older adults are more likely to have preexisting health issues that can be exacerbated by poor

air quality. Children spend more time outside, and their lungs have not fully developed. Pregnant women may experience issues including potential harm to the developing fetus," she says. "People of low socioeconomic status may be more likely to have preexisting lung conditions because of the poor air quality in their neighborhoods. They also tend to lack access to medical care, as well as good indoor ventilation and air conditioning."

What causes these effects?

Particulates measuring between 2.5 and 10 microns can penetrate deeper into the small airways of the lungs, potentially causing greater damage. Particles from fires can include ash or other burned materials, as well as high concentrations of carbon monoxide and other volatile organic compounds. Particles smaller than 2.5 microns can enter the bloodstream, potentially causing inflammation and other issues over time.

What steps can help minimize exposure to particles and toxins?

In the event of a fire, try to get as far away as possible from areas with smoke or poor air quality. When that is not possible, Dr. Hixson advises staying indoors, closing windows and turning the fan or air conditioner to recirculation mode (use a filter rated MERV13 or higher for the home's HVAC system). "You can reduce your exposure to particulate matter by about 50% just by taking those measures," she says. Portable air purifiers with HEPA filters remove much of the small particulate matter released by fires. However, they are costly and require following the manufacturer's



Photo: iStock

directions regarding the appropriate room size and frequency for cleaning the filter. "When you need to go outside, wear a tight-fitting N95 mask," she says.

What else should people know?

"Air pollution depends on where you live and work. Obviously, proximity to things like freeways or factories that release chemicals in the air puts people at higher risk," Dr. Hixson says. She recommends checking the air quality level in one's specific area to know when it's best to stay inside. Airnow.gov, run by the EPA, and the South Coast Air Quality Management District (AQMD) post air quality levels. Access South Coast AQMD information by visiting AQMD.gov and selecting "Air Quality."



Dr. Roxana Y. Hixson.
Photo: UCLA Health



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How Air Quality Affects Health

This winter's fires in Pacific Palisades, Altadena and other local areas heightened awareness of air-quality issues among Southern California residents. Although the fires have abated, health risks linger. Samuel P. Haslam, MD, a UCLA Health pulmonary care physician in Thousand Oaks, discusses how smoke and other pollutants impact the body and steps to reduce harm.

What are the health effects of poor air quality, including those caused by wildfire smoke?

"The majority of people are not going to develop lung disease from a fire exposure. However, the damage depends on the dose and duration, meaning what in the fire — or other pollution source — people were exposed to and how much and how long were they around it," Dr. Haslam says. "While those who don't have airway disease are less likely to have symptoms, they may experience some coughing, shortness of breath and, potentially, flu-like symptoms. People with underlying airway diseases such as asthma or COPD (chronic obstructive pulmonary disease) are more sensitive to particulate matter, so they may experience lung inflammation and exacerbations that could require additional medication, or even a trip to the emergency room."



Dr. Samuel P. Haslam.
Photo: UCLA Health

What are the potential long-term effects?

"When toxins such as metals, asbestos, batteries or plastics burn, they can enter the lungs, and even the bloodstream. It's difficult to know the implications of that down the line, but it could potentially increase the risk of cancers or systemic diseases," Dr. Haslam says. "That's why it's important to minimize both the dose and duration of smoke exposure through protective measures."

What steps can help minimize exposure to particles and toxins?

"If possible, leave the area during a fire," Dr. Haslam advises. "When that's not practical, stay indoors." At home, keep doors and windows closed. Use a filter rated MERV13 or higher for the home's HVAC system, and set it to recirculate mode. Dr. Haslam recommends using portable air purifiers with HEPA filters in each large room. When using portable air purifiers, make sure to follow the manufacturers' directions regarding what size room the filter is designed for and how often to clean it. When outdoors, wear an N95 mask that completely covers the mouth and nose. "If you have lung disease, be sure to take your inhalers as prescribed and let your physician know if your condition worsens," he says.

What else should readers know?

Dr. Haslam says wildfires are a principal source of poor air quality in Southern California. However, he points out that air quality depends on the specific area where people live and work. For example, those who live near a factory that releases fumes or work in construction would be exposed to particulate matter over



Photo: iStock

long periods of time and thus at greater risk. People who live in fire-damaged areas should follow the directions from public officials and cleanup teams regarding air quality, as the clean-up process can stir up ash and other substances. Airnow.gov, run by the EPA, along with the South Coast Air Quality Management District (AQMD), regularly post air-quality levels. To access the South Coast AQMD information, visit AQMD.gov and select "Air Quality." While these services can't account for all potential factors, they provide a good indication of the measurable ones.



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