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A PUBLICATION FROM MERCY REGIONAL MEDICAL CENTER

Mercy helps fight opioid epidemic

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Keeping score on the latest for hips, knees

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The rise of vaping: What to know

The U.S. Surgeon General has declared vaping a youth epidemic.

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Joanna Dominick, FNP-C

A warm welcome

FAMILY CARE PROVIDER JOINS THE MERCY FAMILY

Mercy welcomes board-certified family nurse practitioner Joanna Dominick, DNP, APRN, FNP-C. Joanna provides care to patients of all ages at Mercy Family Medicine's clinic at Three Springs.

Joanna earned both her Doctor of Nursing Practice and Family Nurse Practitioner Master of Science degrees from Regis University. She completed her undergraduate degree in kinesiology at Western State College, and her Bachelor of Science in Nursing degree at the University of Colorado Health Science Center.

Joanna has been a family nurse practitioner for 11 years. She's passionate about mental and behavioral health in family medicine and enjoys working with adolescents. Her goal is to provide quality, comprehensive health care to the community and identify health risk factors before they become problematic.

✦ CONTACT US:

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On the Cover:

Susie Kim, MD, board-certified interventional cardiologist, Mercy Cardiology Associates, displays the logo of Mercy Health Foundation's \$4 million dollar "Incredible Dream" campaign. Learn more on page 11.

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John Peel is a contributing writer for Health+Care.



Rachel Cain, MD



Dr. Rachel Cain implanting the device.



The device's remote-control unit.

A new way to conquer sleep apnea

Are you one of the 22 million Americans who suffer from sleep apnea? If you're unable to tolerate the most common treatment for the disorder—a continuous positive airway pressure (CPAP) device—you may find relief from an upper airway stimulator.

Obstructive sleep apnea is a sleep disorder in which breathing repeatedly stops and starts during sleep. The most common symptoms of the condition are snoring loudly and feeling tired, even after a full night's rest. Someone with sleep apnea wakes up multiple times a night, and this constant disruption of sleep can leave people chronically fatigued, and increases the risk of heart attack, stroke, dementia and premature death.

The most common treatment option for people with obstructive sleep apnea is the CPAP machine, which keeps the airway open by sending a constant flow of pressurized air into the nose or mouth by way of a mask worn during sleep. However, this device doesn't work for everyone: up to 50 percent of patients with obstructive sleep apnea do not tolerate or benefit from CPAP.

Fortunately, there is an alternative to CPAP available at Mercy. Dr. Rachel Cain, MD, ear, nose and throat specialist, is able to surgically implant a small device that stimulates the muscles in a patient's upper airway during sleep to prevent obstruction. Dr. Cain, who received training to perform the procedure during her residency at Mayo Clinic, saw a local need for the technology when she returned to her hometown of Durango in 2016.

The device is implanted during an outpatient surgery in which Dr. Cain makes three small incisions to place the unit's three components: a nerve stimulator, voltage generator, and breathing sensor. The nerve stimulator is placed around the hypoglossal nerve in the upper neck, which controls the muscles of the tongue. The generator is placed in the upper chest and sends an electrical pulse to the nerve. The sensor is placed through an incision near the ribs and signals the generator to activate when the patient takes a breath. The three components

are connected by flexible wires that run underneath the skin. Once implanted, patients control the device with a remote control, turning it on each night before bed and off in the morning. About two months after surgery, patients spend a night in the Four Corners Sleep Disorders Center at Mercy to determine the appropriate implant settings to fit the patient's level of sleep apnea.

Studies have found an average of 78 percent reduction in sleep apnea events per hour following the implantation of the device.

Mercy is the only hospital in the Four Corners to offer this effective treatment which may improve not only the quality of your sleep but also the quality of your life. If you suffer from chronic sleep problems, talk to your doctor about seeing a Mercy sleep specialist and having a sleep study at **Mercy's Four Corners Sleep Disorders Center.**



Mercy helps fight opioid epidemic

ALTO PROGRAM UNDER WAY IN EMERGENCY DEPARTMENT

The opioid epidemic is a national problem, with millions of Americans misusing their prescriptions every year, sometimes lethally. Musicians Tom Petty and Prince tragically make the list, and maybe there are others you know personally.

It's a local problem, too. With a new program, Mercy Regional Medical Center vows to keep its patients from going down a dangerous road that has few obvious exits. Mercy's Emergency Department began implementing the Alternative to Opioid (ALTO) program in December. As ALTO enters continuing phases, it will spread to all areas of the hospital.

Changing behavior is a long process, says Paul Gibson, Director of the Emergency Department at Mercy. It will involve re-educating everyone from physicians and nurses, to emergency responders, and even the general public.

"The way to treat all pain has been narcotics," Gibson says. "We have to change that behavior."

In 2017, six-month ALTO pilot programs, developed by the Colorado Hospital Association, were run at 10 hospitals. The goal was to reduce opioid prescriptions by 15 percent. Surprisingly, they were able to make a 36 percent reduction. Centura Health, the health system to which Mercy belongs, is now implementing the ALTO program at all of its 17 hospitals.

Among the 50 states, Colorado has the 12th-highest rate of prescription opioid misuse and

abuse. Colorado recorded 558 opioid-related deaths in 2017, a five percent rise from the previous year.

Narcotics such as oxycontin, morphine, and even the highly addictive fentanyl—linked to the deaths of both Petty and Prince—are prescribed often for a variety of conditions. But in many cases—such as for inflammation—this doesn't help the root cause.

"No narcotic takes the pain away," Gibson says. "It just makes you care less about it. And the less you care about it, the less likely you'll be to actually attack what's truly causing the pain."

Addiction to narcotics can happen in less than three days, says Emergency Department Assistant Nurse Manager Celeste Hanson-Weller, who took the ALTO training and is helping to implement the program at Mercy.

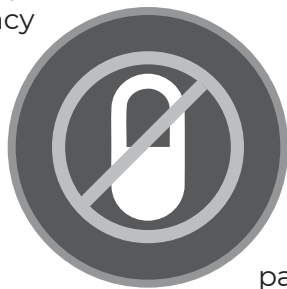
Opioids are still a treatment option, particularly when there's an acute trauma.

But if you have a migraine, say, you'll get other options first. For a painful kidney stone, you'll get a numbing medicine such as lidocaine. For inflammation, you'll get anti-inflammatory drugs such as Motrin, Toradol or corticosteroids.

No longer is the goal "zero pain." And opioids are no longer the first line of defense. Mary Jo Seiter, Assistant Nurse Manager at Mercy Urgent Care at Purgatory Resort and the Mercy Emergency Department, says many alternatives are available. For children, it could be toys to distract them. For adults, it could mean ibuprofen, repositioning the body, using hot and cold compresses, or even massage.

The statistics and the empirical evidence can't be ignored. Opioids are highly addictive, to some user groups more than others.

"We are going to treat their pain," Gibson says. "But part of taking care of people is making sure they don't become addicted to opioids."





How to use over-the-counter drugs wisely

They're easy to purchase, so some people tend to treat over-the-counter drugs like candy. But they're not candy, and if taken incorrectly can be harmful.

For a little help with some basics on over-the-counter (OTC, or nonprescription) medications, we turned to John Turtle, the Outpatient Pharmacy Manager at Mercy Regional Medical Center.

I HAVE A HEADACHE. WHAT SHOULD I TAKE?

For tension-related headaches, acetaminophen is generally most effective. The most common form is the over-the-counter brand Tylenol, a name you've heard much more often than acetaminophen, the generic drug. Ibuprofen, naproxen, and salicylates (including aspirin) may also help.

Though salicylates are beneficial in certain situations and specific types of patients, they should generally be avoided by children. It is recommended that you speak with a pharmacist before choosing an option in the salicylate family.

WHAT IF I HAVE A FEVER OR ACHING MUSCLE?

Try an NSAID (non-steroidal anti-inflammatory) such as ibuprofen. These can reduce fever and inflammation. Advil is the most common ibuprofen brand, although several others are popular. NSAIDs can relieve fever and minor, short-term pain from tooth, muscle and back aches; arthritis; and menstrual cramps, just to name a few.

Tylenol can also be used to reduce fever.

CAN TAKING TOO MUCH ACETAMINOPHEN OR NSAIDS CAUSE ANY PROBLEMS?

Yes. Too much acetaminophen (Tylenol) can lead to liver problems, and chronic use can lead to acute liver failure. Don't take more than 3 grams a day.

Ibuprofen (Advil) and naproxen (Aleve) are NSAIDs, and high doses can lead to problems with kidney function or stomach distress. Chronic use can break down tissue or reduce blood flow to the kidney. Gastrointestinal issues can be avoided by taking food or milk with NSAIDs.

WHAT ARE SOME COMMON MISTAKES PEOPLE MAKE?

One: Not taking with a full glass of water.

If the directions say to take with a full glass of water, that's not just a direction to help the swallowing process. Hydration affects how well and how quickly the drug works.

"It sounds so cliché, but don't shortcut that," Turtle says. "It's a real thing. Don't just pop them and swallow them with your saliva."

Two: Going back and forth between drugs. With headaches, for instance, try Tylenol as first defense, then add on another if you can't handle the pain.

"Stick to one for a baseline," Turtle says. "If that's not covering it, then you should seek out additional therapy."

If you're taking Tylenol daily for more than a week, see a doctor. The goal is to get healthy, not just mask the pain, Turtle advises.

And if you have any questions, don't be shy: Talk to the pharmacist or your doctor.

DISPOSING OF PRESCRIPTION DRUGS AND OTHER MEDICATIONS

If you're not using medications, or they have expired, get rid of them. The Colorado Household Medication Take-Back Program was created to provide each county with at least one permanent collection location that can accept household medications and prescription controlled substances such as narcotics. Visit www.colorado.gov/cdphe/colorado-medication-take-back-program for a list of collection locations and hours of operation.

If you're unable to dispose of leftover or expired medications at a drop-off location, do not flush them down the toilet. The Food & Drug Administration's recommended disposal method is to mix medications with an unpalatable substance such as kitty litter, used coffee grounds, or even dirt. (Don't crush tablets or capsules.) Place that mixture in a sealed plastic bag and throw it in the trash.



Keeping score on the latest for hips, knees

One could say the field of orthopedics is moving as fast as a batter rounding the bases, or a wide receiver sprinting toward the end zone.

Dr. Matthew Smith with Mercy Orthopedic Associates brings his patients not only the latest technology and advances, but an insight into keeping athletes - everyone from pros to the more common weekend warrior - as active as possible.

Dr. Smith says there's a "wow" factor to his fellowship with the Steadman Hawkins Clinic-Denver, during which he worked with the Denver Broncos and Colorado Rockies. But his main takeaway was a keen familiarity with the decision-making tree in evaluating an injury or condition. The world of professional athletics is high-stakes, and forces one to consider decisions carefully.

He'll see you for any type of shoulder, hip, or knee pain, and prescribe anything from rest to physical therapy to arthroscopy or arthroplasty (joint replacement). Among his remedies are the latest techniques in "hip preservation" and an exciting development in patching up damaged cartilage with your own cells.

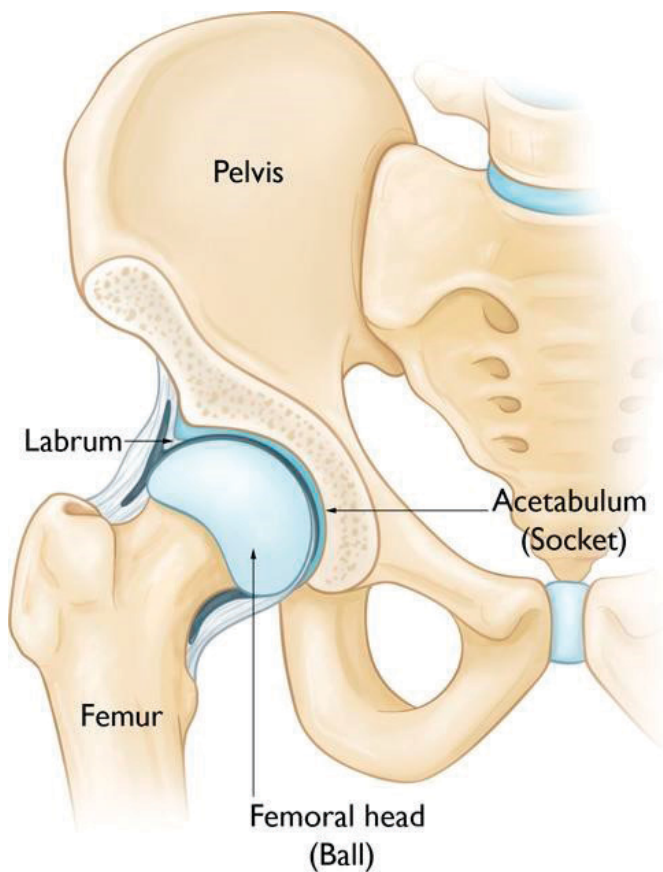
HIP PRESERVATION

This is a relatively new field that spawned from European research into the onset of early arthritis in hips. Arthritis can start as early as the late teen years. Hip preservation is all about preserving cartilage, and often that has to do with stabilizing the labrum.

The labrum is a gasket that runs around the lip of the hip socket, and serves as a seal between the socket and the ball. Labrum tears are very common. If untreated, these tears can lead to extra wear on the adjacent cartilage.

If treatment such as physical therapy or injections won't take away the pain (often felt in the groin), then arthroscopic surgery might be the next step to consider. Prior to surgery, X-rays may reveal arthritis; an MRI might be necessary to show a labral tear or damaged cartilage.

Matthew Smith, MD



During surgery, Dr. Smith looks at the hip joint with a tiny camera at the end of the scope. He'll analyze the ball and socket, and look at the cartilage on both sides, as well as the labrum. Labral tears can be repaired using small screws with sutures to pull the labrum back into place, or by removing the torn labrum and replacing it with a cadaver labrum. During the procedure, any bony bumps causing wear and tear will be shaved smooth.

The growing belief is that this surgery "preserves" the hip joint by decreasing the risk for early arthritis and the need to replace the hip joint in the future.

MACI

Staying at the top of his game takes some work, and Dr. Smith is constantly reviewing peer journals and training with new technology. Matrix-associated autologous chondrocyte implantation (MACI) sounds fancy, and, well, it truly is. Cartilage just won't heal itself. MACI, a trade name, is a method of repairing damaged knee cartilage using a replacement patch developed from your own cells. ACL, a generic term, has been around for several decades. The new development in this procedure is the patch.

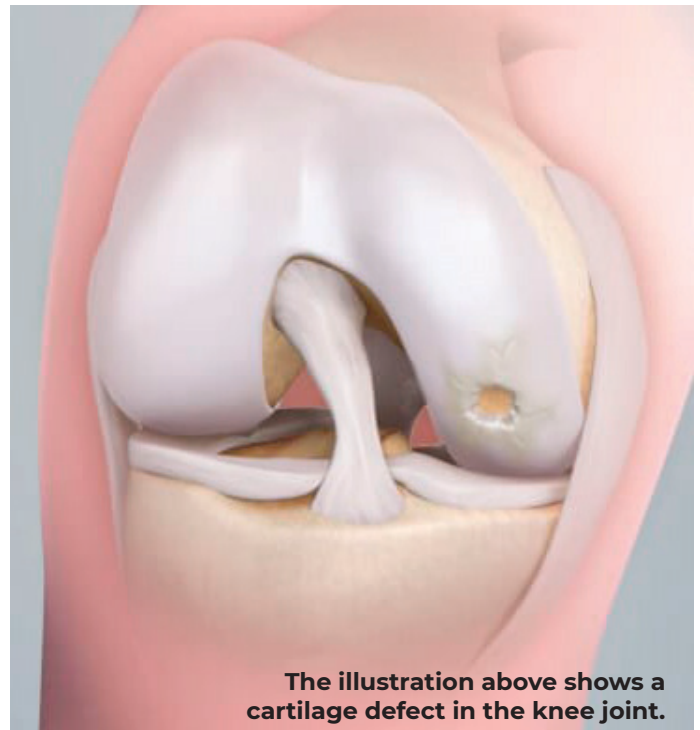
In a typical case, you've torn your anterior-cruciate ligament (ACL) and simultaneously knocked off a chunk of cartilage. A few years after the injury, and you're needing help with a painful or immobile knee. MACI is among the options. Both patients and surgeons appreciate this method because the patch makes this procedure quicker and simpler than other cartilage replacement options, including ACL. Also, there is an appeal to using a patch grown from your own cells.

Some patience is involved. The first step is an arthroscopy to remove a piece of non-weight-bearing cartilage. That piece is sent to a laboratory, where the cartilage-producing cells are grown and impregnated into a collagen patch. This takes about six weeks.

Next, surgery is performed. Damaged cartilage is removed, and then the patch is fitted and implanted; it is affixed with a fibrin glue. The patch mixture gradually expands to replace the missing cartilage. Meanwhile, rehab begins.

"It allows your own cartilage to fill in the gaps," Dr. Smith says. The divot in your knee is gone, with no negative long-term impact. And with the pain relieved, you can get back to your active life.

✚ Call **Mercy Orthopedic Associates** at **970-764-9400** for more information or to schedule an appointment.



The illustration above shows a cartilage defect in the knee joint.

The rise of vaping: What to know

Although cigarette use has dropped dramatically among teenagers, in the last few years a related health issue has emerged: vaping.

Vaping is marketed as a safe alternative to smoking, but that's misleading, says Dr. Krista Ault, a family practice physician at Mercy Family Medicine's Horse Gulch campus. Both contain nicotine. Cigarette smoke contains harmful chemicals that e-cigarettes don't, such as tar, the number one carcinogen in cigarettes. But the jury is still out on certain chemicals released during vaping, such as the diacetyl used in flavoring. Diacetyl has been linked to a rare disease called "popcorn lung."

While smoking cigarettes is the top cause of preventable death in the U.S., no long-term data are yet available on the safety of e-cigarettes.

"We think it has less bad stuff for you," Dr. Ault says of an e-cigarette. "It still has nicotine, so you still have to deal with the addiction piece of it."

So, you're a parent or simply a concerned adult. What should you know about vaping?

WHAT IS VAPING?

With e-cigarettes, a battery-powered device heats a coil that vaporizes a flavored liquid contained in the device. As the liquid is vaporized, the user inhales the vapor as they would cigarette smoke. The difference is that, unlike smoking, no combustion takes place with vaping.

The most popular vaping device is the JUUL, a product that resembles a computer flash drive and can be charged in a USB port. It's slim and easy to carry (and conceal, if desired).

The use of e-cigarettes and other vaping devices has increased so quickly that the U.S. Surgeon General in December declared it a youth health epidemic. From 2017 to 2018, a government-funded study showed the number



of high school seniors who reported vaping nicotine within the past month nearly doubled, rising from 11 percent to 21 percent.

The Surgeon General's advisory also called for a curb on the sale of flavored e-liquids, which are a favorite among youngsters. Although e-liquids cannot legally be sold to those under 18, there's no question that children are attracted to the fruit and candy flavors and packaging of e-liquids. The instances of young children swallowing vaping liquid and suffering nicotine poisoning have also increased dramatically.

CAN I TELL IF SOMEONE IS VAPING?

In general, vaping is difficult to detect. JUULs and similar vaping devices may look like just another electronic gizmo, and unlike cigarette smoke, the vapor dissipates quickly and is generally not very noticeable unless you're in the same room where the activity is occurring.



HOW SHOULD I TALK TO MY KIDS ABOUT IT?

Just like talking drugs, alcohol or sex, it can be a difficult and awkward subject to approach. Be ready when the subject arises, and be sure kids understand that vaping liquid can contain nicotine, and potentially other harmful chemicals.

Like many drugs, nicotine can have detrimental long-term effects on a developing brain (those under age 25). Effects include mood and attention span disorders, and a lowering of impulse control.

“Just try to be an open presence,” Dr. Ault recommends. “Try to be somebody your kids can talk to about things. Present them with facts as best as you can in an age-appropriate manner.”

IS IT A GOOD TRANSITION OFF CIGARETTES?

Although she’s hesitant to give an emphatic “yes,” Dr. Ault says she will continue to support her patients desperately seeking a way to break their cigarette-smoking habit.

So far, study results are mixed as to whether e-cigarettes help people kick the habit, or even exacerbate the habit.

Preferably, a smoker can find a replacement habit other than e-cigarettes. A healthier habit, for example, would be chewing gum. For those craving the hand-mouth element of smoking, eating carrots or celery may work. Dr. Ault says

that one of her patients found that sucking through straws replaced sucking cigarettes.

If you have questions on vaping, your family doctor is there to provide advice.

Says Dr. Ault: “It’s all about living as healthy as possible.”



Krista Ault, MD





Sarah Goodpastor, MD,
speaks with a patient.

Why you lie to your doctor, and why you shouldn't

With any relationship, we generally try to put ourselves in the best light possible. But when it comes to the doctor/patient relationship, doing that to extremes can be detrimental to your health.

A recent study published in the *Journal of the American Medical Association* found that, depending on age, 61 to 81 percent of patients have lied to their doctor.

The doctor/patient relationship is a tricky one, and time can be a limitation during an office visit, but if you're concerned about your health, the one thing you shouldn't do is be untruthful.

WHAT THE PATIENT CAN DO

Often patients tell a doctor what they wish was happening, even if it isn't, says Dr. Sarah Goodpastor, doctor of Obesity Medicine and Internal Medicine at Mercy Internal Medicine. They know what they should be doing, and they don't want to disappoint the doctor.

But say you have hypertension (high blood pressure). Are you exercising? Are you controlling salt in your diet? You answer yes, but that's not the truth. There are no other lifestyle treatment possibilities, so the next level of treatment is medication, which you may not actually need.

Or say you're not taking your prescribed medications, but you tell the doctor you are. The doctor might increase a dosage, leading to adverse effects.

If you're too embarrassed to talk to your doctor about certain symptoms you're experiencing,

there's no way the underlying condition can be properly diagnosed or treated. Left untreated, it could develop into something even worse.

If people understood how critical it is to tell the truth, how important being honest is in reaching their health goals, they'd come clean, Dr. Goodpastor says. Don't be ashamed to be honest.

"If you are feeling ashamed, you're with the wrong provider." As they say, we're all human, and doctors have seen it all before.

WHAT YOUR DOCTOR CAN DO

Physicians have an equal role in establishing an open and beneficial relationship. Dr. Goodpastor says her role is facilitator—sharing her knowledge and providing patients information and perhaps recommendations. But ultimately patients should make their own decisions.

Patients are concerned about sharing delicate information—perhaps regarding a sexually transmitted disease, substance abuse, or mental health issues. That information is protected by law. A physician can address those and other barriers to establishing a solid relationship.

"It takes a long time to build trust, and for people to want to tell you why they're not taking their medications," Dr. Goodpastor says.

It's a collaborative relationship, much more effective with good communication and honesty.

"It should be a positive and empowering relationship," Dr. Goodpastor says, and concedes: "That doesn't mean the doctor's going to agree with everything you say."



Support Mercy's Heart and Vascular Program through Mercy Health Foundation campaign

Mercy is honored to have a strong cardiology team that delivers high-quality care, but to stay abreast of new advancements in cardiac treatments and to continue providing the excellent care you've come to expect from Mercy, we need your support. Mercy Health Foundation's \$4 million "Incredible Dream" campaign is off to a great start, raising funds to support several critical cardiology needs at Mercy, including:

- Purchase of new equipment and other upgrades to the Cardiac Catheterization Laboratory
- Addition of advanced cardiac services, including electrophysiology
- Enhancement of life-saving services and programs for the intensive care and emergency departments
- Expansion and advancement of interventional radiology and diagnostic capabilities
- Redesign of the cardiac patient areas for enhanced comfort and care

Without the support of the communities we serve, Mercy could not provide the level of medical care and services that are available. You are a vital part of Mercy's heartbeat. Please help us grow our heart program by giving a gift today. Your donation

to Mercy Health Foundation allows Mercy to continue providing high-quality health care to the residents of the Four Corners region.

Our mission continues to be simple:

“ We save lives—we impact lives—we have a healthier community every day. We hope our gratitude echoes in your heart for a lifetime. ”

✚ To make a donation or learn more about the **Incredible Dream Campaign**, call **970-764-2800** or visit mercydurango.org/foundation.

Please accept my gift to support Mercy's Heart and Vascular Program.

Enclosed is my tax-deductible gift for:

- _____ \$500
- _____ \$100
- _____ \$50
- _____ \$25
- \$ _____ Other

Enclose check and mail to:

Mercy Health Foundation
1010 Three Springs Blvd. Ste 248
Durango, CO 81301

Mercy Regional
Medical Center
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incredible
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Heart specialists serving on Mercy's Medical Staff include: (left to right) Alexander Fraley, M.D.; Susie Kim, M.D.; Robert Palusinski, M.D.; Bruce Andrea, M.D.; Sheena Carswell, CNS; and Chad Bidart; M.D.



Small changes make a **BIG** difference

MERCY LAB EXPERT BRINGS SKILLS TO TANZANIA

During Kelly Brimhall's first day at Dareda Hospital in Tanzania, Africa, a doctor approached her with a creatinine result that seemed impossibly high. Brimhall, the lab technical supervisor at Mercy Regional Medical Center, was just getting her bearings in a very foreign place and wasn't sure what to think.

"Is the patient still living?" she asked.

The answer was yes.

From there, Brimhall quickly began to understand her task: to update a laboratory that, despite competent technicians, lacked basic technology and supplies to provide both quality results and a healthy working environment.

Brimhall and five other volunteer Centura Health employees traveled to eastern Africa in 2018 as part of the ongoing Tanzania Mission Project, which is a partnership between Mercy and Global Health Initiatives, Centura Health's international medical mission program. Their focus was the Dareda Hospital in the Manyara Region of northern Tanzania.

The faulty test underlined the importance of the lab, perhaps the most underappreciated hospital department everywhere. It is said that U.S. doctors make 50 to 70 percent of their medical decisions based on lab and diagnostic data, said Dr. Valerie McKinnis, hospitalist at Mercy.

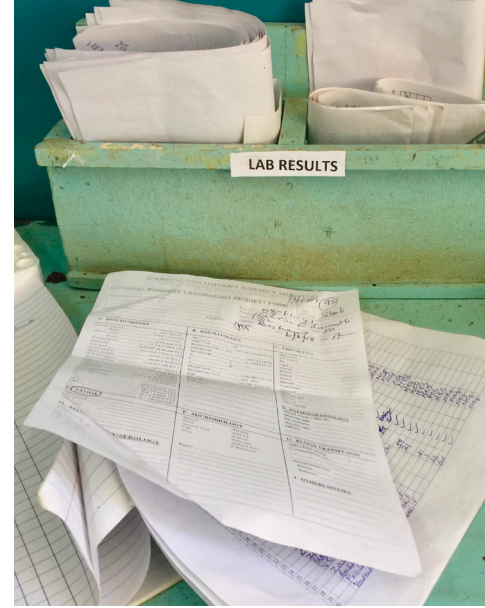
McKinnis has traveled several times to Dareda Hospital and spearheaded the idea of bringing along a lab specialist in 2018. Kelly Brimhall, a mother of two teenagers, heeded the call.

"Kelly has really been instrumental in understanding current lab capabilities," McKinnis said. "She's really taken this project to a better place."

Upon closer inspection of the creatinine test, Brimhall realized the problem wasn't the testing machine, but the pre-testing procedures used. The sample wasn't handled properly and contained visible contaminants, something that rarely happens in the U.S. But in Tanzania, funding is limited and there are competing priorities. The lab had not received high priority.

It broke Brimhall's heart to see that capable technicians just didn't have the tools to properly

Kelly Brimhall



Dareda Hospital's laboratory is significantly underfunded.

do their work. For example, many test procedures must be accurately timed, yet there were no timers, or wrist watches, or even wall clocks that worked.

“It was hard for me to realize that basic need was not being met,” Brimhall said.

Another shock to a First World medical professional: When looking for tuberculosis, lab techs with no protection were creating slides. In the U.S., medical techs would inspect such slides under a biological hood with a shield while negative air pressure sucks away potentially harmful airborne particles. Another common sight at Dareda: health providers toiling with just one glove.

“It definitely changes your perspective on what’s actually a problem,” Brimhall said of her week of dawn-to-dusk workdays at Dareda Hospital. “Wearing one glove? That’s a real problem. Here in Durango, we don’t like our lab coats because they’re staticky.”

Doctors at Dareda Hospital do their best to diagnose patients, but if symptoms show it could be one of several things, they need lab tests to provide the answer. Without reliable lab

results, doctors are left to make their best guess. Unfortunately, it is a guess, and an incorrect guess can be fatal to the patient.

In February, Brimhall joined Dr. McKinnis on a return mission to Dareda Hospital. The goal was to set procedures in place to provide accurate blood count tests, improve biochemistry, better analyze infections, and more.

Without modern lab results, doctors in Tanzania “are kind of trapped in the 1950s or ’60s,” Dr. McKinnis said.

Brimhall is excited to implement changes and provide equipment that will vastly improve both patient and worker needs. It’s humbling and satisfying to see an immediate impact.

“It is a game-changer for doctors,” Brimhall said of lab work, “and I think it becomes apparent when you go somewhere like Dareda that doesn’t have it.”

**Mercy Health
Foundation**



TO DONATE

Even small amounts can make a big impact to the people of Tanzania. To donate, contact **Mercy Health Foundation** at **970-764-2800** or visit: **mercydurango.org/foundation**.

To see a video of Dr. Valerie McKinnis explaining the needs and her motivation for going to Tanzania visit: **www.youtube.com/watch?v=jxd_f7FsGYY**

Kidney Stones: the inside scoop

Maybe you've felt that pain in your side, just above the hipbone and toward the back. And maybe it just wouldn't go away.

You might think it's a muscle pull. But often that pain – described sometimes as a “persistent dog bite” – is a kidney stone trying to move through your system. Sometimes it does move through, but sometimes it becomes lodged. That's a problem. Other symptoms are frequent urinating, pain when doing so, or blood in the urine. A fever may develop as well.

We talked to Dr. Francisco Carpio, board-certified urologist at Mercy Urology Services, to get the scoop on kidney stones.

Here's a primer on their cause, their treatment, and what steps you can take to prevent this common ailment:

THREE MAIN TYPES

Kidney stones are hard deposits of minerals and salts. Three main types of stones can form.

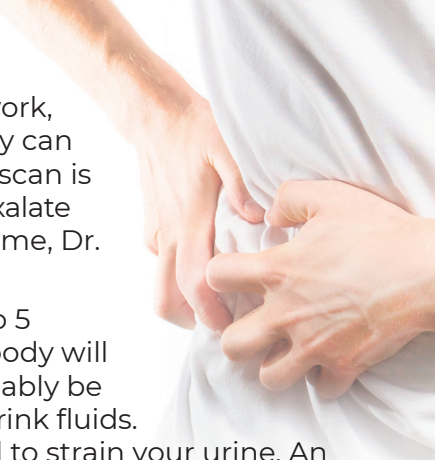
Calcium oxalate: Oxalate is a substance found in food such as green leafy vegetables, nuts, soda and tea. Don't stop eating the green leafy stuff, but when you do, wash it down with water, Dr. Carpio says.

Uric acid: Not drinking enough water, or a diet rich in red meats or alcohol can prompt the forming of these stones.

Struvite: These stones form due to an infection in the urinary tract or elsewhere. They can form what are called staghorn calculi, which look like coral and form a large cast of the kidney. (It's almost worth a trip to Dr. Carpio's office to see his samples!)

I HAVE SYMPTOMS; WHAT NOW?

If you feel that nagging pain and suspect a kidney stone, see a physician or go to the



emergency room. Lab work, an ultrasound or an X-ray can detect a stone, but a CT scan is effective in finding an oxalate stone 97 percent of the time, Dr. Carpio says.

If it's a small stone, 4 to 5 millimeters or less, the body will likely expel it. You'll probably be sent home and told to drink fluids. You might also be asked to strain your urine. An analysis of your stone can answer the question of why it formed and help you prevent a recurrence.

TREATMENTS

If it's a large stone, or it gets stuck in the ureter, you won't want to wait for it to pass. An obstruction, particularly when an infection is present, can be serious and could even kill a kidney.

Shock wave lithotripsy: Energy waves from outside the body vibrate the stone and cause it to shatter into fragments that can pass through the ureter.

Ureteroscopy: A small scope is threaded into the ureter and bladder, and the stone is broken up and removed through the scope using a wire basket.

Percutaneous nephrolithotomy: This procedure is used for large stones, or when other procedures won't work. A surgeon makes an incision in the back and threads a nephroscope through the kidney to get to the stone. It is removed whole, or broken up and then removed in pieces.

DIET; OH, DID WE MENTION WATER?

Dehydration is a major factor in kidney stone development, and the dry climate of Southwest Colorado can be a problem. “People get dehydrated here and don't even know because they're used to it,” Dr. Carpio says.

His main piece of advice: Consume enough fluids, preferably water, to produce at least 2 liters of urine per day.



Francisco Carpio, MD

+ Call Mercy Urology Services at 970-764-3845 for more information or to schedule an appointment.

Bite Size News



You're invited to Mercy's monthly prediabetes class

Have you been diagnosed with prediabetes? If so, you're at a higher risk of developing type 2 diabetes and cardiovascular disease.

However, effectively managing prediabetes can help prevent diabetes. In fact, studies have shown that the risk of developing type 2 diabetes can be significantly reduced through weight loss and exercise, which is shown to be more effective in managing prediabetes than medication alone.

Anyone identified as having prediabetes is invited to attend a **FREE** class with Sheena Carswell, CNS, BC-ADM, and Marge Morris, RD, CDE, offered the first Friday of every month from 9:00 to 11:00 a.m. in suite 140 of Mercy's Medical Office Building. Attendees will learn how to manage prediabetes and help prevent the onset of type 2 diabetes. To register, call **970-764-3415**.

Improve your balance

As you age, you naturally lose muscle strength and balance. If you feel this could be happening to you, join Mercy Integrated Physical Therapy for "Six Weeks to Better Balance and a Stronger Self." The class is designed for anyone who wants to improve their balance and is geared toward those who are starting to decondition as a result of aging. The program involves one hour of circuit training twice a week. To register or learn more about the program, call **970-385-0644**.



Convenient care at Purgatory Resort

Trying to pack in as many bluebird days on the slopes as you can before the snow disappears? Next time you're at Purgatory, stop in and visit the friendly staff at Mercy Urgent Care. Mercy Urgent Care is conveniently located just off Highway 550 at the entrance to Purgatory Resort, and provides care for minor injuries and illnesses, x-rays, vaccinations, and more. The clinic is staffed by skilled nurse practitioners and experienced physician assistants who are supported by emergency physicians at Mercy Regional Medical Center in Durango. With virtually no wait time, the clinic is a great option for anyone enjoying the mountains.



For more information, call **970-259-4553**.

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If you have an address change or would like to be removed from our mailing list, please call 970-764-3990.

mercydurango.org

Get Meditating!

RESEARCH SHOWS MEDITATION BOOSTS YOUR HEALTH, HAPPINESS AND SUCCESS.

In the hurried, busy world in which we live, sometimes the best thing for our health is to slow down and be still. One way to experience stillness is through the act of meditation. Meditation trains your mind to focus and redirects runaway thoughts so that you can experience peace.

Numerous studies have proven the benefits of meditation, including:

- **Decreased pain.** Meditation can reduce the perception of mental and physical pain.
- **Improved sleep.** A variety of meditation techniques can aid in relaxation and control runaway thoughts that can interfere with sleep.
- **Decreased blood pressure.** It has been shown that blood pressure decreases not only during meditation, but also over time in individuals who meditate regularly.
- **Decreased depression, anxiety and stress.** Some forms of meditation can improve depression, reduce anxiety and help reduce stress.
- **Increased focus.** Research shows that meditation improves cognition and increases the ability to perform tasks requiring focus.
- **Improved memory.** Meditation has been proven to improve the ability to memorize things and to store new information.

Perhaps the simplest form is breathing meditation in which you focus on your breath. Every time your mind begins to shift its focus away from breathing, simply bring your attention back to focus on your breaths as you inhale and exhale.

MEDITATION TIPS

- **Start small.** Begin meditating for five minutes a day and gradually increase the time as you get more comfortable with your practice.
- **Use a timer.** Constantly looking at a clock to see how much time you have remaining is disruptive to your practice. Instead, use a timer to alert you when your time is finished.
- **Be easy on yourself.** It's easy to become frustrated when your mind wanders. Instead of reacting negatively when you get distracted, gently bring your attention back to your meditation.
- **Try an app.** Many free apps are available, such as Insight Timer, that can serve as a guided introduction to meditation.



HOW DO YOU START?

There are many types of meditation. It's best to decide what you want out of your meditation practice, and then do some research to find a practice that best aligns with your goals.