



Cindi Russell at the Havasu Half Marathon.

One Kidney, No Limits: My Journey Back to Running

by Cindi Russell

I never really considered myself an athlete, but while going through the process of donating a kidney and having what felt like the world's most thorough physical, I began to realize that I had strength I wasn't even aware of. My donation team kept saying how much healthier I was than their usual donors! I was completely surprised to hear this because I had been worried that I was too old to donate, or that they would find some hidden health concern that would disqualify me. All they found was my hidden potential. I began to reach out to others who had already donated to make sure I was preparing my body for a quick recovery when I came across an organization called Kidney Donor Athletes (KDA). I read many of the donors' spotlight stories and thought, "why not?" I've done athletic things in my life. I used to be kind of a runner. I realized that I had let life get in the way of that for a while, but donating a kidney helped me find my way back.

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Run Smart in the Heat: The Science of Staying Safe in a Warming Desert

by Sarah Wolf

In recent years, many runners in Southern Arizona have noticed the arrival of spring increasingly comes with summer-like temperatures. As hot days arrive earlier and persist later, understanding how heat affects the body is more important than ever for both performance and safety.

If running in the heat feels harder, that's because it is. The reasons are rooted in how your body responds to heat.

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Beat the Heat. Keep Running.



PREPARE

Prehydrate: Drink 10–15 oz of water 10–15 min before

Plan ahead: Carry water on runs >60 min

Map your route: Know refill spots



HYDRATE

Drink every 20–30 min

You may lose **6–12 oz** every 20 min in heat

Don't wait until you feel thirsty



KNOW THE HEAT RISK

Avoid running if: >98°F and high humidity (70–80%)

High humidity blocks sweat evaporation

Overheating can happen quickly



SMART HABITS

Dress smart: Light, breathable fabrics

Sun protection: SPF 15+

Know your body: Stop if dizzy, nauseated, or not sweating

Get help: Confusion or collapse
CALL 911

One Kidney, No Limits cont.

Some of the KDA stories were about people who were just like me—out there trying to lose weight, stay healthy, be a good example for their kids, delay aging as long as possible. I can do that! I should do that! I want to do that! I realized that donating a kidney was taking my athleticism to the next level. When you donate a kidney, you're giving away your spare. Your remaining kidney (and the donated one) gradually increase in function to take over for the missing one so that you and your recipient can both live normal and healthy lives. You're not giving away part of your health; you're sharing and growing it. I would imagine that even fewer people (me included) realize what kinds of athletic endeavors are possible with one kidney. I've become more of an athlete after donation than I ever was before. It's important to test your "limits" from time to time to find out what you're capable of.

Like most people, my husband and I got into "running" in our mid to late 20s before we had kids. We were battling the weight gain of newlyweds with long commutes, time-consuming new jobs, and trying to figure out our new dynamic as a married couple. We were fortunate enough to live near the boardwalk on Rockaway Beach, NY. My husband suggested we train for a marathon so that we had a long-term goal to work toward to keep us going. When we make a goal, we go all out. He bought every book for beginners and began to plan our training schedule. We picked the Shamrock Marathon 2005 in Virginia Beach for our first marathon, because we wanted to go someplace fun. We drove down with our own cheering section (our siblings) and our goal to finish—and we did!

That was it, we'd caught the running bug. We both put our names in the NYC Marathon 2005 lottery because we lived there and couldn't pass up that opportunity. We vowed that if either of us was chosen, we'd train with and support the other. We were both chosen!

We made it a special occasion: we stayed in the city and had a fancy post-race meal with our cheering section, which had grown by two friends and another sibling. We ran the NYC Marathon even slower than our first one, but we finished. We continued the tradition of picking cool places to race while visiting family. We signed up to do the Lost Dutchman Half Marathon in sunny Arizona. At this point in our training, I was finally running at a respectable pace, and it felt good. It turned out that my body was super efficient, partly because I was in the sweet spot of early pregnancy with my daughter. Unfortunately, after that event, the running stopped for a while.



Cindi and husband Robert prior to surgery at Banner Hospital.

Having visited Arizona a few times (in February and March), we chose Tucson as our place to settle down and raise our daughter. Somehow, I managed to talk my dad into training with me for the Tucson Marathon because I really wanted to prove to myself that I could continue running after having a kid. My dad (age 64) showed me that I had quite a way to go before I had to hang up my last medal. Then some more life happened. In 2010, a big boy and a ventral (abdominal) hernia were born, and in 2013 another big boy and a hernia repair arrived.

One Kidney, No Limits cont.

It took many years to heal and get back into working out after all that, so I watched and admired my teacher friend Monica Bermudez accomplishing marathons and triathlons and bringing exercise and running programs (Girls on the Run, Fitness Funatics, and FitKidz) to our school and the greater Tucson community. As soon as my kids were old enough, I signed them up for all these programs and even helped with Fitness Funatics at our school as I quietly found my way back through the kids and Monica's example. Even though I have never felt like I could call myself an athlete or a runner, I've always felt a sense of pride and accomplishment after every run. Every time I go for a jog or hop on the treadmill to get some extra cardio, I remember how nice it feels—and not because it's particularly easy for me. It feels nice because it challenges me and makes me feel strong and capable of accomplishing all kinds of hard things, and not just physical things.

After my third kid left the elementary school where I taught and met Monica, I was offered a perfectly timed opportunity to work at the U of A. It was just as my daughter was graduating and moving on to college. I snatched that job right up and started working for the department head. Part of my job was to help put together the weekly *Roundup* newsletter. About this time last spring, my boss received an email from a retired professor who wanted to include a letter about his daughter in the *Roundup*. As I read the letter describing how his daughter had been struggling with Type I diabetes since she was three and recently had her kidneys shut down so that she needed dialysis three times a week, I couldn't imagine how hard it must be to live like that.

I thought about my own daughter whose Crohn's disease, also diagnosed at an early age, had gradually increased in severity as she grew. Since she was 12, my daughter had to get infusions that

take 3–4 hours, once a month. This makes school and work, let alone having time for friendships, incredibly difficult. Dialysis must have made having any kind of normal life impossible for a 30-year-old newlywed like Andrea. Before her kidneys failed, my recipient was a nurse for the county jail and then for a company that takes care of homebound folks. With dialysis three times a week for several hours each session, she had to quit school and work. Her energy levels were at rock bottom. I reached out to her dad to ask some questions for the *Roundup*—but really, I was interested in the answers for myself. I signed up to see if I qualified to be a donor and then began the process of getting tested to see if I was a match to Andrea. I stayed in touch with my recipient's parents every step of the process and later met Andrea before the surgery. She and her whole family are amazing humans, and I am so honored that I could help her. After her recovery, which takes a lot longer for the recipient than the donor, she went back to school to become an anesthesia nurse. She has also been able to go back to work nursing her homebound patients.

I didn't tell anyone except my daughter about my decision to donate until the tests revealed I was a match to Andrea. I don't know how to explain this, but I was sure I was a match to her the moment I read her dad's letter. I felt called to do it from the start. Once I told family about my plans, they kept asking if I was sure about donating. They wanted to make sure I had researched the effects on my own health and even asked if I would wait until after my own kids were all grown before donating. Even though I had learned that it didn't really matter how old the donated kidney is, just how well it functioned, I told my family that I wanted to donate now while I was at my healthiest. With every test, article, description of the surgery (the surgeon was very detailed), and list of potential risks all laid out, I became surer that I was doing what I was meant to do.

One Kidney, No Limits cont.

Everything I was learning from the nephrologist, nutritionist, and KDA stories made me want to eat better and exercise longer and harder so that I could give Andrea the healthiest kidney anyone has ever received!

After donating on September 11, 2025, I was getting all kinds of notifications from KDA and read that they were sponsoring donors' "First Event Back." Of course I needed that motivation. I wasn't going to pass up a free event, shirt, and medal. As was tradition, I chose a cool-sounding location to look for an event to work toward. Keep in mind, I hadn't even jogged more than 4 miles in at least 5 years. I chose the Havasu Half Marathon because it looked beautiful and I had never been there. The only problem was that I only had about 2 months to get ready. And I didn't just sign up for the half marathon. I signed up for the "Lighthouse Challenge" because I thought it was the only one that came with a medal. The Challenge meant I would run the half marathon and a 5K back-to-back. I told myself, "It's only 3 more miles. Of course I can do it. I don't have to be fast; I just have to finish." And I did. I ended up getting a medal for each event and for the Challenge. Three medals in one day!

To get ready in such a short time, I joined SAR and ran every race I could between January and the Havasu Half in March. My actual "First Event Back" was the Sun Run. I even went to the SAR 50th anniversary dinner (which was right around my 50th birthday), where we made some new friends and saw some old friends that we'd lost touch with over the years. Right around the time I was super focused on planning and preparation to run the Lighthouse Challenge for KDA, the organization announced that it had 6 bibs for the NYC Marathon that kidney donors could apply for to be part of the team. Wouldn't that be cool? It would be like coming full circle. Of course, I applied because I was sure I wouldn't be chosen. But I WAS chosen! And now I'm thinking, "What have I gotten myself into?"

That brings us to today: I will be running the NYC Marathon in November and raising money for the KDA, to prove to myself, my family, and those of you who are thinking about getting back into running, that it is NEVER too late. If a menopausal 50-year-old, with three kids, a full-time job, and only one kidney can do it—so can you! The KDA, Monica, my dad, and the 70-year-old gentleman I ran next to the first time I ran the NYC Marathon, have shown me that it is about making a lifelong

commitment to your health. And it is never too late to donate. I'm grateful that I had a chance to rediscover my health. It gave me an opportunity to develop an appreciation for my body's capabilities, and the drive to protect, preserve, and maximize that potential. I've also received the gift of experiences that I can share with other runners, donors, and prospective donors. I hope that this story will help you discover your potential and the impact that kidney donation carries beyond the initial gift.



Living Donor Awareness Night at Hillenbrand Stadium. From left: Maribel Costello (Banner Transplant Team), Andrea (recipient), Cindi (donor), and Betsy Zidel (Banner Transplant Team).

Run Smart cont.

Why Running Feels Harder in the Heat

When you run, your muscles require more oxygen to produce energy, and your heart works harder to deliver it. At the same time, your body generates heat as a byproduct of that energy production. To keep your core temperature in a safe range, your body relies on two main cooling strategies: sweating and increasing blood flow to the skin, both of which are pushed to their limits as temperatures rise.

Sweating cools the body through evaporation: when sweat absorbs heat from your skin and evaporates into the air, it carries that heat away. At the same time, your body redirects blood toward the skin to release heat. But your muscles are still demanding oxygen-rich blood to keep moving. The result is your body trying to meet two competing demands at once: your heart must work harder to supply both your muscles and your cooling system.

Cardiac Drift: Why Your Heart Rate Climbs

This increased demand on your heart shows up in a phenomenon many runners recognize: **cardiac drift**. Over the course of a run, especially in the heat, your heart rate gradually increases, even if your pace stays the same. This happens partly because of rising core temperature, but also because of fluid loss from sweating. As you lose fluids, your blood volume decreases. With less blood circulating, each heartbeat pumps a smaller amount of blood. To compensate, your heart beats faster.

Even in ideal conditions, heart rate tends to rise slightly over time. In the heat, that effect is compounded. A run that would normally feel easy instead feels much more fatiguing, and not because your fitness has changed, but because your body is under greater stress.

Dehydration: Small Losses, Big Impact

It doesn't take much dehydration to affect performance. Research shows that losing around 2% of your body weight through fluid loss is enough to increase physiological strain. At that point:

- Core temperature rises more quickly
- Heart rate increases
- Perceived effort spikes

This happens because sweating reduces **plasma volume** (the liquid component of your blood). With less circulating fluid, your body has a harder time delivering oxygen to muscles and dissipating heat through the skin. The result is a cascade of effects: higher effort, lower performance, and increased risk of heat-related illness.

Hydration Isn't Just Water

When you sweat, you don't just lose water; you also lose **electrolytes**, especially sodium. Sodium helps maintain fluid balance and supports nerve and muscle function. Other electrolytes, like potassium, magnesium, and calcium are also lost in sweat, but in much smaller amounts; most runners can replace these through a normal diet.

Replacing fluids without replacing electrolytes, particularly during longer or hotter runs, can dilute sodium levels in the blood, leading to fatigue, cramping, or in severe cases, hyponatremia.

On the other hand, not drinking enough leads to dehydration. The goal is to maintain a proper balance. For most runners:

- Short runs (less than an hour): Water is usually sufficient
- Longer or hotter runs: Consider adding electrolytes
- Drink regularly: Don't wait until you feel thirsty in extreme heat

Run Smart cont.

How you hydrate matters just as much as how much you hydrate. Drink water regularly throughout the day and before your run, using pale yellow urine as a simple indicator. Consider weighing yourself before and after your run and rehydrate based on how much you lost. As a general guideline, aim for 16–24 oz of fluid per pound lost.

To optimize for your personal needs, you can estimate your sweat rate:

1. Weigh yourself before you run
2. Run for one hour
3. Weigh yourself again
4. Add any fluids consumed

The difference is your hourly fluid loss.

Why “A Dry Heat” Is Deceptive

One advantage of running in Southern Arizona is the low humidity. Sweat evaporates quickly, making cooling more efficient. But this comes with a hidden risk: because sweat evaporates so quickly, you may not realize how much you’re losing.

In hot conditions, runners can lose up to a liter of fluid per hour, or more, depending on the individual. Add in intense sun exposure, radiant heat from pavement, and minimal cloud cover, and it becomes easy to underestimate hydration needs.

Humidity, when it does rise (especially during monsoon season), creates the opposite problem. When the air is already saturated, sweat cannot evaporate efficiently, reducing your body’s ability to cool itself.

Know the Conditions: Heat Risk and WBGT

Air temperature and humidity don’t tell the whole story. A more accurate measure of heat stress is the Wet Bulb Globe Temperature (or WBGT),

which accounts for temperature, humidity, sun exposure, and wind. This metric is widely used by athletic organizations and safety agencies to assess outdoor conditions.

As a general guideline, the Road Runners Club of America recommends avoiding outdoor running when temperatures exceed about 98°F with high humidity (70–80%).

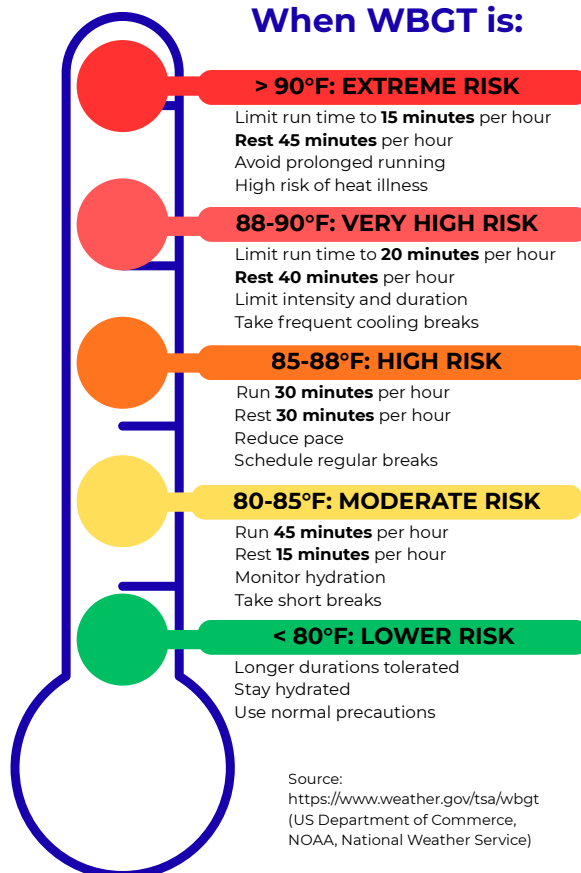
If you’re planning to do outdoor activities when WBGT is high, take steps such as wearing a hat and lightweight, light-colored, loose-fitting clothing. Plan to take frequent breaks in shady areas. Drink plenty of water or other fluids, even if you don’t feel thirsty, to prevent dehydration. Wear sunscreen and don’t get too much sun. Sunburns, besides increasing your risk of skin cancer, make it harder for the body to get rid of excess heat.

Heat Risk Guide

How to use (WBGT*) and run safely in the heat

*WetBulb Globe Temperature accounts for temperature, humidity, wind speed, sun angle, and cloud cover, making it preferable to temperature alone.

When WBGT is:



Run Smart cont.

Recognize the Warning Signs

Even with preparation, it's critical to listen to your body. Early signs of heat illness include dizziness, nausea, headache, and muscle cramps.

If symptoms escalate, or if you experience confusion, loss of coordination, or stop sweating, stop running immediately, seek shade, and begin cooling down. Heat stroke is a medical emergency and requires immediate attention.

Recognizing & Responding to Heat Illness

EMERGENCY

Heat stroke: Body loses ability to cool itself; temperature rises rapidly ($\geq 106^{\circ}\text{F}$) and is life-threatening.

Symptoms

- Confusion
- Collapse
- Seizures
- Hot skin (dry or sweating)

Act FAST

- CALL 911
- Move to shade
- Cool immediately (ice bath, if possible)
- Cold packs (head, neck, armpits, groin)

SERIOUS

Heat exhaustion: Excessive fluid and salt loss from sweating.

Symptoms

- Headache/Dizziness
- Nausea
- Weakness
- Heavy sweating

Act FAST

- Move to shade
- Loosen clothing
- Sip cool water
- Cold compresses (head, face, neck)
- Seek medical help if symptoms don't improve

Rhabdomyolysis (rhabdo): Muscle breakdown from extreme exertion/heat that can damage kidneys.

Symptoms

- Muscle cramps/pain
- Weakness
- Dark urine (tea/cola-colored)

Act FAST

- Seek immediate medical care
- Ask to be checked for rhabdo
- Drink water

WARNING SIGNS

Heat syncope: Fainting from heat, often after standing or sudden rising.

Symptoms

- Fainting
- Dizziness/Light-headedness

What to Do

- Move to a cool place
- Sit or lie down
- Sip water, clear juice, or sports drink

Heat cramps: Muscle spasms from fluid and salt loss.

Symptoms

- Muscle cramps
- Pain or spasms (abdomen, arms, or legs)

What to Do

- Drink water + electrolytes
- Avoid salt tablets
- Seek medical care if:
 - Cramps >1 hour
 - Heart condition/low-sodium diet

Heat rash: Skin irritation from trapped sweat.

Symptoms

- Red bumps or small blisters
- Common in skin folds (neck, chest, groin, elbows)

What to Do

- Keep skin dry
- Use powder for comfort
- Avoid ointments or creams

Run Smart cont.

Run Smart, Stay Safe

One of the most important skills for running in the heat is adjusting your expectations and your mindset. Heat increases perceived effort, meaning your usual pace may no longer match how your body feels. An easy run at 60°F will not feel the same at 90°F. Slow down, take breaks, and focus on effort rather than pace. Reframe these as strategies rather than setbacks.

We all know how beautiful the desert can be, and running here can be an incredible experience, but it comes with its unique challenges. By understanding how heat affects your body, proactively hydrating, and recognizing the warning signs of heat stress, you can continue to train safely, even as temperatures rise earlier each year. The goal isn't just to run today; it's to stay healthy enough to run tomorrow.



2026 SAR RACE SCHEDULE

- **May 3rd: Dr. Gann's Diet of Hope Cinco de Mayo 10K & 5K + FitKidz Mile**
- **May 17th: Tucson 5000 + FitKidz Mile**
- **May 30th: TMC Meet Me Downtown 5K Night Run & Mile Festival + FitKidz Mile**
- **September 7th: TMC Saguaro National Park Labor Day 8 Mile & 5K Run/Walk**
- **September 13th: TMC Tucson 10K & 5K**
- **September 26th: Sabino Canyon One Mile FitKidz Classic**
- **September 27th: Jim Click's Run 'n' Roll 5K & 1 Mile**
- **October 18th: TMC A-Mountain Half Marathon & Cigna 4-Miler + FitKidz Mile**
- **November 1st: Dave's Run for ALS 8K & 5K + FitKidz Mile**
- **November 26th: Thanksgiving XC Classic 5K & 1.5 Mile Fun Run/Walk**

About SAR

The Southern Arizona Roadrunners is a not-for-profit organization dedicated to promoting health and fitness in Tucson and Southern Arizona through running and walking.

Our vision is to strengthen and support the running and walking community in Southern Arizona through high-quality, affordable, and family-friendly events and programming that empower people of all backgrounds, abilities, and ages to pursue a healthier lifestyle. We promote community engagement by celebrating the joy of athletic achievement, individual and group participation, philanthropy, and volunteer service.



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