

## HOME LIFE

## The Good Fight: How Yoga is Being Used Within the Military

Spurred in part by the crushing opioid epidemic, the Department of Defense and other federal agencies have been spearheading efforts to manage and mitigate pain and mental health problems among active service members. Yoga, as it turns out, is one of the rising stars. While those in the trenches say there is a long way to go before yoga can be broadly and systemically deployed within the military, the foundation is being laid for using asana, meditation, and other holistic therapies to make military personnel more resilient.

LINDSAY TUCKER · SEP 27, 2018

In July 2010, US Navy pilot Liz Corwin was flying her F-18 fighter jet on a combat mission over Afghanistan at 350 knots. She had been in the air for seven hours and was struggling with the little hand-held urinal that female pilots use to relieve themselves mid-flight. Suddenly, to her left, she caught a glimpse of her wingman—just 50 feet away. The pair were on converging paths. They were so close, in fact, that she could clearly see the control panel inside his cockpit and the squadron's mascot painted on his helmet. Taking a deep breath, she called on her eight years of aviation training and yanked the jet's control stick toward her, flipping her plane upside down in an aggressive attempt to avoid a collision. But the turbulence told her it was too late. As she glanced out of her cockpit, there was no question: her wingtip was missing.

See also [This 15-pose Sequence was Scientifically Proven to Treat Chronic Low-Back Pain in the Military](#)

Wrestling ego, uncertainty, and self-criticism, Corwin spent the next few moments finding deep breaths to "wrangle those demons back into their pens," she says. In the back of her mind, she knew the real threat would emerge when she attempted to slow down, deploy her landing gear, and touch down on an aircraft carrier floating somewhere in the Arabian Sea—which at her current speed was every bit of an hour away.

That hour was brutal, says Corwin, calling it the worst of her life. But she tapped into her yoga training, employing the same breathing and mindfulness techniques she had been practicing throughout deployment alone in her room on her yoga mat. Five thousand people awaited her return on the carrier, and she knew it would be a moment of reckoning for her reputation as a pilot—a female one at that.

"The cacophony of voices in my head needed an orchestrator, and I knew I couldn't let self-doubt and shame be the loudest," Corwin says. Yoga had been her savior during flight school: "My entire relationship with myself was at stake, but I knew if I could tap into presence, calm, and self-care, I could pull myself together enough to land safely."

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As Corwin recalls, she paused for deep self-reflection and offered up some vital self-love to the woman staring back at her in the rearview mirror of her cockpit. “Yoga had taught me to loosen harsh self-judgements. It taught me that whatever I did didn’t define me, but was a tool for my own awakening. I knew in that moment that what was happening wasn’t a failure, but an opportunity,” she says. “Yoga delivered a sense of peace to the moment of hell I was living in.”

Ultimately, she delivered the best carrier landing of her life—“a perfect pass,” she calls it.

Little did she know that at the same time, the US Department of Defense (DoD) and the Department of Veterans Affairs (VA) were already working with the National Academy of Medicine (formerly the Institute of Medicine) and the National Institutes of Health to examine exactly how integrative therapies such as yoga and mindfulness meditation might be used to benefit service members like herself.

### **From PTSD to Pain Management**

Traditionally, military leaders often met these practices with skepticism. But over the past two decades, a series of clinical trials backed by a growing catalog of scientific evidence has persuaded high-level DoD health care experts to accept yoga and meditation as legitimate treatments for post-traumatic stress disorder (PTSD), pain management, and much more.

Part of the appeal: Experts familiar with the research suggest that yoga and mindfulness may actually be more cost effective and faster at promoting healing and preventing certain injuries than more-popular modalities such as surgery and prescription drugs. On a more grassroots level, active service members are tapping into the practice’s performance-enhancing and preventive benefits to make soldiers and operational staff more calm and resilient in the field—before shock, injury, or PTSD set in. In fact, efforts to embed yoga into every branch of the military have never been more aggressive.

See *also* How High-Level Pentagon Officials Are Using Yoga to Destress

While much of the early research on yoga and the military focused on how meditation and mindful movement could help veterans mitigate PTSD (which has had significant impact at VA hospitals and has been linked to record suicide rates among vets), by the mid-aughts, other related areas of concern were coming into sharp focus.

According to the National Center for Complementary and Integrative Health, studies show that nearly 45 percent of soldiers and 50 percent of veterans experience pain regularly, and there’s a significant correlation among chronic pain, PTSD, and post-concussive symptoms such as fatigue, poor balance, sleep disturbances, and depression (meaning, if you have one, you’re more likely to experience one or more of the others).

“Musculoskeletal and mental health problems have really spiked, thanks to all the things that go along with active combat: carrying heavy loads, jumping in and out of aircraft—plus exposure to infectious diseases and violence,” says 42nd US Army Surgeon General, Eric Schoomaker, MD, PhD, who retired in 2012 and now serves as vice chair for Leadership, Centers, and Programs in the Department of Military and Emergency Medicine at the Uniformed Services University. Schoomaker is on a mission to bring yoga and its benefits to the frontlines of military health care.

During the mid-2000s, at the government level, new pain treatments and prevention techniques were in high demand. Surgery and prescription drugs weren't working, and the military was hit especially hard by the opioid epidemic. In fact, in 2005—just two years into the Iraq War—narcotic painkillers were the most abused drugs in the military, according to a DoD survey of more than 16,000 service members. By 2011, it was estimated that up to 35 percent of wounded soldiers were dependent on prescription pain relievers.

In 2009, amidst the growing opioid epidemic, Schoomaker, then the Army Surgeon General, chartered the Army Pain Management Task Force. The goal? To come up with a new, comprehensive pain-management strategy utilizing the most up-to-date research available. The group included medical experts from the Army, Navy, Air Force, the Veterans Health Administration, and Tricare—the military's health insurance program. Schoomaker tasked the group with extensively researching any modalities that might be effective in combating acute and chronic pain. Among the science-backed solutions presented, he says, were yoga and mindfulness meditation.

Since the Pain Management Task Force published its findings in 2010, interest in what's now referred to in the DoD as complementary integrative health and medicine (CIH/CIM) has heightened within the government and private health care organizations looking to revolutionize mental and physical pain management in the armed forces. "By then, we recognized that yoga and mindfulness were sorely underutilized in this country," says retired US Army Colonel Chester "Trip" Buckenmaier III, MD, program director and principal investigator for the Uniformed Services University's Defense and Veterans Center for Integrative Pain Management.

But before a case could be made for their implementation among the armed forces, these practices would have to be studied in military-specific environments. Centuries of anecdotal evidence and outside research do not cut it when you're talking about a globally deployed organization like the US military—especially when someone has to pick up the bill, Schoomaker says.

Several pain-research efforts ensued. One of the most groundbreaking was a study published in 2017 by the journal *American Congress of Rehabilitation Medicine* that examined the practicality and effectiveness of an individualized yoga program, dubbed RESTORE (Restorative Exercise and Strength Training for Operational Resilience and Excellence), designed to treat chronic lower-back pain in service members and their families. Researchers and yoga-treatment experts created a 15-pose asana sequence to promote strengthening, flexibility, and postural alignment—specifically to target core, back, and gluteal muscles. (For the full sequence, click here).

Yoga teachers who led the practice went through a 200-hour Yoga Alliance teacher training and an additional 50-hour program-specific course "based on therapeutic yoga," says lead author Krista Highland, PhD. A "cultural-competence training" ensured that yoga instructors understood how to act within a military structure and how to address "unique clinical characteristics that patients in the military might present with," such as post-traumatic stress.

Fifty-nine service members participated in the eight-week trial, the majority of whom were active duty. During this time, the RESTORE and control groups continued individual treatment as usual (think medication, physical therapy, chiropractic, injections, massage, or acupuncture). The RESTORE group, however, also incorporated one to two yoga sessions per week, accompanied by breathwork and a guided meditation. Pain levels and symptoms such as physical impairments and sleep disturbance were monitored for six months after the trial began. The yoga and meditation group experienced symptom relief more quickly than those in the control group, reporting lower pain intensity at mid-treatment (four weeks) and post treatment (eight weeks).

“That’s extra months to get back to work, to function socially—to get out with friends and family members,” says Buckenmaier, who was one of the 11 researchers. “That’s so beneficial for these patients.” Schoomaker agrees: “In those weeks in which yoga has restored function and improved pain, other people turn to surgery and drugs—things that get them into trouble.” Instead, Schoomaker says, we ought to be frontloading practices such as yoga that focus on function and whole-body wellness—using them offensively and defensively as the first step in preventive care and medical treatment before chronic pain, illness, and drug use become issues.

While the government amasses the empirical evidence it needs, dozens of yoga non-profits are taking matters into their own hands. Lieutenant Colonel Jannell MacAulay, who retired from the military in June, was just 17 when she snapped her femur in half after a stress fracture went undiagnosed in basic training. Devastated and debilitated, MacAulay went through two surgeries and three months of rigorous rehab. In her determination to become a US Air Force pilot, she tried a variety of therapies—yoga, acupuncture, and trigger-point massage among them—in order to improve mobility.

Once she found a regular yoga routine, scar tissue, stiffness, and pain started improving little by little. “Yoga became a space of non-judgment and gratitude that I wasn’t getting anywhere else in my life,” MacAulay says. “I was completely stressed all the time—just going, going, going. But when I practiced yoga, I could be myself and invest in slowing down, which actually helped me speed up my career path as a professional in the military.”

See *also*: [New Study Finds Yoga Significantly Reduces Depression in Male Veterans](#)

Back in 2012, while government research was ramping up, MacAulay founded Healthy Body Healthy Life—a free, first-of-its-kind health-and-wellness initiative for military families that incorporates yoga, meditation, nutrition, and high-intensity interval training. She also pioneered a similar program at Kirtland Air Force Base, in New Mexico, when she was stationed there last year. Today, the Air Force pays her to travel the globe educating senior leaders about the importance of incorporating yoga into basic training—so soldiers can get ahead of mental and physical injuries before they happen. “We need to better prepare our military, not just to do the job, but to do the job under extreme stress,” she says. “Because that’s the reality in a combat zone. If we’re not using yoga and mindfulness, we’re missing out on creating the best human-weapon systems to operate in those environments.”

She’s not wrong. A resilience-training program that appeared in the *American Journal of Psychiatry* in 2014 studied 147 Marines who had undergone Mindfulness-Based Mind Fitness Training (MMFT)—a 20-hour, 8-week course that incorporates mindfulness and physical exercises designed by former US Army Captain Elizabeth Stanley, a Georgetown University professor who used yoga and meditation to combat her own PTSD. The MMFT program, developed in 2007, aims to enhance troop performance and mitigate the extreme mental and physical stress that comes with deployment. As part of pre-deployment training, the test subjects practiced MMFT in a mock Afghan village. Shrieking actors and controlled blasts simulated combat stress. Meanwhile, a control group of another 134 Marines went through the same simulation without MMFT.

The research team analyzed both groups’ blood and saliva samples, brain imaging, and a range of cognitive performance tests. The data showed that Marines who practiced MMFT demonstrated greater reactivity, better emotion and stress management, enhanced heart-rate and breath recovery, and a reduced anxiety response. “In other words, these soldiers were not only better equipped for handling stress,” Stanley wrote in the book *Bio-Inspired Innovation and National Security*, “but they also recuperated more quickly so that they were better prepared to handle any subsequent stressors.”

Today, the US Army is collaborating with Amishi Jha, an MMFT researcher and associate professor of psychology at the University of Miami, to investigate the scalability of mindfulness training designed specifically for military and other high-demand professions.

See also: Veterans Who Hit Rock Bottom Open Up About How Yoga Changed Their Lives

### **A Bright Future for Yoga in the Military**

These research efforts and others have paid off in some ways. Today, half of existing US military treatment facilities (MTFs) recommend yoga to patients, and nearly a quarter offer it onsite—according to a report published in 2017 by the Rand Corporation, a nonprofit think tank. Currently, Tricare insurance, the military's primary medical insurer, will pay for yoga only when it's administered at an MTF: "The minute you go outside, you can't get reimbursed," Schoomaker says. Because sending troops offsite to practice yoga can be tricky. The health and wellness of service members is the military's first priority, but if practiced incorrectly, asana can cause strain or further injury.

Schoomaker believes RESTORE could pave the way for non-harming, military-specific yoga programs that can be taught on base, because its success was twofold: It proved that yoga could be an accepted, successful treatment within an active-duty military community, and it demonstrated the potential for a standard approach to yoga as a pain-management tool. He compares it to the extensive work done by the chiropractic community and thinks yoga should follow a similar path.

For the uninitiated, by law, chiropractors must be board certified and adhere to state regulations. They've also launched very successful lobbying campaigns over the past 50 years to become established practitioners within the health-care community. Thanks to lobbying efforts back in the 1960s and '70s, today chiropractic is covered by Medicare—and since 2000, chiropractic treatment has been available to all active duty service members.

"Yoga needs a standardized system of treatment that focuses on anatomy, physiology, and kinesiology," Highland says. Buy-in from bill payers and legislators for additional programs and coverage will require cooperation from the yoga community by way of national standards or licensure, adds Buckenmaier. Yet that's the subject of an ongoing debate among yoga leaders and teachers, who represent dozens, if not hundreds, of different styles and philosophies—all called "yoga."

"Lawmakers want to know what a group does to self-regulate itself to ensure there's competency among practitioners before they unleash them on the public," says Len Wisneski, MD, chair of the Integrative Health Policy Consortium, which advises the new Integrative Health and Wellness Congressional Caucus, a nonpartisan educational forum for lawmakers to discuss potential integrative-health legislation based on new research from experts. The caucus was announced in October 2017 and provides enormous opportunity to integrate yoga into an evolving health-care system focused not just on illness but on prevention and wellness—notably within the military. "People assume the military is rigid," Wisneski says. "When, in fact, it's incredibly innovative when it comes to being open to new ideas. They just want to know if something works and what it costs. If it's non-harmful and noninvasive, they'll try it."

To this end, last September, the US Department of Health and Human Services, the DoD, and the VA announced a joint partnership—the first of its kind—to comprehensively study approaches for pain management beyond pharmacological treatments. Twelve research projects, costing an estimated \$81 million over six years, will be used to develop, implement, and test non-drug approaches, including yoga and meditation, for pain management and other conditions treated by military and veteran health-care organizations.

“The future is bright,” Schoomaker says. “For the first time, these three federal agencies are aligned in searching for a better understanding of the scientific effectiveness of these modalities—to tackle some of the issues like how these complementary integrative approaches can be used and delivered to service members.”

But MacAulay and Corwin, who have both taught yoga on several military bases, say that while yoga for pain management is a worthy cause, the dire need is for preventive programs—ones that train soldiers *before* suffering sets in.

“We can’t wait until we get injured or are out of the service to have these things available to us,” says Corwin, an ambassador for the Give Back Yoga Foundation, a nonprofit that supports and funds research-backed, clinically tested yoga programs for marginalized populations. “We have to get it early on in our careers.” For that to happen, she says, yoga teachers who work with service members must tailor their classes with the unique culture of the armed forces in mind: “Active military members need to be handled so differently [from civilian students]. You have to be conscious of what you’re teaching, because soldiers may not have the luxury of completely surrendering on the yoga mat when they have to wake up the next morning and do something that they’d probably rather not do.”

Another challenge is creating classes that are rewarding and engaging to a population that’s physically fit by trade, says Corwin. “They’re young, they’re athletic—so what kind of yoga classes do they need?” Sweating, she says, is essential.

The military spokespeople and yoga researchers we spoke with agree that a culturally specific style of yoga will be an integral part of the puzzle, but it’s just one cog in a very elaborate machine. Another thing everyone agrees on is that progress, especially in a global system like the armed forces, takes time.

But things seem to be headed in the right direction for advocates of using yoga as a preventive practice. Thanks to a legacy of research such as the MMFT program, the National Defense Authorization Act for Fiscal Year 2019 requires the Secretary of Defense to launch a pilot program that provides mindfulness-based stress-reduction training to members of the armed forces before they’re deployed to combat zones—in order to study its effects on stress management and PTSD prevention.

“I’m constantly optimistic,” says MacAulay. “Three years ago I gave my first presentation and was called ‘brave’ and ‘bold’ for having the guts to talk about yoga in a professional military forum. But today, more and more senior leaders are inviting me to share this message about yoga and mindfulness with this community.” begin applying yoga and mindfulness to prepare soldiers for combat.

See *also*: [A Healing Meditation for Caregivers of Wounded Warriors \(It Only Takes 5 Minutes!\)](#)