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MOVE TO IMPROVE SCI
BULLETPROOFING
SHOULDER WARM UP

Tim Morris

Why Bulletproofing?

Up to 73% of people living with spinal cord injuries suffer from some type of shoulder injury or discomfort over the course of their lives. That's 3 in 4 people who have an SCI that will also deal with shoulder pain. The majority of these people are wheelchair users, and many rely on their shoulders to be healthy for mobility and independence. Loss of any amount of shoulder function can be demoralizing, frustrating, and the cause of further physical and emotional harm.

I'm Tim...

... from Move to Improve SCI. I've been a trainer for nearly 20 years. I'm a Certified Strength & Conditioning Specialist, I have a Master's in Kinesiology, I'm a Pain-Free Performance Specialist, a high school phys-ed teacher, and my school's head track coach. I've coached hundreds of people of all abilities and at all levels, from D1 collegiate athletes to Olympic and Paralympic hopefuls, but mostly those with spinal cord injuries like you and I. For me, the goal is to live a stronger, longer and more fulfilling life... something that's much harder to do if you're struggling with pain.

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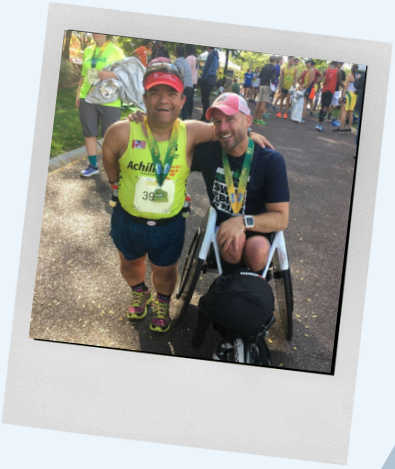
I've also been a wheelchair user for 17 years now. I have thousands of miles on my shoulders, including 5 marathons, a half ironman, countless other road and bike races, as well as dozens of obstacle races where I wheelbarrowed on my hands through mountains, fields, and ballpark stadiums. And I've NEVER had any type of shoulder injury.



So with this Bulletproofing program, I'm going to show you how I've done it.

We're going to start with the warm up, which for many people, may be a workout itself.

I'm going to give you access to some of the programming I use when bulletproofing my own shoulders from wear and tear, from the dreaded "overuse" injuries, and from the daily beating our shoulders are susceptible to.

The warm up includes slight variations to use as you progress over time, so it doesn't matter if you're new to training, returning to training after a shoulder injury or a long lay-off, or if you're a workout vet – this warm up is beneficial for all.

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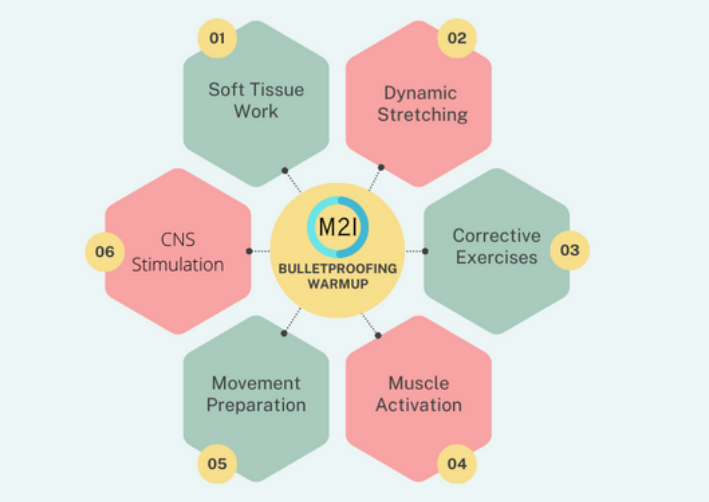
THE BULLETPROOFING DYNAMIC WARM UP

The warm up will take about 10 minutes and it's done in 6 phases. I'll give you a brief description of each phase and then you'll find a video demo'ing the whole thing that you can watch to get familiar with the warm up exercises and/or you can follow along to help you learn it.



The true power of this warm up is the cumulative effect of performing all the phases in order.

It's common that it takes a little longer as you're learning the exercises. Then, as you get more familiar, you'll be more efficient!

PHASE 1 SOFT TISSUE WORK

People living with SCI are prone to tight muscles, and muscle imbalances, particularly within the shoulder complex. Overactive and tight lats can really inhibit your ability to reach overhead, while shortened chest muscles occur from all the pushing and bad posture while sitting and can contribute to the shoulder being pulled forward, often causing pain or discomfort on the front of the shoulder.

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Soft Tissue techniques are a great technique to kick off the warm up because we are doing 2 important things:

Locally - using compression and decompression to address tight and painful muscles, increasing circulation and temperature in the area via friction, and helping layers of tissue move more easily where repetitive patterns and/or disuse can cause them to get “sticky” and restricted.

Globally – the nerve endings that are stimulated by pressure (and vibration) in the area we are working on are also sending messaging to the brain which, if we are relaxed and focused on steady breathing while doing the soft tissue work, can help reduce muscle tension throughout the whole body. I like to think of this as “removing the internal parking brake” on movement.

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In general, as you're doing soft tissue work, we want to focus on 3 things: posture, managing the intensity to a max of 4 out of 10, and using diaphragmatic breathing.

*If it hurts too much, we won't get the result we want... which is overall relaxation and restoration of movement quality at the joint.

PHASE 2 DYNAMIC STRETCHING

After the soft tissue work, we're going to use dynamic stretching on the same muscles to further prepare your body for pain-free movement.

Lots of different techniques get called "stretching" so the important thing to note with our phase 2 focus is that we are doing stretching that is specific to the upcoming workout. And while you might feel a stretch sensation in these positions, that's ok because it's not necessarily the goal. Especially in the shoulder, not all pain comes from a lack of mobility.

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So what we ARE going to focus on is good posture, not compensating for the sake of the stretch sensation and using diaphragmatic breathing to access the parasympathetic (relaxation) response.

Again as in the soft tissue work, I want you to find a 4, maybe 5, out of 10 sensation, max. There's no benefit in stretching into pain. And again, for some people, the stretches might feel more like position holds than stretches and that's ok.

PHASE 3 CORRECTIVE EXERCISE

Now that you're more open in and around the shoulders, it's time to implement the corrective exercise. Where we spend so much time with our shoulders working in internal rotation, pushing our chairs and sitting with poor posture, we need to be working our external rotators daily. Since the shoulder joint is make up of several bones and many muscles, when some muscles are tight/dominant and others are long/weak, we want to work to balance this out. I want you to be patient here... often weak muscles can get tired quickly, or they can be hard to fine in the first place. It will be important to pay attention to good posture and setting up in the right position before starting the reps. But when you're doing the exercise properly, you'll notice these weaker muscles get stronger quickly!

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PHASE 4 MUSCLE ACTIVATION

The corrective exercise often has a range of motion focus, where you're exploring the movement and improving control throughout the reps. As a complement to that, the phase 4 muscle activation exercise will work to hold this new range open! Where gravity and lack of appropriate exercises can result in a rounded or hunched posture, we're going to focus on the muscles that pull us upright and draw the shoulders back and down.

Since these postural and supportive movements are important to posture, they need to be worked often, at different angles, and more higher rep volume.

PHASE 5 MOVEMENT PREP

Now in phase 5 we're pulling and pressing - two of the primary movement patterns I use in my workout programs. The focus here is to make sure the movement is feeling good BEFORE we train under more load. So this is also a great place to make some adjustments or try different positions or grips until you feel confident about the workout ahead.

When you're new to exercise, we use phase 5 as a way to get reps in learning new movements. This is especially important if you have to make adjustments for your SCI compared to exercises you performed in the past.

PHASE 6 CNS STIMULUATION

> **You don't rise to the level of your goals. You fall to the level of your preparation.**

In this last phase of the warm up, we want to make sure we're really ready to go. If you're starting with just the warm up, you'll be getting some important stimulus with faster reps... important to keep up, or develop, speed, power and reaction. If you're going to move on from the warm up into a full workout, you'll be ensuring that you'll perform at a higher level right from the start of your workout.

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This is an important phase to match your exercise selection with what makes sense for your particular SCI and your current capabilities. The key is that there are lots of great options to customize the warm up specifically for you: from things like explosive banded movements or med ball throws, or lighter throws or even isometrics.

As an example, I don't have the lower back & pelvic stability to do medicine ball throws with good form. But I can do banded movements or towel throws. If you have any doubts here, refer to your doctor or physical therapist's recommendations.

Equipment Needed:

GYM:

- wall
- micro band (and a place to anchor at eye level)
- chest or shoulder height platform or bench

HOME:

- wall
- micro band
- table or counter

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Full Warm Up Video

Click to play video

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In the future, I will be offering more warm ups, full workout programs and even opportunities to get 1-on-1 customized coaching from me. But for now, watching the video, practicing these movements yourself, listening to what works for your body and getting into some good movement habits is going to be a great start!

I hope this Bulletproofing Shoulder Warm Up Program has been helpful... I'd love to connect so please tag me in your videos or reach out...

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