



by Alex Morrow

During the six weeks after the 2011 NFL lockout, players experienced twice the number of [Achilles tendon ruptures](#) than the average for an **entire season**. These were professional athletes doing their best to train on their own, and who likely had access to gyms and fitness equipment. One-third of players who rupture their Achilles never play again. The other two-thirds average 11 months of physical therapy and reconditioning. Although Army physical training and NFL training have different goals, there are similar risks involved in returning to training too aggressively.

The NFL never intended to put players at risk. In fact, their intent was to ensure players were as prepared as possible for the quickly approaching season. In their attempts to compress months of off-season training into six weeks, coaches subjected their athletes to physical demands that their bodies were not prepared for. Ten Achilles tendon ruptures

occurred in the first two weeks of training camp alone.

Army leaders will soon find themselves in a remarkably similar situation; pressure to implement previously planned training schedules will encourage a rush to failure. As we return to full reimplementation of in-person duties and mass PT formations, there will be the temptation to pick up where we left off. Army leaders have steadfastly found creative ways to maintain personal fitness while adhering to COVID-19 mitigation measures, and units are proactive in delivering at-home physical training plans for their Soldiers. However, there must be a realistic expectation about the frequency, intensity, and volume of training that we subject our Soldiers to. Many of them are coping with the new reality of continuing the mission while homeschooling and social distancing.

While the recently released [FORSCOM ACFT data](#) has received a lot of attention for the gender discrepancies in pass rates, there should be significant concern that the most failed event is now the 2-mile run. Training for this event requires no equipment and it has been part of Army fitness testing for decades, suggesting that a sudden increase in failures is indicative of a decline in overall fitness levels during a year with COVID restrictions and without an enforceable fitness standard. According to [Army Public Health Command](#), males who can't run 2 miles in less than 15 minutes and women whose 2-mile runs take longer than 18 minutes are at greatest risk for musculoskeletal injuries. With so many Soldiers failing to meet the current 21-minute standard, injury risk mitigation should be a top priority.

The National Strength and Conditioning Association has issued [guidance on a safe return to training](#) for athletes, and much of it is also relevant for Soldiers. Master Fitness Trainers and leaders should emphasize a thorough dynamic warm up, as a brief iteration of the Preparation Drill may not be sufficient. Avoid high volume exercises conducted to the point of muscle failure, and do not perform physically exhausting drills for the purpose of developing mental toughness. While training outdoors minimizes COVID-19 transmission

risks, it is important to adjust workouts for high heat and humidity.

Start slow, progress gradually, and monitor for symptoms of the most likely injuries such as tendinitis and bone stress injuries. Leaders must balance the readiness and safety of their formations with the demand to return to highly challenging physical training as quickly as possible. In the Master Fitness Trainer Course, we constantly reinforce that progression must be **systematic** and **gradual**. A realistic assessment of formations' fitness levels upon resuming normal training schedules will ensure that Soldiers can safely progress towards, and eventually exceed, goals.

Leaders should also consider that fitness is impacted by many aspects of overall health. As Soldiers continue to train regularly, do not underestimate the impact of proper sleep, nutrition, spiritual, and mental readiness on optimal physical performance. This holistic approach is captured in the Army's new fitness manual, [FM 7-22 Holistic Health and Fitness](#). Commanders have numerous resources at their disposal to ensure Soldiers remain healthy and fit during this unique time, including H2F professionals and Army Wellness Centers.

## **STRENGTH TRAINING**

Strength training activities should follow traditional protocols for progression. This means starting at low intensity (weight/difficulty) and moderate volume (repetitions/time). Initially, the intensity should remain low while gradually progressing the volume. This allows time for muscular adaptations, and healthy bone and connective tissue development as well. Soldiers will be at particularly high risk for [tendinitis](#) and [tendinosis](#) during this early phase, as tendons adapt to training more slowly than muscles. After this early stage, intensity can be slowly progressed, accompanied by a decrease in volume to accommodate the increased stress.

## **RUNNING**

The first few weeks of running should be focused on building up Soldiers' aerobic base. This means running at a low enough intensity that conversation can be maintained. Mileage should also be limited, and runs should not be conducted on back-to-back days. Interval training can be an effective tool for improving pace, but in this reconditioning phase intervals should be short and not at maximum speed. High impact activities, especially running, carry [risk of bone stress injuries](#) such as shin splints and stress fractures, so Soldiers should be monitored for symptoms. Early progression should focus on increasing mileage no more than 10% per week. After several weeks of consistent training, workouts can start to include higher intensity interval training as long as Soldiers are experiencing no issues.

Every Soldier has an individual responsibility to maintain their personal fitness regardless of the situation, but leaders set conditions that directly impact success or failure. We need to be careful as we begin to train collectively over the coming weeks, and we need to resist the temptation to over-train. If Soldiers get injured immediately upon return to training, then we only prolong the negative impacts of COVID-19.

### **EXAMPLE PHYSICAL TRAINING SCHEDULE**

While leaders often like to deviate from doctrine to make physical training more engaging, Physical Readiness Training (PRT) is an effective system for safely conditioning Soldiers to be able to achieve baseline physical readiness. This example program uses PRT methodology with minor modifications to gradually recondition Soldiers whose fitness levels may have regressed in recent weeks. These workouts will help build the foundation necessary to safely progress to more advanced physical training without excessive injury risk. Active recovery is included once per week in order to improve flexibility and mobility and avoid overuse injuries. All workouts should emphasize a thorough, dynamic warmup at least ten minutes long, especially during the initial weeks of return to organized physical training.

## Systematic and Gradual: Safely Returning to Collective Physical Training

Day	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Goal</b>	Aerobic Capacity	Upper Body Muscular Endurance	Anaerobic Capacity	Active Recovery	Lower Body Muscular Endurance
<b>Main Activity</b>	20-minute Ability Group Run (AGR) at LOW intensity (conversational pace, heart rate 120-130)	Modified Strength Training Circuit (STC), alternate pushing, pulling, and core exercises, 30 sec work/30 sec rest	15 minutes of 30:60s, ensure Soldiers are WALKING during the rest intervals	Flexibility and mobility improvement (light calisthenics, stretching, foam rolling, aquatics, yoga)	Modified Strength Training Circuit (STC), alternate hinging, squatting, lunging, and core exercises
<b>Progression</b>	Add 2-4 minutes per week, do not increase pace until week 4	Adjust work to rest ratio. Introduce Climbing Drill 1 (CD1). Select more difficult exercise variations.	Add 2-4 minutes per week. Progress to 60:120s. Introduce 300 yd Shuttle Run at beginning of workout.	No need to progress Active Recovery, but variety can increase motivation.	Adjust work to rest ratio. Introduce Conditioning Drill 3 (CD3). Select more difficult exercise variations.

Bottom line, the first day back to regular unit PT is NOT the time for First Sergeant to take the company out on a long hard run. The desire to set the standard and maintain the standard should be balanced with realistic expectations and an emphasis on safety in order to maximize readiness. If we injure Soldiers immediately when we get back to training, then we only prolong the negative impacts of COVID-19.

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*units' physical readiness training. He is currently working with the DoD's [Consortium for Health and Military Performance](#). For more training principles you can follow him on Instagram [@mops\\_n\\_moes](#).*

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