



As Seen In

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Work Conditioning

Rehabilitation designed to return the injured to physical work

By Joseph P. Carroll, PT, MS, SCS

At first glance, passers by must think there is some type of emergency. Why else would a firefighter from the Orleans Fire and Rescue Department be roaming around the Barnstable Athletic Club fully dressed in his firefighting gear complete with an oxygen tank on his back? The answer has nothing to do with a false alarm or safety inspection, but everything to do with a program at Cape Cod Rehabilitation known as work conditioning.

In short, Cape Cod Rehabilitation work conditioning is a physical therapy program designed to return a patient to full functional capacity for a job that requires a high level of physical activity. Firefighters, EMTs and police officers are typical examples of such positions. Work conditioning is not only designed to prepare the individual to return to physical work, but also helps avoid re-injury.

For example, after an industrial accident, re-injury is most likely to occur shortly after a worker resumes his usual duties unless he has been properly prepared. Similar to an athlete resuming light practice before returning to competition, a



Rick Brown, a Physical Therapist Assistant with Cape Cod Rehabilitation, oversees work conditioning exercises performed by Orleans firefighter Mike Gould.

worker whose job is physically demanding benefits from work conditioning. The term work

conditioning refers to the therapeutic approach of progressively increasing physical work loads after injury back to the point that the worker was at prior to the injury. Performed in an outpatient setting, working conditioning is usually done 3-5 days per week for 2-3 hours. Work conditioning is done after a person has completed acute rehab whether it is post surgical or some other type of soft tissue injury. Once the worker transitions from the traditional outpatient program the focus shifts to more job simulated tasks, total body conditioning and endurance training

depending on the demands of the job. In particular, this article will profile an Orleans firefighter, and his post injury participation in the work conditioning program as part of his journey back to full time work status.

The story begins as another day in the life of a Cape Cod firefighter. However, instead of responding to a medical emergency, Orleans



Mike Gould works through job specific exercises at the Cape Cod Rehabilitation Hyannis office.

firefighter Mike Gould became the medical emergency himself. Involved in an on the job accident, Mike suffered two bone fractures in his

left leg and one in his left arm. This was the point at which Mike began his long road back to functional good health.

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bound for two to three months,” Mike commented. He slowly began rehabilitation at home, progressing from the wheel chair to

crutches. He explained, “During my recovery, I reached the point where I was very nervous about transitioning from crutches to actually standing and putting weight on my left leg. That was a big step for me, but I did it.” Over the next several weeks Mike worked on regaining his flexibility. He recalled, “I went from having my leg straight 100% of the time, to having to learn how to flex it again and teach those muscles how to work again. My

rehab experience has been a series of goals that I’ve worked towards.” Next on his list was to be able to walk up and down stairs, which he admitted was weighing heavily on his mind. According to Mike, “In my job we may not fight a huge amount of fires, but we constantly need to transport people up and down stairs.”

At this stage, Mike was not only ready to enter the work conditioning program, but was required to in order to return to full time status at the fire department. According to Steve Edwards, the Fire Chief of the Orleans Fire and Rescue Department, “Depending upon the injury, our town’s insurance mandates that injured employees attend a work conditioning program to make sure they

are fully recovered before they return to work. We obviously need to make sure they are either in the same or even better shape as they were prior to the

injury so they can perform their physical job responsibilities without putting themselves or anyone else in jeopardy.”

Since other members of his department had participated in the work conditioning program at Cape Cod Rehabilitation, Mike started his

program in August at the Cape Cod Rehab office in Hyannis.

Working closely with a physical therapist, an exercise program was developed that closely simulated his on the job physical demands. In this regard, Mike is put through a regime of progressive total body strengthening and endurance exercises. From crawling on the floor in full rescue gear, to repetitive climbing drills on extension ladders, the exercises work to build and increase Mike’s strength and stamina. In addition, Mike works on a series of resistance drills

including a walking drill where a physical therapy aid will wrap a large rubber tube around his waist and pull from behind as he walks forward against the resistance. Mike has regained significant strength to the point where he can easily drag the assistant around the parking lot.

build my strength and my confidence and then slowly introduce the gear. Last week I put on my self contained breathing apparatus bottle so we added that extra weight. I think it has been a good progression. It has definitely increased my confidence level. I was having fears whether I was



Julie Mei with Cape Cod Rehabilitation provides resistance during one of Orleans firefighter Mike Gould’s work conditioning exercises.

going to be able to go up and down stairs. The program has helped tremendously. Now I can go up and down stairs with my full gear on in addition to carrying a weight without any problem. The fitness program Cape Cod Rehabilitation has me on has definitely improved my abilities.”

When asked about his perceptions and progress in

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the work conditioning program, Mike explained, “I really didn’t know what to think. Initially I worked two weeks without my gear so they allowed me to

This comes as no surprise to Rick Brown, a

Physical Therapist Assistant at Cape Cod Rehabilitation who monitored and worked closely with Mike. Rick explained, “I’ve worked with several of the firefighters here and their level of commitment was just fantastic. They all worked hard. You don’t always see that, but these firefighters all worked really hard and had positive attitudes. The positive mental attitude makes a big difference.”

One look at Mike during his work conditioning session tells the whole story. The exercises are designed to physically exert the patient. Shortly

after his routine begins Mike is wiping the sweat from his forehead. This is understandable considering he is working out in roughly 30 pounds of fire rescue gear. Mike is quick to point out, “Rick is here to make sure that I do what I need to get done. I feel stronger, I feel more confident and it’s because he tends to push me. Every day there are new and different techniques that he throws in to keep it interesting. If anything, it makes me feel better. Every day I do a significant cardio workout here. I’m sure that if I wasn’t here I wouldn’t be doing it.”

To date, Mike has made significant progress. When compared to others who have been through the program with similar injuries, Mike feels he is ahead of the game with his rehabilitation. From a muscular / skeletal standpoint he says he feels great. As Mike nears the completion of his program he recognizes the support and

encouragement the rehabilitation staff has made in his progress. He concluded by saying, “They’re trying to get me back to work at full capacity, so if they don’t push me, what good is it? I’ve got to be doing things that simulate what I’m doing on the job, and If they don’t, I’ll go back to work wondering whether or not I can do it. That’s not something I want in the back of my mind while I’m on the job.” Considering his physical accomplishments in the work conditioning program, that’s not something that is likely to happen.

Joe Carroll is a physical therapist and owner of Cape Cod Rehabilitation. He is certified as a master instructor in the Burdenko method and can be reached at jcarroll@cape.com

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