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## Burns: Recovery, Rehabilitation and Reconstructions

Survival was once the only goal and measurement of successful recovery from burn injuries. With effective treatments available, today's goal is reintegrating the burn patient back into society and back to work. A study in the [Journal of Rehabilitation Medicine](#) cites that most burn patients do return to work; **90 percent in fact returned to work within two years**. This return does not come without challenges, which exist throughout the entire healing process, including recovery, rehabilitation and reconstruction. With the right support, injured workers can get back to the normal life they had before their accident.

### Heat is not the only culprit

Burns sources can include heat, electricity, chemicals or cold (frostbite). Regardless of the culprit, these burns have similar courses for recovery. Evaluation is needed to determine the level of damage. Treatment evaluates the thickness of the burn as well as the surface area and physical location to determine the best course of action. As Dr. Ronald Downs of [The Centre for Working Hands](#) states, "It is important to understand that all burns are unique. Treatment is not a simple timeline; the wound repair requires stages of recovery and may require multiple reconstructive surgeries. That is not uncommon." Some locations on the body present additional challenges, such as an injury to the hand, because scars can form across joints and rehab time is longer.

### Recovery

This first phase after a burn injury addresses the immediate need - **repairing the burn**. Burns may be treated with first aid, in an out-of-hospital setting or require more specialized treatment (such as a burn center). Moderate to severe burns are most likely treated in a hospital setting. For these patients, completion of a series of staged operations occurs within a few days after injury, resulting in a temporary wound cover. Healing time may range from two weeks for a partial burn to eight weeks for a skin graft. For sake of simplicity, this incredibly condensed description does not do justice to explain the number of treatments and operations as well as the difficulty on the patient. There is a high degree of pain. For traumatic and severe burns, the patient may fear survival and immediate psychiatric issues dominate, which can include anxiety, fear, pain, delirium, sleep deprivation and confusion.

### Rehabilitation

Treatment goals vary, depending on the patient's injury, stage of treatment, age and other illnesses/diseases. A [Medscape article](#) shows goals ranging from minimizing loss of range of motion (ROM) to establishing a work hardening program in recovered patients. Physical and occupational therapists play essential roles in this stage of treatment. In addition to rehab, the burn therapist plays a key role in establishing a long-term relationship with the patient and family members to ensure compliance with therapy goals and increase the patient's morale for recovery. At this point, fewer surgical procedures occur and the patient is beginning to understand the impact and long-term implications of the injury. [Medscape](#) also notes that patients may become depressed, and up to 30 percent experience symptoms of posttraumatic stress disorder (PTSD) with side effects including fearfulness and sleep disturbances.

### Reconstruction

Reconstructive surgery frequently demands complex planning and may require a number of procedures completed in stages. Burn reconstruction begins when the scar has matured, usually 9 to 12 months

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after the date of the injury. Reconstructive surgery serves to address both the functional and cosmetic effects of burns, explains Downs. “Depending on the location, burns can be detrimental and cause permanent scarring. Scars are a permanent reminder of the injury. They last forever,” states Downs. The later effects of burns can include limitation of movement, pain, disfigurement and social embarrassment. The size, nature and extent of the injury or deformity will determine choice of treatment and how quickly surgery is performed.

### **Getting back to work**

Returning to work may not just be a physical challenge, as [Research Utilization Support and Help \(RUSH\)](#) study points out, with **41 percent** of work related burn injury patients having emotional difficulty returning to work. Common concerns include safety issues, self-esteem and adjustment to a different level of functioning. This time is often emotionally difficult, as patients adjust to new limitations at home and at work while experiencing waning PTSD symptoms. Downs suggests that employers be aggressive in getting the worker back in some capacity.

“Providing an opportunity to work helps the patient physically and mentally”, said Downs. This provides reassurance to the injured worker, which is especially important during rehab. The [Journal of Rehabilitation Medicine](#) found similar evidence of this. The likelihood of returning to work correlated with the personality/outlook of the patient. Those with a positive/outgoing personality had higher return to work rates. [Medscape](#) noted that these elements might be more important than the physical injury itself.

It may seem like an uphill battle for burn patients, and it is. Constant challenges exist throughout the recovery, rehabilitation and reconstruction phases - all physically and psychologically demanding. With the right support in place – connecting with the right burn specialists, mental health providers and the support of family- positive outcomes are very likely. For employers, understanding the long recovery process can help empathize with workers and serve as a supporting role in recovery. With the right support and care, those injured will be back, ready to resume their life.