Burn Wound Depth and Healing

How deep is my burn and how will affect the healing?

Skin has a surface layer of alive and dead cells called epidermis. The next layer underneath is called dermis and contained sweat glands, hair roots, glands that produce oils and has blood vessels and nerves. The thickness of epidermis and dermis varies throughout the body. Underneath dermis is the fat layer.



The most **superficial burns** caused by a sun burn affect only the top layer (first degree). Those type of burn wounds will heal in a week with no scars.



Partial thickness burns

When blisters are formed, the top layer and part of the second layer of skin is affected by the burn injury. The appearance of the skin might be red or it may be lifting up. The blisters will contain fluids. If the blisters are removed you may see small blobs of fluid on the surface of the burn (partial thickness burns, or superficial second-degree burn). Those types of burn wounds are

caused mainly by scalding and are quite painful. These type of burn wounds will heal up to 14 days from the time of injury and the scars will be minimal.

Deep Dermal burns



If the burns get deeper, it will destroy the first layer of the skin and also most of the second skin layer (dermis). This is a deep dermal thickness burn (deep second degree burns). Blisters can be seen and the skin underneath looks red or mottled and it does not hurt as much as the partial thickness burns. Water and salt are lost also, but less than in a partial thickness burns. It hurts sometimes and it will take longer to heal (sometimes more than 21 days) and will leave scars. In certain situations surgery may be indicated.

Full thickness burns



Full thickness burns are when all the skin layers are damaged, sometimes going deeper than just the fat (into the muscle or bone). These burn wounds will take a very long time to heal on their own and will cause scars. Frequently these burn wounds are treated with surgery and skin grafting.