Lightning volts

The odds of any one person being struck by lightning are 1 in 600,000. When it happens, it usually causes devastating effects to the human body. the most serious injuries are those to the heart and brain. Often, they are fatal. Lightning victims can also also develop long-term medical problems, such as myelopathy (nervous system damage), parkinsonism (shaking), or motor system disease (Cherington et al., *Neurology*, 43:7, 1993). Many people who are struck experience temporary (or permanent) paralysis or temporary amnesia. They may not remember getting hit, or even the events that occurred before lightning struck. Lightning often causes burns on the skin, and can rupture the eardrums of the victim.

Farmer Donald Weiland of rural Beresford, South Dakota, was struck in 1976 when a hazy April drizzle suddenly gave birth to a bolt of cloud-to-ground lightning. Weiland was climging down from some haying machinery he was repairing with his nephew when it happened. "It came like a flash, and knocked me down. I was laying there, and when my son came I told Junior to go home and call a doctor and call a priest," he remembered. "My hand was burned, and my left shirt sleeve was blown apart. There were holes in the rest of his clothing, and spatter lines from hot, molten metal on his wedding ring. "The ambulance guys thought I was dead, but I never lost consciousness," he recalled.



Weiland was taken to a Sioux Falls hospital, where he was stabilized. But the day after being struck, strange maks appeared on his skin. "They were like marks from a red lead pencil drawn all over my body. The streaks were shaped like forked lightning, upside down Y's," he said. The streaks went away almost as quicklyl as they came, and Weiland says he started to feel good. But one week later, another system emerged, on that stayed with him for years. "All of a sudden in my right foot, all the way up and back, there was a tingling sensation. It wouldn't go away." Weiland was examined by specialists in Sioux Falls and Rochester, Minnesota. But none were able to cure the problem. Weiland described the problem as, "there from the time I get up and put my right foot on the floor. It's like I'm stepping on a steel bristle brush. When I got to bed, it goes away until I stand up again in the morning. Every day."