

Muscles convulsed severely enough to fracture several bones

Deputy's arms, shoulders injured in Taser training

ED KEMMICK Of The Gazette Staff | Posted: Wednesday, May 19, 2010

A Roosevelt County sheriff's deputy is recovering at home two weeks after he broke both his arms during a training session in which he was zapped by a stun gun.

"I took the Taser, and when it was over I couldn't move my arms," Chief Deputy Jason Frederick said.

Frederick underwent surgery at St. Vincent Healthcare in Billings after breaking the humerus bones, in his upper arms, dislocating his shoulders and fracturing his shoulder sockets. "The doctor in Glasgow told me it was the worst injuries to the shoulders he'd ever seen," Frederick said.

Frederick, 32, said Wednesday that he expects to be able to return to desk duty in five to six weeks, and to full duty within three to four months.

He was injured May 6 while receiving certification training in the use of the Taser stun gun. Frederick said he and another deputy and a Wolf Point police officer were all undergoing training in the Poplar fire hall, late in the afternoon.

The police officer was hit with the Taser first, followed by Frederick and then the other deputy. Neither of the other officers was injured, but Frederick said that when he was hit with the electric shock, it was clear to him that something had gone wrong. "I kind of knew right away. I knew something was up," he said.

Roosevelt County Sheriff Freedom Crawford, who wasn't present at the training session but watched a video of the incident, said the second deputy was hit with the stun gun after Frederick was Tased because it wasn't obvious that Frederick had suffered out-of-the-ordinary injuries. People recover from the shock at different rates, Crawford said, "and they assumed he was just taking longer to recover."

But when Frederick said he couldn't move his upper arms, he was taken to the emergency room of the Wolf Point hospital, where X-rays showed he had two broken arms, with lengthwise fractures. From there he was taken to a doctor in Glasgow, who made the decision to fly him to Billings for surgery.

Frederick said he arrived at St. Vincent Healthcare early in the morning of May 7, underwent hourslong surgery and remained hospitalized until May 11.

He said his surgeon, Dr. Steve Klepps, told him the injuries were caused by his "muscles convulsing the bones" and had nothing to do with a fall. Frederick said he was on his knees when he was stunned and fell forward onto a mat.

Klepps could not be reached for comment, but Dr. Thomas Bennett, a forensic pathologist in Billings, said it's not unusual for electrocution victims to suffer broken bones, particularly if the victim was in very good shape with lots of muscle mass.

Ordinarily, the muscles would tear before causing any damage to the bone. But if there is a lot of muscle mass, the contraction of the muscles, which are attached to the humerus up and down its length, would place enormous pressure on the bone and could break it, Bennett said. Still, he said, the extent of Frederick's injuries was unusual. "With dislocated shoulders, too — that's amazing," he said.

Frederick said he was "in fairly good shape" but hadn't done much weight-lifting in more than a year.

Steve Tuttle, a spokesman with Taser International in Scottsdale, Ariz., said the training session in Wolf Point was not done according to recommended conditions, in which the person being Tased would be standing up, with an assistant on either side holding him under the arms to prevent a fall.

"If we see injuries in training, it's generally from a fall," he said. Tuttle said he had never heard of injuries like those suffered by Frederick. He also said there have been more than 2 million "applications" of the Taser, including "voluntary exposures and in the field," and "injuries are exceedingly rare."

In a study published last year in the *Annals of Emergency Medicine*, Tuttle said, researchers found only three significant injuries out of 1,201 incidents in which criminal suspects were subdued with Tasers.

Crawford said he is still conducting an investigation of the incident with Deputy Dave Bets His Medicine, who was conducting the certification training when Frederick was injured. "I don't know what happened," Crawford said. "It was a freak deal."