



WHOLE-BODY VIBRATION: Dayna Schultz, who was paralyzed from the waist down in a car accident, is helped by Stephanie Montera, left, and William Thornton.

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Good vibrations for spinal-cord injuries

Treatment center draws people from around the country.

By CECILIA OLECK
Detroit Free Press

DETROIT— Dayna Schultz looks as if there is an earthquake going on under her feet.

She stands ramrod-straight, teeth clenched, gripping a gray walker for support as her body shakes like a jackhammer, the walker every so often slipping off the side of the large metal plate she is on.

Yet for all the motion, Schultz, 19, of Morris, Minn., is calm. The vibrations she experiences aren't the result of seismic shifting. They're part of a therapy called whole-body vibration.

The Rehabilitation Institute of Michigan is using it to help increase bone density, reduce spasms and build muscle tone in people who have suffered spinal cord injuries.

Madonna and members of the Detroit Lions are proponents, too.

High-frequency vibration for fitness now is being marketed and used as a way to help everyday athletes become more fit as well as for injury recovery programs like the one at the Rehabilitation Institute of Michigan, which uses a machine called the Wave. Some fitness centers across the country — including in Orange County — are offering whole-body vibration machines.

The machines used in whole-body vibration look somewhat like StairMasters — with a large metal plate where the steps would be. You stand on the plate and select a frequency and a segment time (usually from 30 to 60 seconds); the plate vibrates, causing your muscles to contract. That's supposed to lead to better circulation, fewer spasms and increased bone density. Users can also do basic moves like calf raises, squats, push-ups or sit-ups to work different body parts.

"For someone who can't make muscle contractions, this does the contractions for them," says Bill Thornton, the head physical trainer at the Rehabilitation Institute's Center for Spinal Cord Injury Recovery.

Thornton, 41, of Dearborn Heights, Mich., will be monitoring the effects of whole-body vibration as part of an institute study.

Schultz is using the machine as a part of her therapy after a car accident left her with a broken neck and no feeling below her torso. She's been a part of the Detroit-based Rehabilitation Institute's Center for Spinal Cord Injury Recovery since August. The crash – a collision with a train that killed two people – occurred last year.

She uses a wheelchair, but also is working to stand again.

"I really had to work hard at standing up," Schultz says of her recent attempt to stand on the machine for the first time. "You feel it a lot more when you're on there."

At the Healing Retreat, a medical spa in Bloomfield Hills, Mich., a vibration machine called a PowerPlate is used to help increase circulation and flexibility in users, says Katie Drinkard, the company's manager.

Some of those who use the machine are recovering from injuries, while others include it as a part of massage treatments.

Drinkard says she's noticed whole-body vibration helping to alleviate back and knee pain in some clients and to increase range of motion in a woman who uses it on a shoulder injury. It's also a quicker way to exercise, she says.

Others, like Thea Rosa, who was injured two years ago when the horse she was riding fell on her, find that whole-body vibration helps to stimulate body parts that have lost sensation. She's been at the institute since June. Rosa started using the Wave in August, when the machine arrived, and now is on it at least three times a week.

"I can feel the tingling in my heels now," says Rosa, 39, after a session on the machine that included push-ups off the plate. "It's kind of a nice feeling when you're connected again to your body. You can feel the muscles work."

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