

# The New York Times

## Health

SMALL FIXES *Low-cost innovations that can save thousands of lives*

### Like a Wetsuit, but It Can Save a Hemorrhaging Mother

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Suellen Miller

In poor countries, women tend to give birth at home or in small clinics. If a mother suffers from bleeding in such a setting, she risks shock, organ failure and eventually death. Short of an airlift to a hospital where transfusions and surgery are available, there is often little to be done.

Now there is an ingenious low-tech medical solution called the [LifeWrap](#). Like a segmented wetsuit that fastens around the legs and torso with Velcro, the skin-tight suit squeezes oxygenated blood back into the heart, lungs and brain of the hemorrhaging mother.

This helps her to regain consciousness, avoid organ damage and stay alive long enough to be moved to better care.

Descended from inflatable suits used in operating rooms and battlefields, the garment can get a little uncomfortable in warmer climates. And at \$259 (made by Zoex in Ashland, Ore.), it's not yet cheap enough to become widespread in remote villages.

But the device works. It is used on a modest scale in India, Bangladesh, Tanzania and Peru.

Early trials in Egypt and Nigeria by Dr. Suellen Miller, a professor of obstetrics at the University of California, San Francisco, showed it could reduce childbirth deaths by over 50 percent. Results in Zambia and Zimbabwe are pending.

“Women are still dying of birth hemorrhage in the poorest countries,” Dr. Miller said. “This is a very potent first-aid device that could have a huge impact in reducing mortality.”