

# Hi-tech shirt to monitor vital signs

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Integrated smart textile company Sensatex launched this week a patented SmartShirt System that could remotely monitor human vital signs.

The shirt, ready for beta testing, can monitor the wearer's movement, heart rate and respiration rate in real time through a patented nanotechnology conductive fiber grid that is seamlessly knit into the material of the fully washable shirt, the company said.

"Today, wearable technology is science, not science fiction," said Chief Executive Officer Robert Kalik. "Following a series of successful tests with first responders and the subsequent development of a seamless knit shirt integrating a conductive fiber system to wirelessly carry physiological signals from the body, Sensatex is ready to begin research and reliability studies using the SmartShirt System in a broad range of applications."

According to the Bethesda, Md.-based company the system could monitor the elderly at home; observe outpatients in post-operative or chronic illness situations; provide training support for athletes and remote monitoring for first responders, hazardous-materials workers and soldiers in the field; and monitor truck drivers' vital signs to alert them of fatigue.

Using light cotton fabric, the shirt has fully integrated conductive fibers to create connectivity to acquire and transfer analog physiological signals to a small personal controller.

The controller then digitizes the data signals and wirelessly transmits them to a remote location where data is monitored.

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