

8/30/13

## Press Release Chagrin Falls Ohio

### SWARM Intelligent Wristband Measures Healthcare Staff's Hand-washing Compliance and Actions (Industry First)

By: Hunter Heiferling CEO-Founder Bluetronix Inc.

Frequent hand washing is the best know defense against **Hospital Acquired Infections (HAIs)**. All healthcare professionals know they should wash their hands, but every year, nearly 2 million people get infections while in US hospitals and around 100,000 of these patients die. This cost the healthcare market 35-40 billions dollars a year as well! This is believe it or not, a big problem.

This number could be quickly reduced if healthcare professionals wash their hands consistently at the right times, follow proper hand-washing techniques, and be reminded and monitored both simultaneously. In fact, the CDC says the number of HAIs could be reduced by as much as 70%.



Hand –washing is most critical to stop infections

That's why Bluetronix Inc. a small defense contractor funded recently by DARPA is now developing a SWARM Intelligent wireless smart bracelet/wristband that monitors healthcare professionals' hand washing hygiene habits wirelessly & accurately in a small non-obtrusive package. An industry first once completed, and unquestionably desperately needed.

The band in design with its patents will work to monitor whether healthcare professionals wash their hands when required. Recently, the World Health Organization created a document called "*Your 5 Moments for Hand Hygiene*" which has become the standard for hand hygiene in hospital settings. Healthcare professionals should wash their hands at each of the following cycles:

1. Before any patient contact
2. Before any aseptic task
3. After body fluid exposure risk
4. After any patient contact
5. After contact with patient surroundings

Voice (440) 247.3434 PO Box 23054 Chagrin Falls Ohio 44023 Fax (440) 543.2955

1

[innovation@bluetronix.net](mailto:innovation@bluetronix.net)

[www.bluetronix.net](http://www.bluetronix.net)

The **SWARM Intelligent** band device has a built-in accelerometer and cleansing sensors that senses whether healthcare professionals wash their hands properly and in accordance with hand-washing guidelines. It will even alert if the healthcare professional has spent the appropriate amount of time washing up, and if the wearer finishes too early it will let the wearer know by either a **blue** light (washed/clean) or **red** light (not washed/clean). A log and time will be collected every time for review. The sensors will calculate within several seconds a quantified number for minimal suitable accepted cleanliness.

SWARM Intelligence is an artificial intelligence based upon biological systems that have evolved for millions of years. The company has a group of patents that integrates intelligence to communications, wireless sensors, monitors, instrumentation and other related equipment. The company was funded for seven years from the US Defense Dept such as DARPA, US Army and the Air Force for over (3) million dollars.

This intelligent design is to replace risky visual observation from infection control specialists, which has been very unreliable. *Healthcare workers cannot be visually monitored at all times*, and behaviors that are observed can't be considered normal since the worker knows he or she is being watched. The SWARM wristband will monitor healthcare professionals at all times, enabling infection control managers a more accurate picture of their employees' hand hygiene compliance and simultaneously saving lives and decreasing infections. The pending product can be used as well for other industries like the food industry, schools, emergency clinics, drug-store medic clinics, animal hospitals, transportation centers, waste centers and any setting requiring hand-washing to prevent infections or bacteria transmission. Very cool --low cost, the company looks to bring this to market through strategic partnerships in 2014 timeframe.



Working SWARM Intelligent  
Design Prototype Wristband