UT Arlington researchers design device to monitor newborns' breath

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ARLINGTON -- Parents of newborns often invest in nursery monitors that let them hear or even see if their infant is awake or sleeping. And most know the importance of putting the infant to bed on his or her back so that their back isn't obstructed.

Now researchers at the University of Texas at Arlington have designed a device that can offer parents quick enough to allow for lifesaving intervention.

"Our sensors just let you know the baby is breathing normally without all the wires and breathing tubes now," Chiao said. "Our system is more accurate than current systems. Our system reduces false alarms.

Sudden unexplained infant death -- a classification for deaths for which no cause can be immediately determined -- deaths that cannot be explained even after an investigation and are sudden infant death syndrome -- deaths that cannot be explained even after an investigation and are sudden infant death syndrome -- deaths that cannot be explained even after an investigation and are sudden infant death syndrome. Babies younger than 1 while they are sleeping.

In October, the American Academy of Pediatrics issued new recommendations for reducing the risk of SIDS. Besides placing the baby on his back, they include using a firm mattress, av on't touch the child's body, and manufacturer should be able to integrate it into their products to give parents more peace of mind, said Chiao, who is the holder of the Sam and Mike Greene and Jenkins Garrett professorships in the UT Arlington College of Engineering.

The new sensors can be attached to a baby's crib or car seat. The sensors are less cumbersome technology that requires breathing apparatus being placed around the baby's nose.

Cao said he was inspired to develop the new sensor after the birth of his first son in 2006.

"I was watching him through the glass in the hospital nursery and didn't see anyone taking care of him. I couldn't get in to check so I thought, 'How can I be sure he's OK?'"

Cao was working at the robotics institute at the time on a project developing gas sensors for missile building sensors that could detect whether a missile had lost gas, which is needed to fire the miss
"I thought, 'Why couldn't that same type of system be used for detecting carbon dioxide, which all Cao said. "The sensors could be mounted around the baby to let people know whether he's breath!

The team has worked to reduce the cost of the device to about $100 to speed its move to the mar

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