

**BabyMatch™**  
**Keeps Newborns & Infants Safe**  
**at**  
**John H. Stroger Jr. Hospital**  
**Chicago, Illinois USA**



**Overview**

The new 1.2 million-square-foot John H. Stroger, Jr. Hospital of Cook County (formerly known as Cook County Hospital) is a public urban teaching hospital in the city of Chicago that provides primary, specialty and tertiary healthcare services to the five million residents of Cook County.

The hospital has a staff of 300 attending physicians along with more than 400 medical residents and is part of the 305 acre (1.2 km<sup>2</sup>) Illinois Medical District, which is one of the largest concentrations of medical facilities in the world. The hospital is nationally known for its expertise and breadth of services. Each year approximately 155,000 adult and pediatric emergency room visits, 45,000 trauma admissions and 13,000 surgical procedures take place at this major medical facility.

In addition to the many other vital services, John H. Stroger, Jr. Hospital serves as one of only 10 Illinois hospitals designated as prenatal centers for high-risk maternal and infant services. Since opening, John H. Stroger, Jr. Hospital's maternity wards each year are handling an ever increasing volume of normal plus high-risk pregnancies.



Resulting from a series of alarming baby abductions during the early 2000s from a number of metropolitan hospitals in the United States, management felt

that the hospital needed to do more to ensure that their tiniest patients were kept safe and secure against abduction and accidental mother/baby switching. In addition to the added security, hospital management also wanted a solution; that would provide a simple, but effective structure for managing the thousands of authorized transfer of babies per week, between its general maternity wards and its Intensive Care, Pediatrics and Obstetrics facilities.

The hospital turned to Johnson Controls, Inc. its security and building automation provider to specify, install and commission a field proven solution for security of newborns and infants in large inner-city full service hospitals. Ultimately, Johnson Controls selected the BabyMatch Infant Abduction Solution from Visonic Technologies.

Since 2005, John H. Stroger, Jr. Hospital has been using BabyMatch to provide family and staff with the peace of mind of knowing that babies are protected from abduction, parental/baby mismatching and are safe and accounted for when being transferred between departments.

**The Customer**

John H. Stroger Jr. Hospital  
Chicago, Illinois USA

**The Integrator**

Johnson Controls, Inc.  
Headquarters - Milwaukee, WI USA

**The Challenge**

Implement a baby abduction prevention solution for the security of newborns and infants that has been field-proven in large inner-city full service hospitals.

**The Solution**

An Elpas BabyMatch™ Infant Abduction System from Visonic Technologies (VT)

**About Visonic Technologies**

Visonic Technologies, a fully owned subsidiary of Visonic, Ltd. (VSC.L) is a global leader in enterprise class, active and passive RFID/ RTLS real-time visibility solutions. Distributed under the Elpas, SpiderAlert, VisAccess and EIRIS system names the company's products deliver personnel identification and safety; supply-chain logistics, asset protection and facility supervision.

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**"We find that the combination of real-time tracking and security provided by BabyMatch yields a level of security and dependability unmatched in the industry".**

Chief Director - Ralph I. Turner  
John H. Stroger Jr. Hospital

## The Implemented Solution

The implemented BabyMatch solution provides John H. Stroger Jr. Hospital with a complete infant protection system. At any one time up to 150 babies and/or infants are simultaneously tracked and protected. Rule-based location and tag status alerts enables BabyMatch to automatically notify designated healthcare and security personnel whenever an event that may threaten the baby's physical safety occurs. In addition to monitoring the physical whereabouts and safety of the infants, BabyMatch also logs the authorized transfer of the infants throughout the hospital while preventing any illicit attempts to move infants to and from wards and treatment centers.

## How BabyMatch Works

The BabyMatch solution consists of 150 active, long-range, supervised RFID baby and 150 corresponding mother tags that transmit safe RF and IR coded messages. These transmissions are received by strategically placed readers, and then automatically passed onto the BabyMatch host computer.



At the time of birth both the infant and the mother are issued pre-configured personalized tags that are only removed upon discharge from the hospital.

The baby's tag (attached to the infant's ankle) is paired to the mother's wrist tag, which enables

mothers to confirm that babies they are with are their own.

The strategically placed IR and RF readers (wall or ceiling mounted) throughout the hospital are used to determine the exact room location of the infants in real-time. Additionally, LF Exciters are mounted at entry/and exit points inside the protected areas so when an unauthorized badged newborn is physically near the protected exit/entrance an alert notification is immediately generated by BabyMatch. This means that staff and family can move babies freely within the protected zones, but no infants can be removed without prior authorization.

## Easy to Use

BabyMatch software is installed on the appropriate host computers, workstations and security terminals in a client-server configuration. Medical and security personnel see only the menus and commands they need in an easy-to-use, intuitive MS Windows based touch-screen interface. Monitoring alarms, assigning tags, discharging babies and manually deactivating/reactivating tags for medical and/or administrative needs involve no more than a password and a click of the mouse. Staff members can perform baby searches or follow the movements of a particular infant in real-time on facility maps.

All system transactions are password protected, time and date stamped and logged into BabyMatch's database on the host computer. Historical reports can be easily generated that prove who admitted, signed out and discharged all babies as well as when and where alerts occurred and who cleared them.

## Features and Benefits

- **Unlimited Tag Population:** As many supplemental baby and mother tags can be added to the initial installation without risk to infant safety.
- **Full Supervision:** BabyMatch ensures full 'State' supervision of each tag (includes: low battery conditions, device tampering or if the location of the tag is unknown) from the time of birth through discharge.
- **Optional Baby Escort:** Babies requiring medical treatment from outside departments can be escorted through the protected exit by authorized staff members.
- **Tamper Alerting:** Baby tags are easily attached the infant's ankle. If the tag is tampered with or removed, a tamper 'State' alert will automatically be generated.
- **Mother/Baby Matching:** Prevents accidental baby switching by permitting a mother to confirm that the baby she is with is her own. Match tests can be performed by both parents and supports twins, triplets and other multiple births.
- **Easy to use Software:** A standard Windows based touch-screen interface enables medical and security staff to monitor alarms; personalize tags, discharge babies, temporarily deactivate tags perform searches or follow the movements of a particular infant.
- **Simple Backend Integration:** BabyMatch's open standard architecture enables seamless integration with security, CCTV access control systems and well as patient care and billing platforms.
- **Internationally Safety Compliant:** BabyMatch's RF components meet applicable CE, FCC UL, EMI, ESD, EM susceptibility standards. Additionally the system's radiated fields will not affect or will be affected by other electronic hospital equipment.
- **Upgradeable and Scalable:** From a single ward protection solution, BabyMatch can easily grow into facility-wide active RFID based unified safety, risk mitigation and asset tracking platforms.