Arizona newborn-screening process improves

A Maricopa Medical Center nurse takes blood samples from day-old Mayrani Navarro on Tuesday. Arizona hospitals have slashed delay times, surpassing a goal of sending 95 percent of newborn blood samples to the state lab within 3 days.(Photo: Charlie Leight/Republic)

Story Highlights

- Hospitals have cut delays in delivery times for blood samples to test for diseases in newborns.
- Some Arizona hospitals were found to have among the worst delay rates nationwide in 2012.
- The effectiveness of newborn screening relies on how quickly the sample is tested at the state lab.

Nearly all Arizona babies are now being screened for potentially life-threatening diseases in record time, dramatically reversing a trend that ranked the state among the worst in the U.S. in testing delays just seven months ago.
The Arizona Department of Health Services and hospitals across the state have made an aggressive effort to improve the time it takes blood-screening samples from newborn babies to arrive at the state lab in downtown Phoenix.

Hospitals use a simple heel prick to draw blood samples from every newborn infant within 24 to 48 hours of birth. Each sample must be submitted within 24 hours, or the next working day after the sample is collected. State health officials consider it acceptable for lab samples to take up to four days to deliver.

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Timely processing of blood samples is crucial for newborn screening. The effectiveness of the test relies on how quickly the sample is tested. The diseases tested for are rare, but can be severe — even deadly — if not diagnosed and treated quickly.

Last November, an investigative report by the Milwaukee Journal Sentinel found hospitals nationwide were sending samples late — in some cases, up to 14 days. A few Arizona hospitals were among the nation's worst for delays in 2012.

The Arizona Republic subsequently reported that in 2012, at least one-third of blood samples collected at 17 of 42 Arizona hospitals took five days or longer to arrive at the state lab.

In December, state Health Director Will Humble set a six-month goal of having 95 percent of samples to the state lab within three days. Under his direction, the ADHS Office of Newborn Screening launched the Transit Time Project.

Today, 99 percent of Arizona hospitals are sending blood samples to the state lab within three days, and 100 percent are sending within four days, exceeding Humble's goal.

"It shouldn't take a baby dying or a big news story for there to be change made," said Jill Levy-Fisch, president of Save Babies Through Screening Foundation, a national non-profit that advocates for newborn screening. "It's something that should be a matter of course. All that being said, I think Arizona is doing a great job to address its deficiencies — and there were many."

The delays in blood-sample deliveries gained national attention after being reported, and a number of contributing factors were found in hospitals nationally and in Arizona. Among them:

• Hospitals that infrequently delivered babies were "batching" samples to save money by delivering several samples at a time to the lab. But hospitals were doing so needlessly. They already were paying the state for a courier service.

• There was a disconnect among hospital staffers. Nurses were prickling babies' heels, but other staff members were responsible for mailing samples. That meant a turnover in staff or someone taking a sick day could throw off the process.
• The state lab was closed on Saturdays, and the FedEx delivery service ran only on weekdays. That posed a problem, especially for samples that arrived on a Friday before a three-day holiday weekend.

• There was not enough education and communication between the state and hospitals about program standards.

ADHS and hospitals in the state addressed those issues over the past six months.

The state and the Arizona Hospital and Healthcare Association have held educational sessions for hospitals. Recordings of the sessions are available online.

Additional training sessions were held because of hospital demand, said Debbie Johnston, senior vice president of policy development at the health-care association. Training covered everything from gathering specimens to the availability of the courier service, Johnston said.

The health-care association will continue to work with ADHS so that if there are delays again, training sessions and education efforts can be restarted, Johnston said.

Meanwhile, a new state website also compares hospitals' blood-sample delivery times, driving competition and awareness. The online updates will continue.

The state lab now processes newborn blood samples on Saturdays, and a new, local courier service also picks up samples on Saturdays. The new courier was a major component in improving sample-delivery times, said Celia Nabor, Transit Time Project manager.

"We knew that the end goal was to be able to save the babies' lives," Nabor said.