

# Improving Transit Time of Newborn Screening Bloodspots in Arizona

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# Arizona Transit Time Taskforce



Sondi Aponte  
Isaac Lee  
Celia Nabor

# Executive Management

Don Herrington

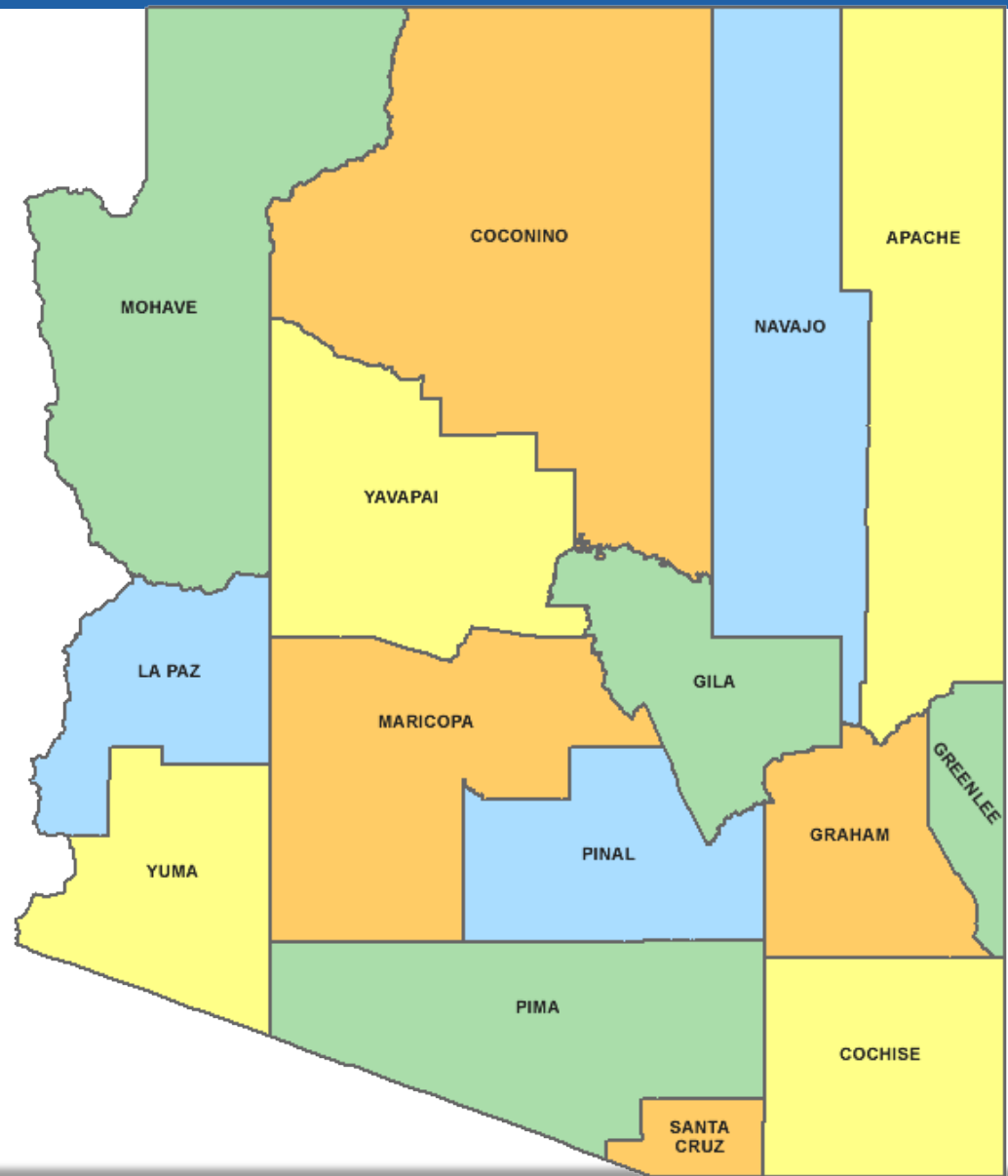
Ward Jacox

Victor Waddell

William Slanta

Director: Will Humble

- 6th largest land/water
- 6.5 million population
- 15 Counties
- 60.5% Maricopa
- 15% Pima County
- 24.5% in 13 other counties
- 43 birth hospitals
- 310 miles east to west
- 400 miles north to south
- One state laboratory



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# How will Arizona NBS achieve.....

Quality

Transparency

Accountability

Partnerships



Owen  
50 years of NBS

# Continuous Quality Improvement

- Step 1 Identify a need/issue/problem and develop a problem statement
- Step 2 Define the current situation
- Step 3 Analyze the problem
- Step 4 Develop an action plan
- Step 5 Look at the results
- Step 6 Start over - go back to the first step and use the same process for the next problem

A JOURNAL SENTINEL WATCHDOG REPORT

# Deadly Delays

The nation's newborn screening programs depend on speed and science to save babies from rare diseases. But thousands of hospitals fall short, deadly delays are ignored and failures are hidden from public view – while babies and their families suffer.

Published Nov. 16, 2013

**“Arizona has one of the worst track records in the country, with 17% of all newborn screening samples arriving at the state lab five or more days after collection in 2012.”**



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**“At Maryvale Hospital Medical Center in Phoenix last year, 70% of newborn screening samples arrived at the state testing lab five or more days after they were collected.”**

## Delays by hospitals hinder blood screening of newborns for rare diseases



# Conditions in 2013



# Conditions in 2013

- Director immediately announced this finding as an agency priority
- Letter to hospitals from Director of Licensing
- Announced a statewide goal
- December 2013-Transit Time taskforce and executive sponsors

# Goal

Within six months (by July 1, 2014), 95% of newborn screening bloodspots (initial screens) will be received at the Arizona Public Health Laboratory within three days of collection

# Analysis

- Excessive batching
- Specimen shipping not occurring within 24 hours of collection
- Satellite locations for hospitals
- No courier services during holidays and Saturdays
- Negative impacts on knowledge transfer

# Analysis

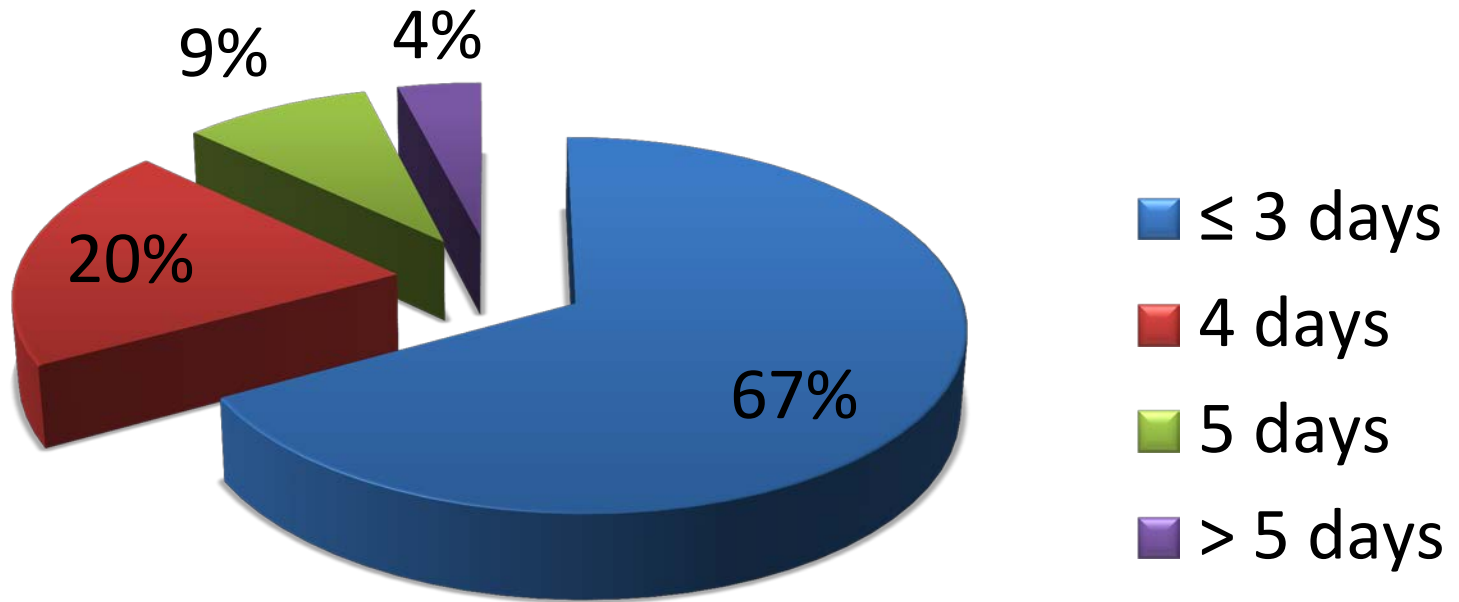
- Performance reports for Transit Time not available
- Lack of monitoring system to evaluate internal processes to ensure timely shipment in hospitals
- Availability of complimentary courier service

# January 2014

- Partnered with Arizona Perinatal Trusts, Arizona Hospital and Healthcare Association (AzHHA), and March of Dimes
- Baseline data released to hospital
  - CEOs, Director of Nursing, & Director of Laboratory



# 2013 Transit Time in Arizona



# February 2014

- Educational webinars for hospitals-Back to the basics, statewide goal, quality
- Hospital site visits-evaluation of processes and technical assistance
- Notification of website

# March 2014

- Hospital site visits
- Launch of the Transit Time Project webpage



- [Bureau of State Laboratory Services Home](#)
  - [Office of Newborn Screening Home](#)
  - [Information for Parents](#)
  - [Healthcare Providers](#)
  - [Testing & Specimen Collection](#)
  - [Transit Time Project](#)
  - [Ordering Supplies](#)
  - [News and Publications](#)
  - [Información en Español](#)
  - [Additional Resources](#)
  - [Data & Stats](#)
  - [Newsletters](#)
  - [Advisory Committee](#)
  - [50 Years of Newborn Screening](#)
  - [About Us](#)
  - [Contact Us](#)
- 
- [State Laboratory Services](#)
  - [Office of Newborn Screening](#)
  - 250 N 17th Avenue
  - Phoenix, AZ 85007
  - 602-364-1409
  - 800-548-8381
  - Deaf and Hard of Hearing call 711 for AZ Relay Service
  - [Email Us](#)

## Office of Newborn Screening

### Transit Time Project



Congratulations to the Arizona Hospitals and their achievement of the transit time goal.

[Home](#) | 
 [Hospital Performance](#) | 
 [Featured Hospitals](#) | 
 [FAQs](#) | 
 [Resources](#) | 
 [Site Visits](#)

The Milwaukee Journal Sentinel recently accessed de-identified information for Newborn Screening Programs nationwide through an open-records request. The Sentinel published their findings on delays in newborn screening testing due to delayed bloodspot delivery to the laboratory for testing (transit time). These findings revealed many opportunities for improvement.

In an effort to improve services to newborns and families, the Arizona Department of Health Services (ADHS) developed an internal taskforce to lead newborn screening transit time initiatives, effective January 2014. ADHS is committed to transparency, accountability, and increased partnership as stakeholder's progress towards meeting this new statewide goal.

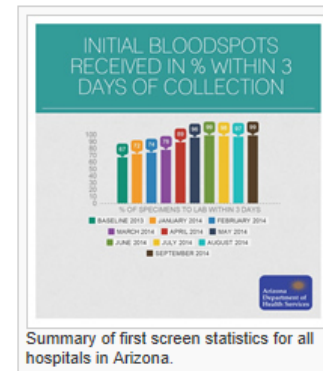
#### What does the Newborn Screening Transit Time Project offer?

- Information about the Newborn Screening Transit Time Project and new statewide goal
- Monthly performance reports for Arizona birth hospitals
- Answers to frequently asked questions about transit time
- Links to valuable resources
- Ability to request a site visit

#### What is the new goal for Arizona birth hospitals?

By July 1, 2014, 95% of all newborn screening bloodspots (initial screens) will be received at the Arizona State Laboratory within three (3) days of collection.

#### How is progress towards the transit time goal measured?



Summary of first screen statistics for all hospitals in Arizona.

- Statewide, peer to peer, and hospital
- Website allows access to two transit time performance reports; mean days and acceptance rate. These two performance reports should be used in combination to help determine progress towards the goal.



Congratulations to the Arizona Hospitals and their achievement of the transit time goal.

[Home](#) | [Hospital Performance](#) | [Featured Hospitals](#) | [FAQs](#) | [Resources](#) | [Site Visits](#)

### Hospital Performance

Hospital performance can be viewed individually and peer-to-peer. Peer-to-peer data allows hospitals to view their performance as it compares to birth hospitals with similar level of care. Hospitals can view their individual performance in average transit time (goal: within three days) and target acceptance percentage (goal: 95%). The peer groups were based on the [Arizona Perinatal Trust Certification Levels of Care](#).

**Level I** – Low risk OB patients; basic newborn care

**Level II** – Selected high risk OB patients; continuing care for newborns 32 weeks or greater

**Level IIE** – High risk OB patients; continuing care for newborns 28 weeks or greater

**Level III** – All OB and newborn patients, including those requiring subspecialty and intensive care at all gestational levels.

You can access the individual hospital data for each category and peer-to-peer performance using the links below:

<a href="#">Level I Hospitals</a>
<a href="#">Level II Hospitals</a>
<a href="#">Level IIE Hospitals</a>
<a href="#">Level III Hospitals</a>

You can access the individual hospital data for each category and peer-to-peer performance using the links below:

[Level I Hospitals](#)

[Level II Hospitals](#)

[Level IIE Hospitals](#)

[Level III Hospitals](#)

## Level I Hospitals

### Peer-to-Peer Performance - September 2014

Click on the links below to see the most recent hospital performance charts:

[Level I Average Transit Time Chart](#)

[Level I Initial Screens Received Within 3 Days Chart](#)

### Individual Hospital Data - September 2014

Hospitals can view their cumulative performance in average transit time (goal: within three days) and acceptance percentage (goal: 95%).

[Banner Page](#)

[Carondelet Holy Cross](#)

[Banner Casa Grande](#)

[Cobre Valley](#)

[Kingman Regional](#)

[Little Colorado Medical Center](#)

[Havasu Hospital](#)

[Mt. Graham](#)

[Payson Regional](#)

[Tempe St. Luke's](#)

[Valley View](#)

[Verde Valley](#)

[Western Arizona Regional Medical Center](#)

Note: All files provided in PDF format unless otherwise noted.

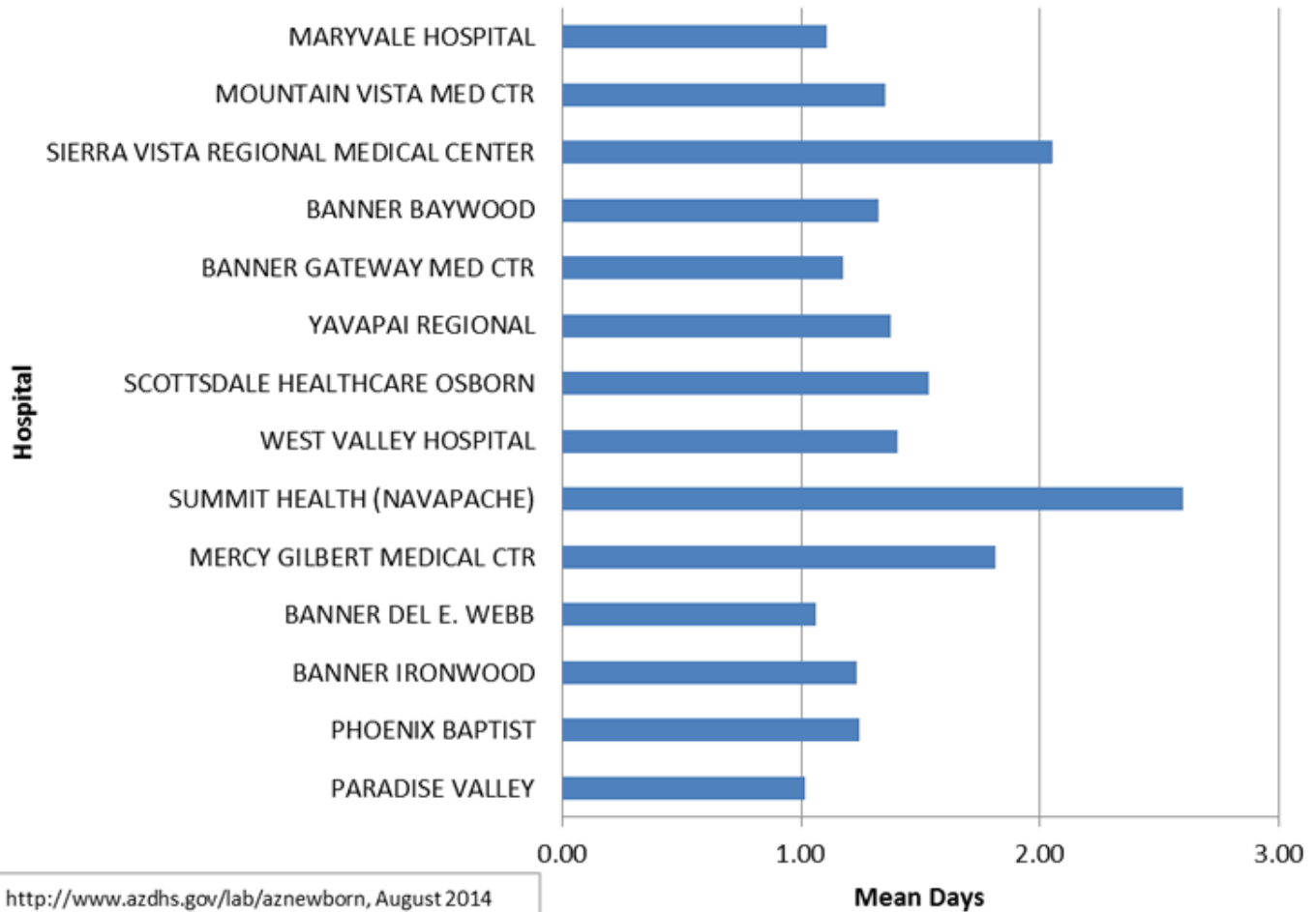


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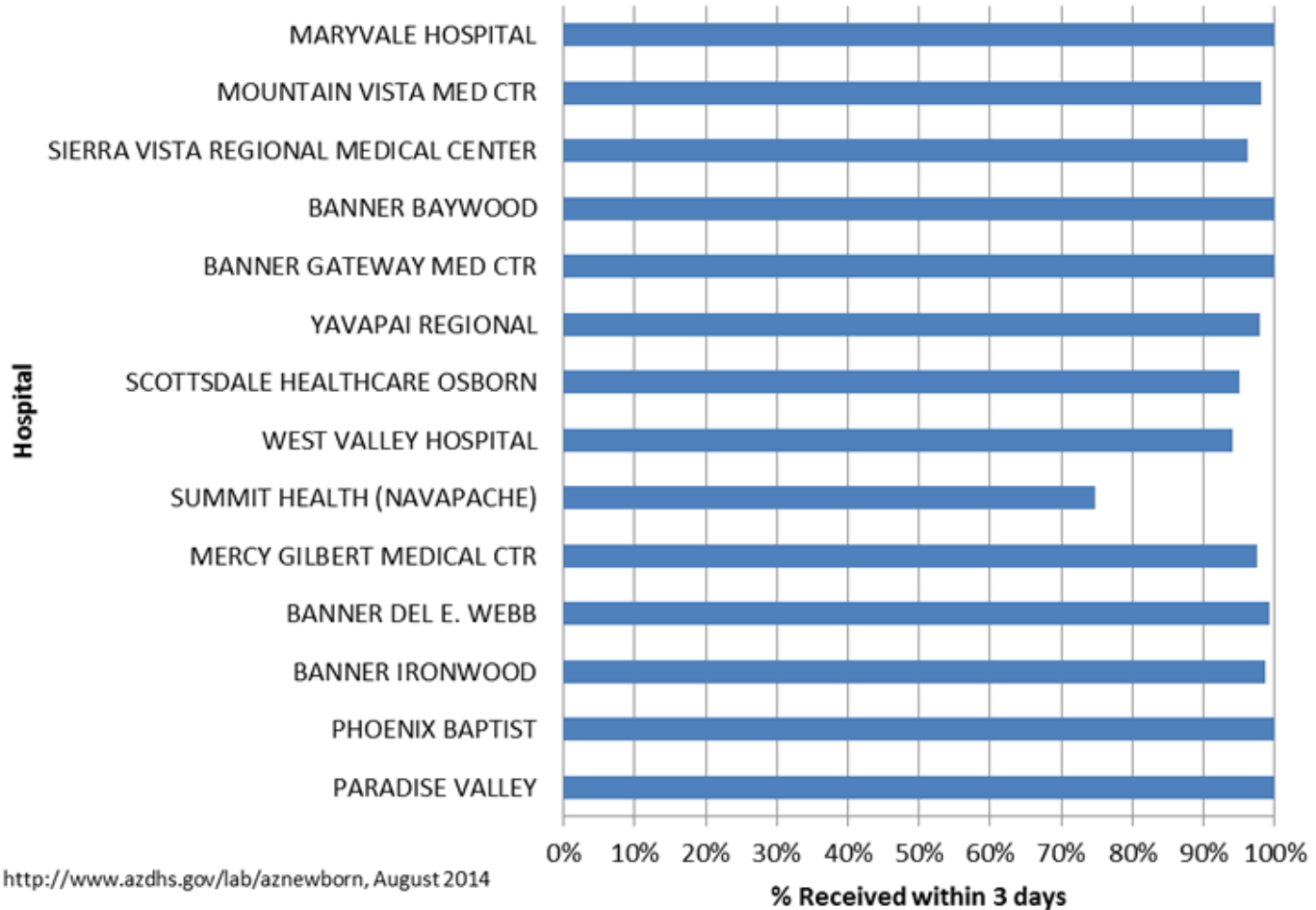
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## Level II Average Transit Time

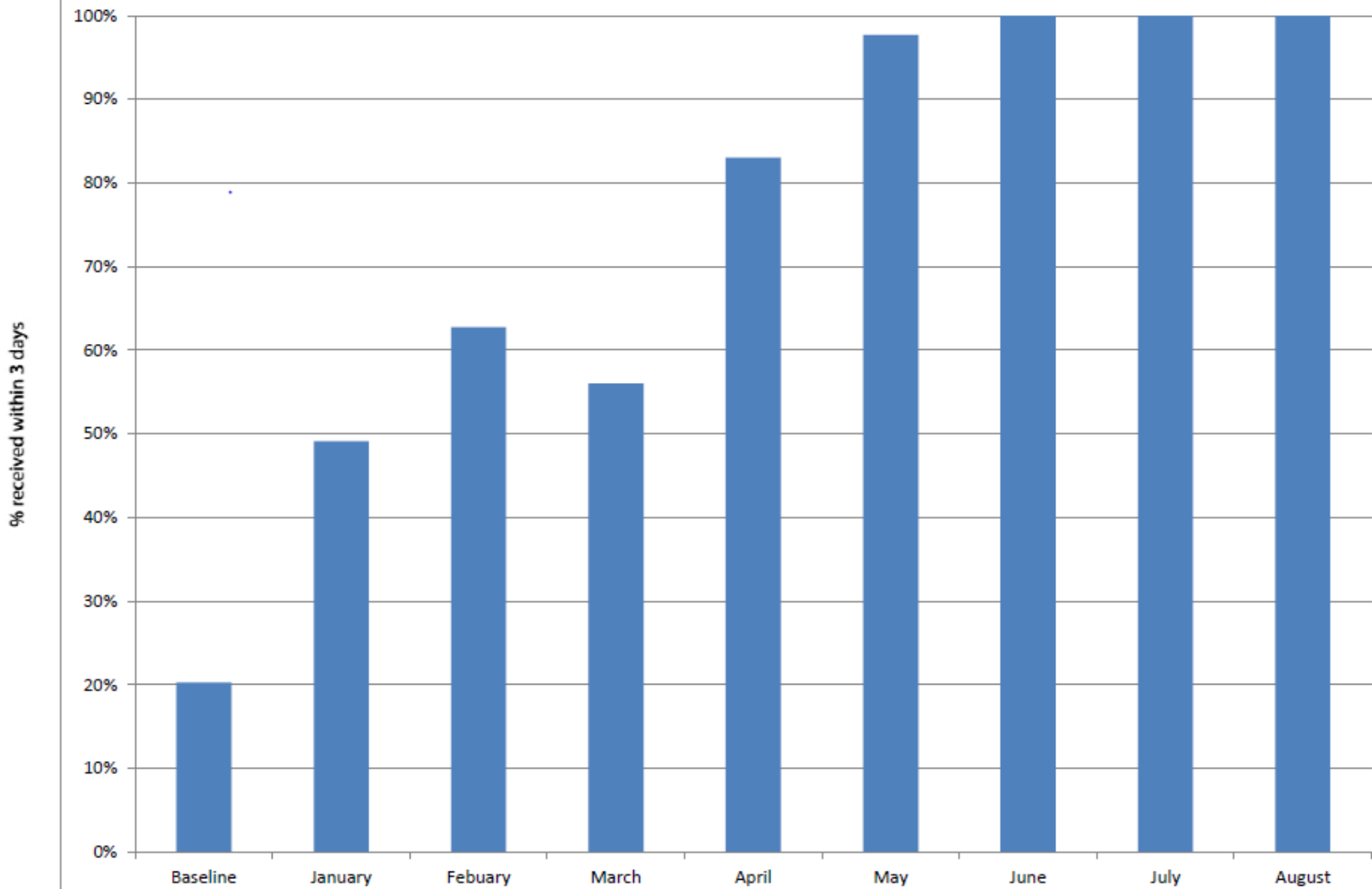




## Level II Initial screens received within 3 days



# BANNER CASA GRANDE

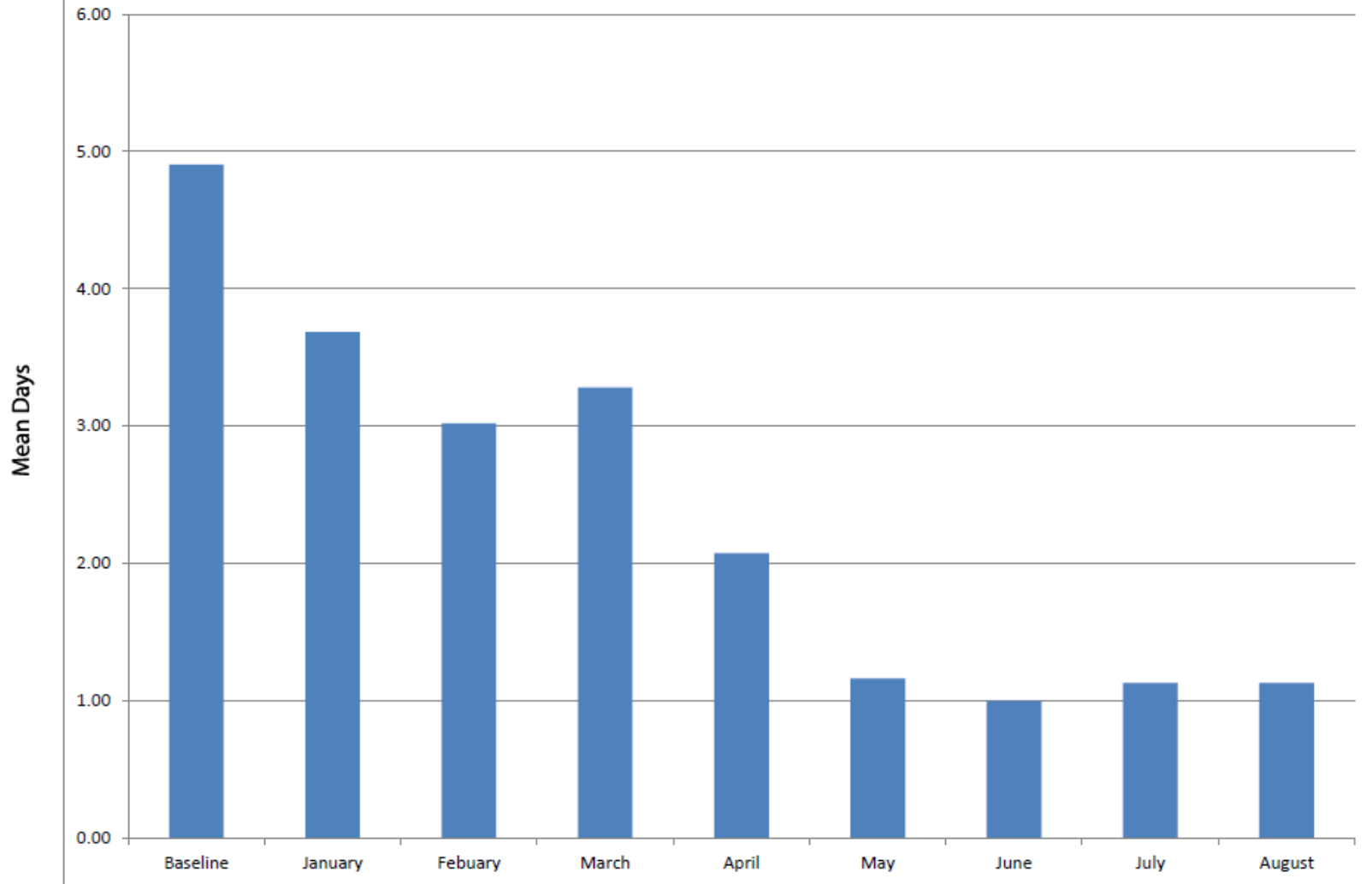


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## BANNER CASA GRANDE



# April 2014

- Implementation of statewide courier-EZ Messenger-Multi Tier approach
- Monday-Saturday pick up and delivery
- Pick up 8:00 AM-11:00 AM
- Same day or next business day delivery
- Lab open six days a week shipping/receiving area

# May/June 2014

- Webpage maintenance
- Logistical planning with courier service
- Communication!  
Communication!  
Communication!



Kaiden  
50 years of NBS

# Results

- In five months 99% of newborn screening bloodspots specimens (initial screens) collected at birth hospitals were received at the Arizona State Laboratory within one day of collection.









## March Of Dimes Honors Arizona With First-Ever Newborn Screening Award

Arizona Health Director Honored for Reforms to Avoid Deadly Delays

CHANDLER, ARIZONA — Thursday, September 18, 2014

# Time Commitment

- 1.40 FTE of ADHS staff time (SME, Project Manager, Epidemiologist)
- Biweekly project meetings with executive
- Weekly project deliverables

# Ongoing monitoring

- Providing detailed reports on a monthly basis to include the outliers
  - Medical Record #, date of collection, date of receipt
- September data 99%, average transit time of one day

# Acknowledgements

**Arizona Department of Health Services**

**Arizona Newborn Screening**

**All Laboratory staff**

**Arizona Birth Hospitals**

**EZ Messenger Courier Service**

**Arizona Hospital and Healthcare Association**

**March of Dimes**

**Arizona Perinatal Trust**



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Arizona NBS is committed to.....



Celia's cousin Ava

Quality  
Transparency  
Accountability  
Partnerships

Babies & Families of Arizona

**Thank you**

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**[www.aznewborn.com](http://www.aznewborn.com)**



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