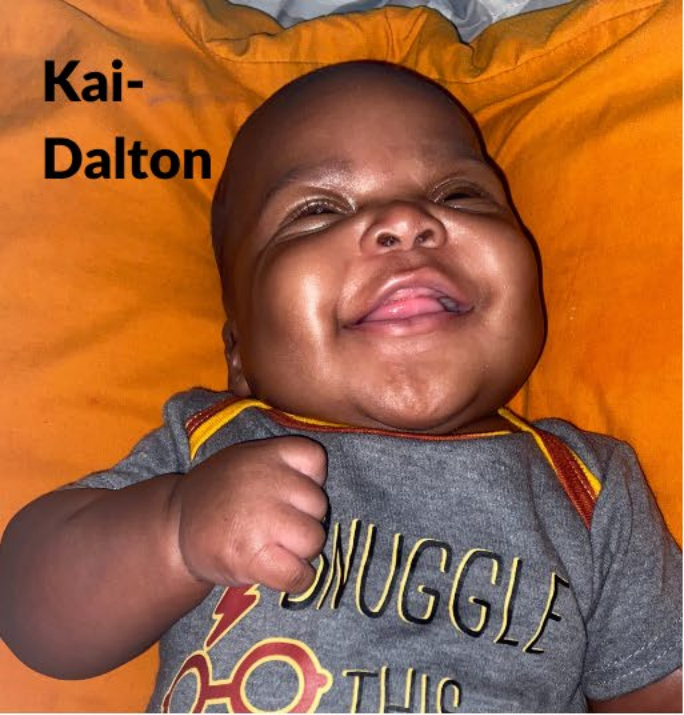


**Kai-  
Dalton**



**William**



**DJ**

**John Walker**



**Aspen**



**Carter**



**Ellis & Everly**



**Jovie**



**Nahla**

**Count  
the KICKS**



# Today's Presenters



**Megan Aucutt**  
Program Director, *Healthy Birth Day, Inc. – Count  
the Kicks*

[Aucutt.Megan@healthybirthday.org](mailto:Aucutt.Megan@healthybirthday.org)

**No Disclosures**

# Count the Kicks®



**ORAL HEALTH OFFICE**  
*Promoting Smiles Across a Lifetime*



# Stillbirth by the numbers

## National Data

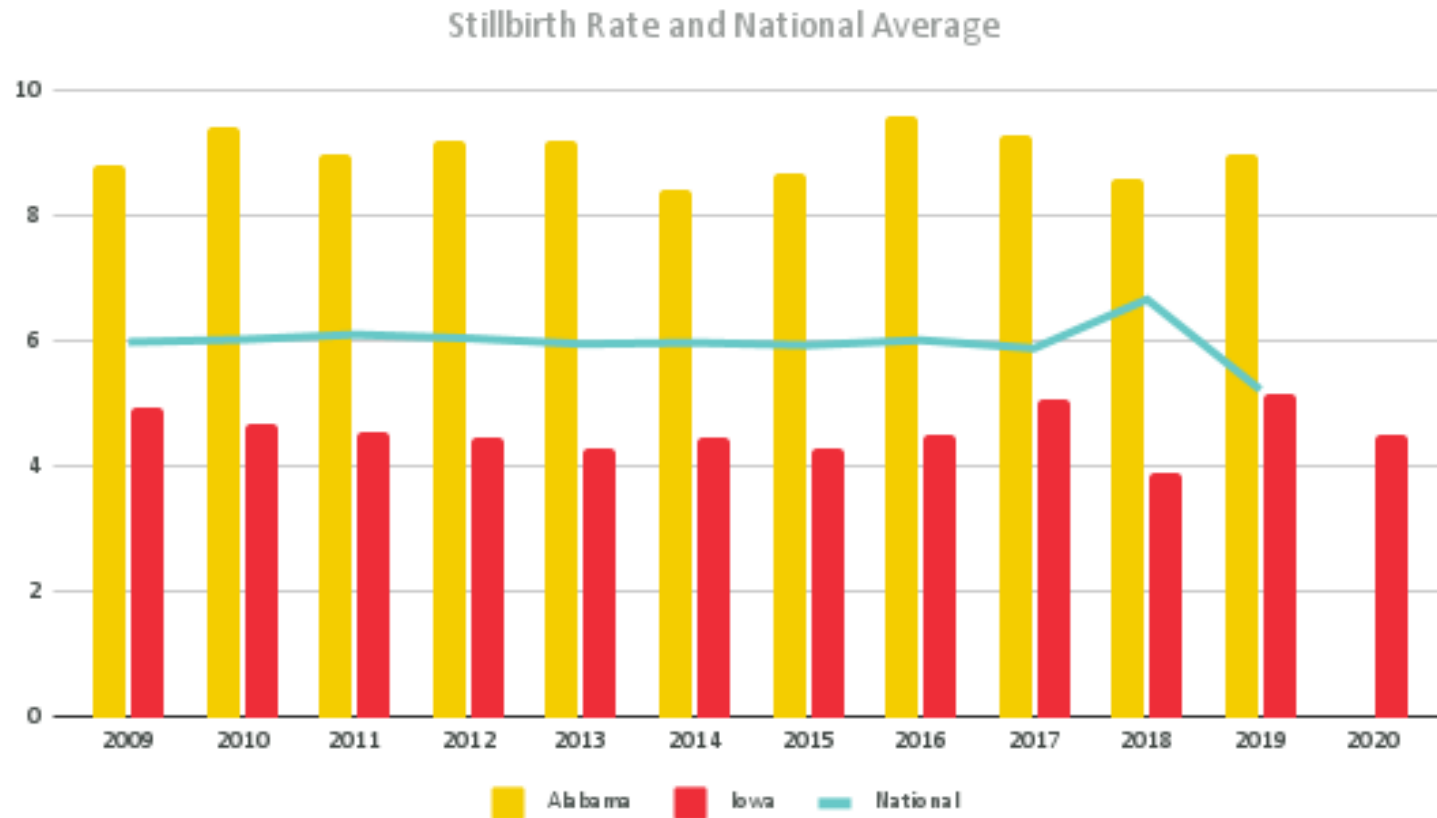
**Families are 6.5 times more likely to lose a baby to stillbirth than to SIDS**

- ▶ 1 in 173 pregnancies end in stillbirth<sup>1</sup>
- ▶ Racial disparities persist<sup>1</sup>
  - ▶ Native Hawaiian or Other Pacific Islander pregnancies: 1 in 94
  - ▶ Black pregnancies: 1 in 97
  - ▶ Indigenous pregnancies: 1 in 128
  - ▶ Hispanic pregnancies: 1 in 205
  - ▶ White pregnancies: 1 in 211
  - ▶ Asian pregnancies: 1 in 254



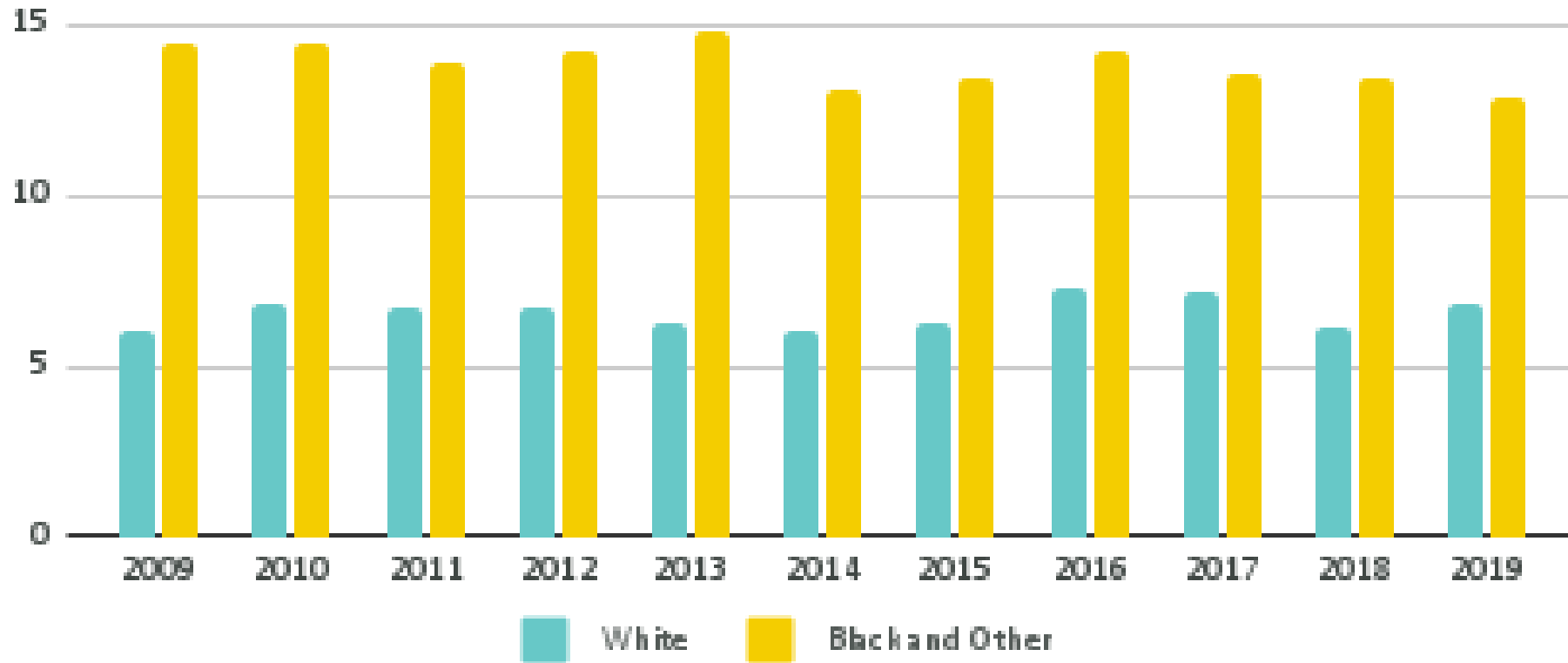
# Alabama Data

Stillbirth Rate: 8.85 per 1,000 live births (5-year average)  
1 out of 113 pregnancies in Alabama end in stillbirth  
Alabama loses approximately 527 babies to stillbirth each year.



- All Alabama data is based on stillbirth data from Alabama Vital Statistics. Fetal deaths does not include abortions.
- US data is from CDC Wonder
- Iowa stillbirth data is from Iowa Vital Statistics, IDPH
- Stillbirth rate is calculated by:  $Fetal\ Deaths / Total\ of\ Live\ Births + Fetal\ Deaths * 1,000$

# Stillbirth Disparities in Alabama:



- All Alabama data is based on stillbirth data from Alabama Vital Statistics. Fetal deaths does not include abortions.
- US data is from CDC Wonder
- Iowa stillbirth data is from Iowa Vital Statistics, IDPH
- Stillbirth rate is calculated by:  $\text{Fetal Deaths} / (\text{Total of Live Births} + \text{Fetal Deaths}) * 1,000$

# Setting the Stage

By 2018 - Over half of rural U.S. counties didn't have a hospital that provided Obstetric Care, as of 2018. The epidemic of closures is only growing worse, creating maternity birth deserts.

In rural areas, it is more common for family physicians to deliver babies than in urban areas where it is more common for OBGYN's and midwives to deliver.

The loss of hospital-based obstetric services in rural areas is associated with increases in out-of-hospital births and pre-term births, which may contribute to poor maternal and infant outcomes.

“The decreased access to birthing units can pose a dangerous risk as the United States is currently experiencing a sharp increase in maternal morbidity and mortality compared to other developed countries (World Bank, 2019).

Access to care is critical for maternal and infant well-being. Low rates of prenatal care through pregnancy are associated with increased adverse outcomes for the infant, including **stillbirth**, premature birth, low birthweight, being small for their gestational age, and having higher rates of admission into the neonatal intensive care unit (Malhi et al., 2019)





*Count the Kicks* is a highly effective, evidence-based stillbirth prevention program.



We developed a proven early warning system for moms.



We are saving 1 in 3 at-risk babies in Iowa.



# Fetal Movement Monitoring – Bridging the Gap

How can mHealth technology play a role?





# Research and evidence-based!



# Norway Study

BMC Pregnancy Childbirth. 2009; 9: 32.

PMCID: PMC2734741

Published online 2009 Jul 22. doi: [10.1186/1471-2393-9-32](https://doi.org/10.1186/1471-2393-9-32)

PMID: [19624847](https://pubmed.ncbi.nlm.nih.gov/19624847/)

## Reduction of late stillbirth with the introduction of fetal movement information and guidelines – a clinical quality improvement

[Julie Victoria Holm Tveit](#),<sup>1,2</sup> [Eli Saastad](#),<sup>2,3</sup> [Babill Stray-Pedersen](#),<sup>1</sup> [Per E Børdahl](#),<sup>4,5</sup> [Vicki Flenady](#),<sup>6</sup>  
[Ruth Fretts](#),<sup>7</sup> and [J Frederik Frøen](#)<sup>1,2,7</sup>

- Educated expectant parents on getting to know baby's normal movement, and to speak up if you notice a change
- 30% reduction in Norway's stillbirth rate
- Dr. Ruth Fretts, original researcher, now sits on our Medical Advisory Board

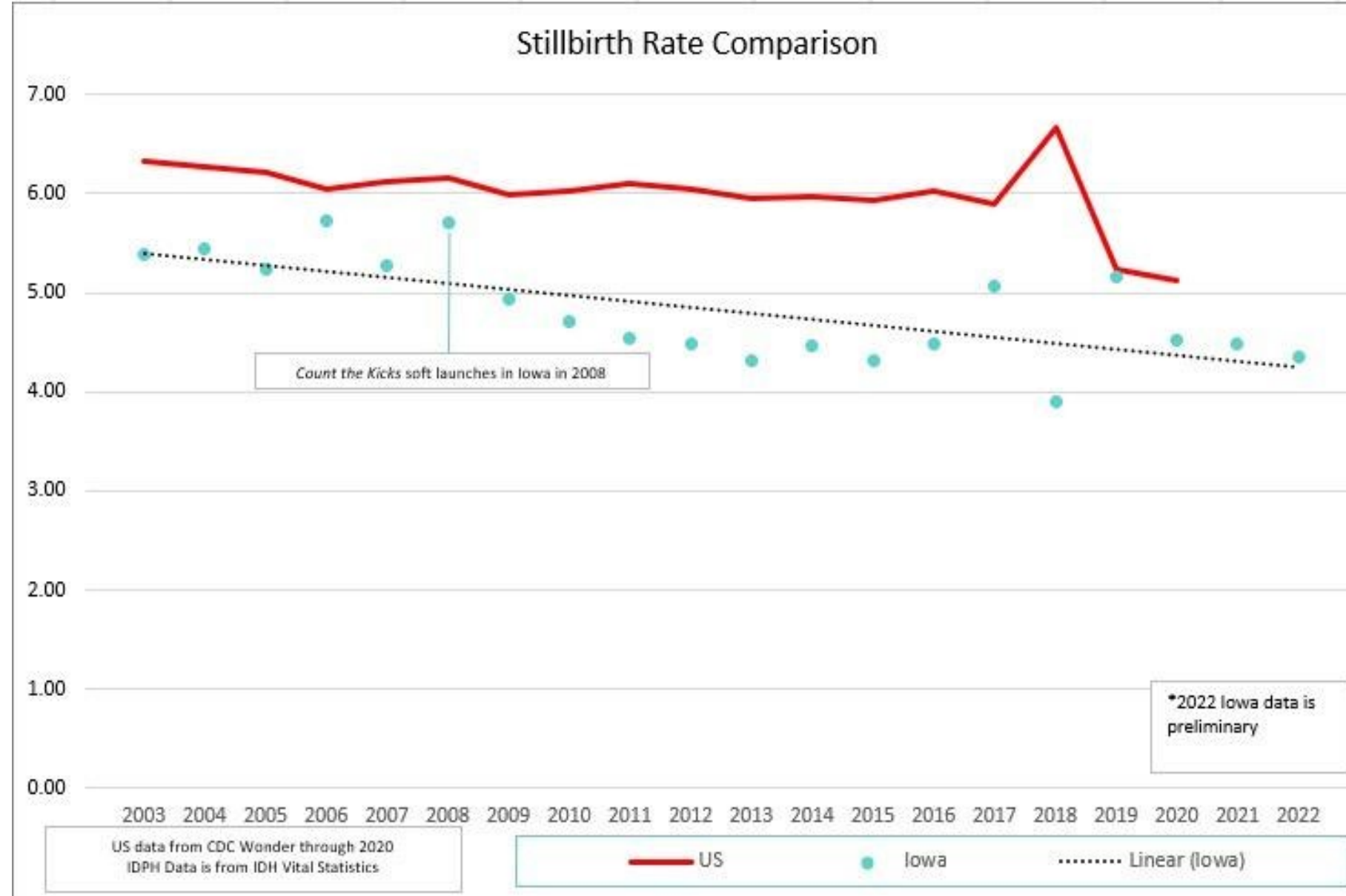
# Count the Kicks Evidence

Published in AJOG and BJOG, evidence shows that expectant parents who utilize *Count the Kicks* have better birth outcomes.



Research shows Iowa's stillbirth rate declined one percent every three months for a decade while the U.S. remained relatively stagnant.

Iowa's African American stillbirth rate decreased by 39% in the first five years of our program.



Source: Iowa Department of Health + Human Services vital statistics 2003-2022





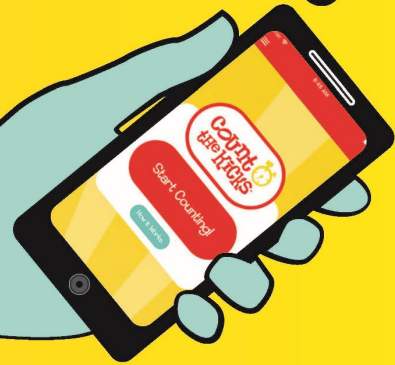
**167** Alabama babies  
could be saved every year  
with our program



# Meet Alabama Baby Saves

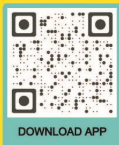


# 3<sup>rd</sup> trimester?



## Start Counting!

Counting kicks is what you should do. It's important and easy too!  
**ASK HOW. ASK NOW.**



Download the **FREE** **Count the Kicks**® app today!

 [counthekicks.org](https://www.counthekicks.org)

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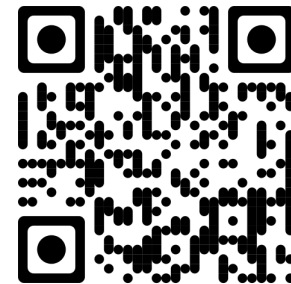
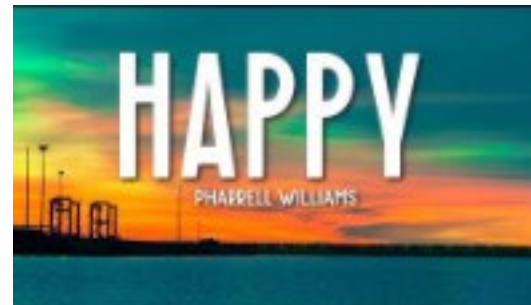


The International Childbirth Education Association endorses Healthy Birth Day, Inc.®, and the Count the Kicks® stillbirth prevention campaign.

## Free Educational Materials

- ▶ Posters in English and Spanish
- ▶ App Card Reminders in English and Spanish
- ▶ Brochures in English and Spanish
- ▶ Additional free resources like printable kick-counting charts

[www.CountTheKicks.org](http://www.CountTheKicks.org)



# No Adverse Effects

## No increase in hospital utilization

- ▶ “...Usually, the fetal movement count (FMC) is reassuring to pregnant women and **prevents unnecessary visits.**”
- ▶ “Decreased fetal movement can indicate a need for more evaluation and has the potential to save lives. There is a worse outcome in pregnancies with reduced fetal movement, with one study demonstrating the highest incidence of poor outcomes in small for gestational age fetuses.”

## No increase in anxiety among pregnant people

- ▶ **84%** of app users stated that regular tracking was associated with **feelings of bonding** and
- ▶ **77%** of app users reported feeling **LESS anxious**

1. Bryant J, Jamil RT, Thistle J. Fetal Movement. [Updated 2020 Nov 30]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK470566/>

2. Lyndi Buckingham-Schutt, PhD, RDN, LD, Pamela A. Duffy, PhD, PT, OCS, Benjamin Williamson, DMU-MPH-24, Ashley Armantrout, DMU-DO-20, & Kerry Biondi-Morlan, MA

1The Harkin Institute for Public Policy & Citizen Engagement, Drake University 2DMU Department of Public Health 3Healthy Birth Day, Inc. “Using Technology to Monitor Baby: the Use of mHealth to Improve Fetal Outcomes.” <https://doi.org/10.1016/j.ajog.2021.11.774>



# Maternal Fetal Movement Monitoring has additional benefits

- ▶ Reduction of preterm birth rate\*
- ▶ Fetal growth restrictions identified earlier\*
- ▶ Women who have stillbirths are at substantially higher risk for severe maternal morbidity than women who have live births, regardless of cause of fetal death.\*\*

“Due to the low cost and potential benefit, it is recommended. Decreased fetal movement can indicate a need for more evaluation and has the potential to save lives.”\*

\*Bryant J, Jamil RT, Thistle J. Fetal Movement. [Updated 2020 Nov 30]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK470566/>

\*\*Wall-Wieler, E., Carmichael, S. L., Gibbs, R. S., Lyell, D. J., Girsan, A. I., El-Sayed, Y. Y., & Butwick, A. J. (2019). Severe Maternal Morbidity Among Stillbirth and Live Birth Deliveries in California. *Obstetrics and gynecology*, 134(2), 310–317. <https://doi.org/10.1097/AOG.0000000000003370>



## Stillbirth in the U.S. Report

# The Link Between Stillbirth and Maternal Mortality and Morbidity: **Firsthand Accounts from American Women**



- ▶ The report includes firsthand accounts from 8 women who shared how speaking up about a change in their baby's movement not only helped their baby to have a safe arrival, but also identified and addressed pregnancy complications that put their own life at risk.
- ▶ It is imperative that providers are proactively discussing stillbirth prevention (or risk factors) with their patients and providing evidence-based solutions like Count the Kicks to every patient they work with.



**Read the Report**

# Implementation of *Count the Kicks*



# MOVEMENTS MATTER – Let's Start Counting!

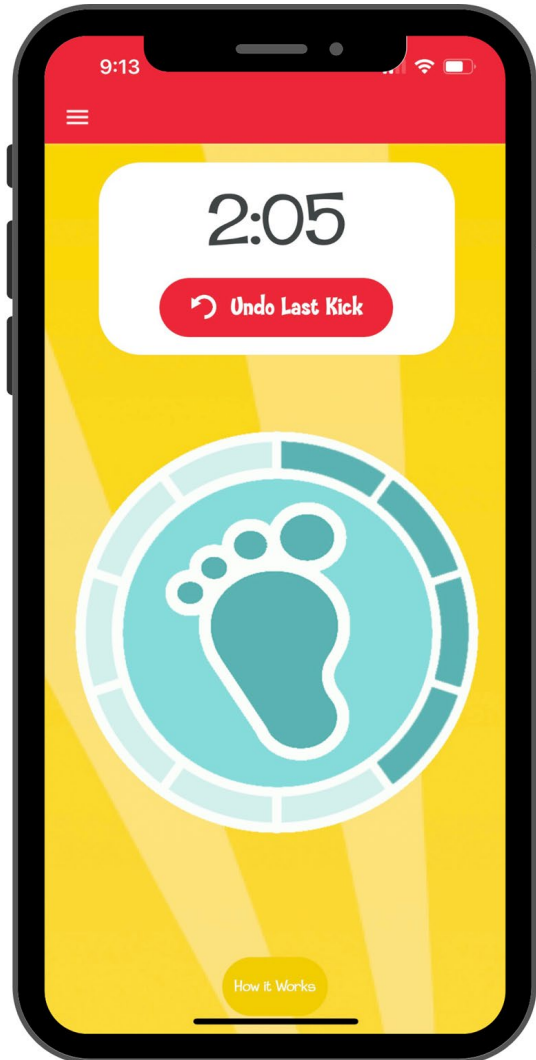
## When should a mom start counting movements?

- ACOG recommends beginning counting at 28 weeks gestation or 26 weeks if considered high risk or pregnant with multiples. This is when research indicates baby has established a consistent pattern that mom can feel and track.

## What counts as a movement?

- Rolls, kicks, jabs, swishes, pushes – anything EXCEPT for hiccups (these are involuntary movements).

# Count the Kicks App Features

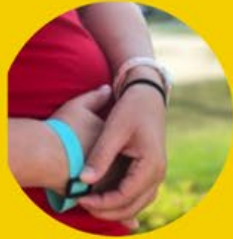


- Our FREE app is evidence-based and available in [16 languages](#)
- Available for Apple and Android products
- Users can restart their session or delete a kick
- **Set a daily reminder to *Count the Kicks***
- Review kick-counting history
- Download history to share with their provider, family or friends via text or email
- Monitor the strength of baby's movements





# Health Equity at the Center



**Kick Counting  
Bracelets**



**App in 16 Languages**

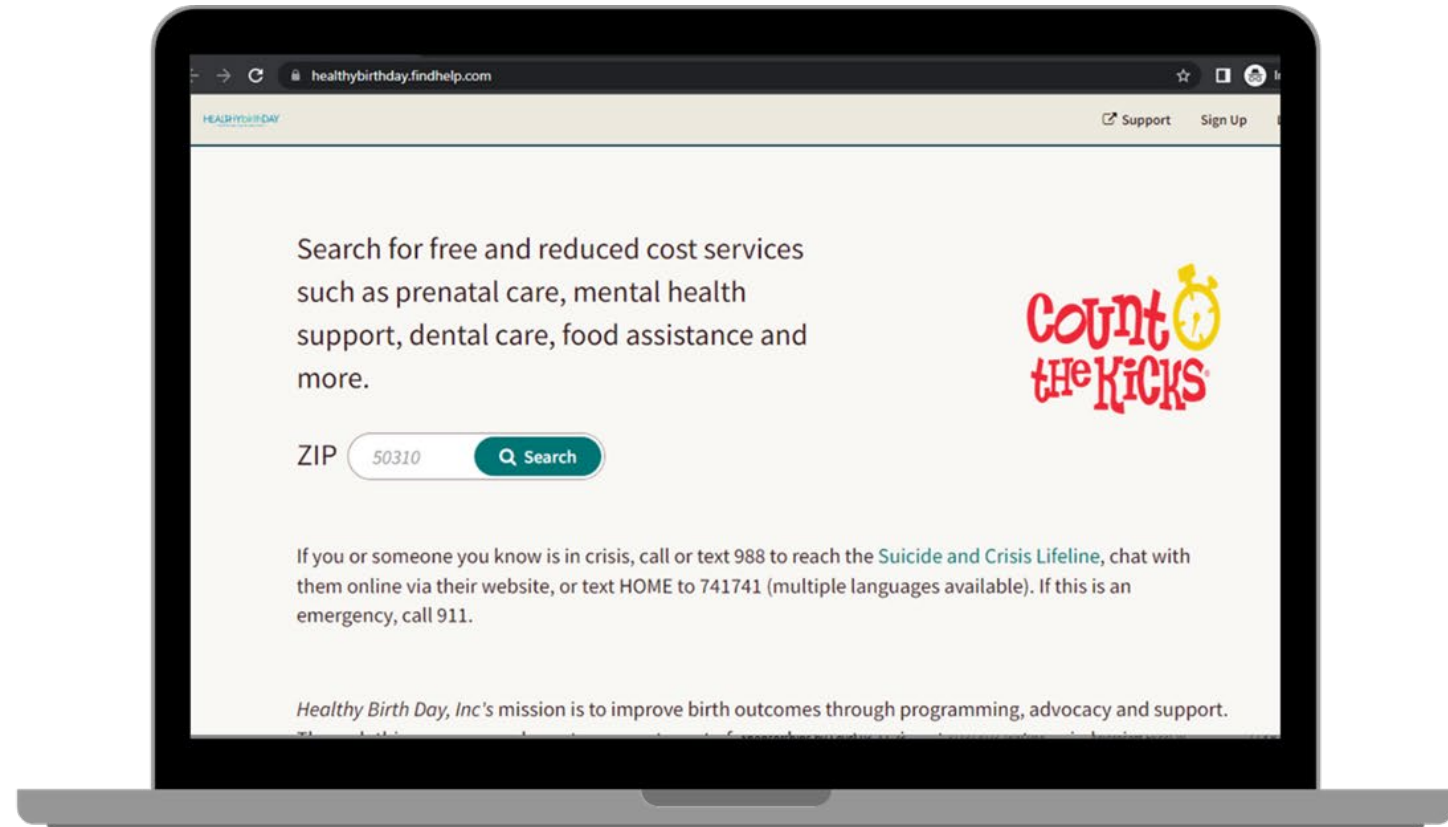
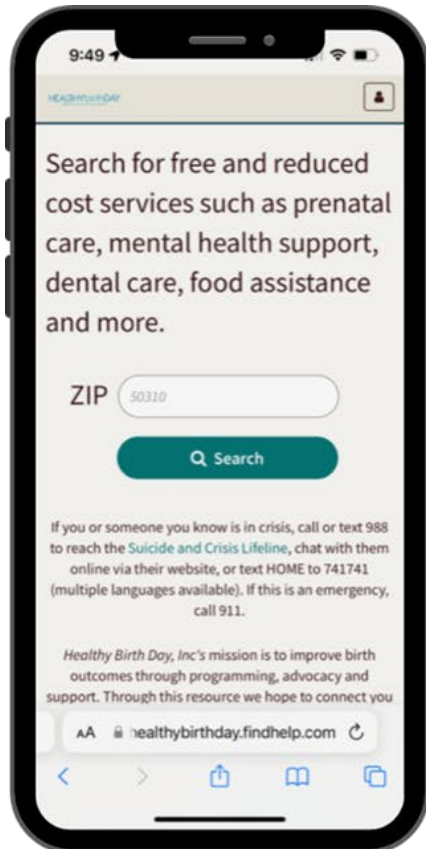


**Social Determinants  
of Health Survey**



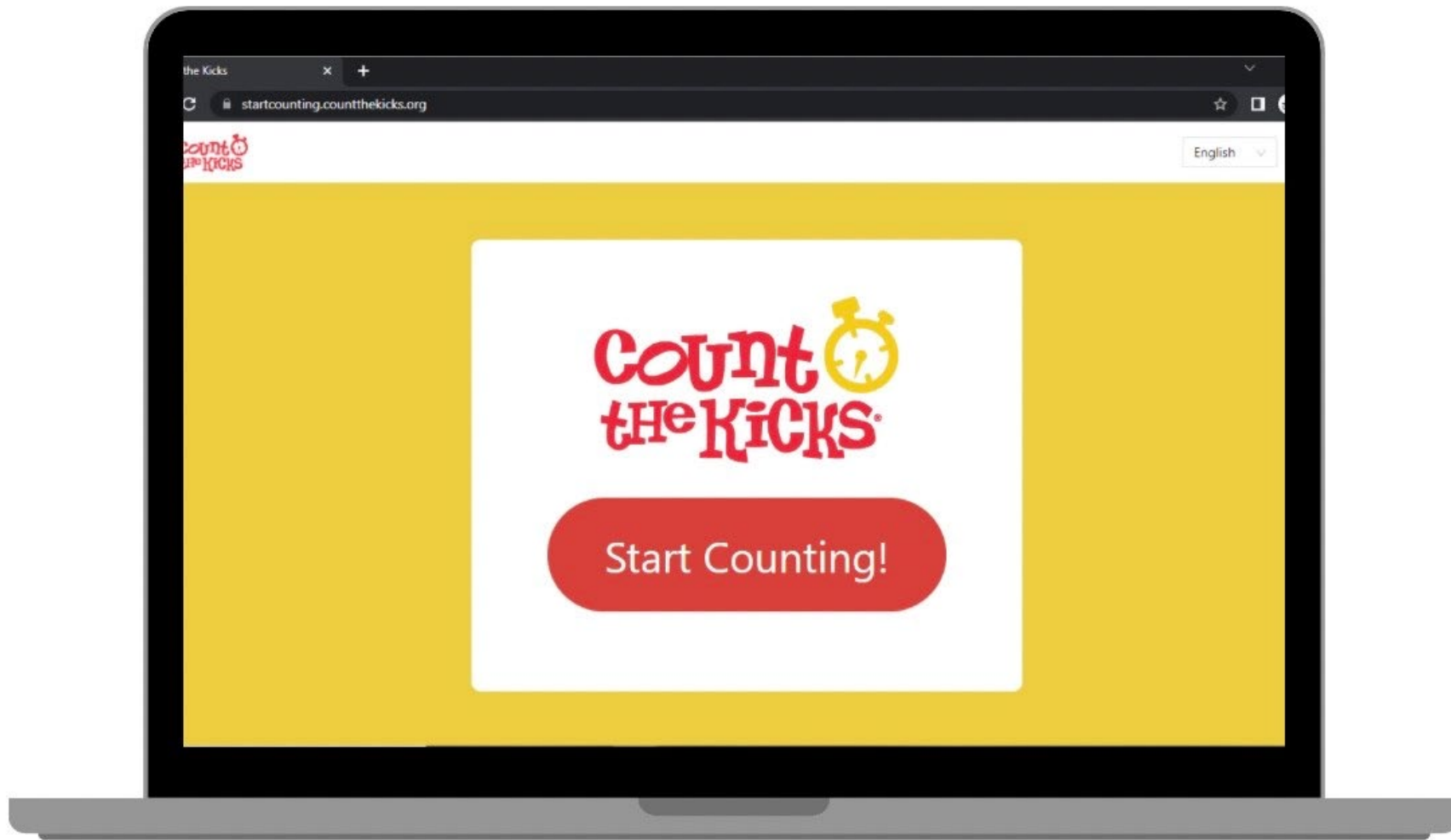
**Non-Traditional  
Providers**

# Find Local Resources



Visit [www.HealthyBirthDay.findhelp.org](http://www.HealthyBirthDay.findhelp.org) to search for free and reduced cost resources in your local community.





# CE Training: 2.25 CEs

The purpose of this educational activity is to train healthcare professionals how to talk to their patients about fetal monitoring and using best practices to track fetal monitoring.

► [Register Here:](#)

[bit.ly/savebabiesCTK](https://bit.ly/savebabiesCTK)

**Code – savebabies-AL**



# Kick Counting Charts are Also Available!

Week #: \_\_\_\_\_ Start Date: \_\_\_\_\_

How long does it take for baby to move 10 times?

| Day             | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-----------------|--------|---------|-----------|----------|--------|----------|--------|
| Start time      | ⊙      | ⊙       | ⊙         | ⊙        | ⊙      | ⊙        | ⊙      |
| Count the kicks |        |         |           |          |        |          |        |
| End time        | ⊙      | ⊙       | ⊙         | ⊙        | ⊙      | ⊙        | ⊙      |
| Minutes         |        |         |           |          |        |          |        |

Find the pattern

| Minutes | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|-----------|----------|--------|----------|--------|
| 0       |        |         |           |          |        |          |        |
| 10      |        |         |           |          |        |          |        |
| 20      |        |         |           |          |        |          |        |
| 30      |        |         |           |          |        |          |        |
| 40      |        |         |           |          |        |          |        |
| 50      |        |         |           |          |        |          |        |
| 1 hour  |        |         |           |          |        |          |        |
| +10     |        |         |           |          |        |          |        |
| +20     |        |         |           |          |        |          |        |
| +30     |        |         |           |          |        |          |        |
| +40     |        |         |           |          |        |          |        |
| +50     |        |         |           |          |        |          |        |
| 2 hours |        |         |           |          |        |          |        |

Week #: \_\_\_\_\_ Start Date: \_\_\_\_\_

How long does it take for baby to move 10 times?

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|-----------------|--------|---------|-----------|----------|--------|----------|--------|
| Start time      | ⊙      | ⊙       | ⊙         | ⊙        | ⊙      | ⊙        | ⊙      |
| Count the kicks |        |         |           |          |        |          |        |
| End time        | ⊙      | ⊙       | ⊙         | ⊙        | ⊙      | ⊙        | ⊙      |
| Minutes         |        |         |           |          |        |          |        |

Find the pattern

| Minutes | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|-----------|----------|--------|----------|--------|
| 0       |        |         |           |          |        |          |        |
| 10      |        |         |           |          |        |          |        |
| 20      |        |         |           |          |        |          |        |
| 30      |        |         |           |          |        |          |        |
| 40      |        |         |           |          |        |          |        |
| 50      |        |         |           |          |        |          |        |
| 1 hour  |        |         |           |          |        |          |        |
| +10     |        |         |           |          |        |          |        |
| +20     |        |         |           |          |        |          |        |
| +30     |        |         |           |          |        |          |        |
| +40     |        |         |           |          |        |          |        |
| +50     |        |         |           |          |        |          |        |
| 2 hours |        |         |           |          |        |          |        |



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©2018 Healthy Birth Day



Print this page 6 times to count weeks 28-40!



## Did You Know?

Health literacy is one of the strongest indicators of an individual's health status.



# Five ways to improve the conversation

**Be Equitable:** Avoid assumptions and provide ALL expectant parents -- no matter, race, gender, religion, socio-economic status, sexual orientation, marital status OR education level -- the SAME information and interaction.

**Listen & Learn:** Ask strategic & open-ended questions about kick counting to help you assess what the individual patient understands, feels and desires.

**Be Clear & Concise:** Avoid long or complex explanations & medical terminology - consider everyday vocabulary.

**Be Honest:** Speak truth while still practicing empathy / compassion.

**Re-teach** - If a patient displays confusion or a lack of understanding, make sure to correct & clarify. Provide EXTRA support to those who need it.

# False: Common Misconceptions



FALSE

**My baby is always active, so I don't need to count kicks.**



FALSE

**Only those experiencing a high-risk pregnancy should pay attention to their baby's movement.**



FALSE

**My baby should get 10 kicks in 2 hours.**



FALSE

**I can just use a Doppler device to monitor my baby's well-being.**



# False: Common Misconceptions



**FALSE**

**If baby isn't moving, I should drink something cold or eat something sugary to get baby moving.**



**FALSE**

**Babies kick less near the end of pregnancy.**



**FALSE**

**Triage doesn't need any *Count the Kicks* education.**

# Connect.the.Dots



## How can you integrate this into your system?

Ensure everyone on the team knows about Count the Kicks and how to talk about fetal movement monitoring

Include Count the Kicks in paperwork – intake forms, action plans

Discuss at every parent meeting

Share throughout the community



# Resources

# CE Training: 2.25 CEs

The purpose of this educational activity is to train healthcare professionals how to talk to their patients about fetal monitoring and using best practices to track fetal monitoring.

► [Register Here:](#)

[bit.ly/savebabiesCTK](https://bit.ly/savebabiesCTK)

Savebabies-AL (free)



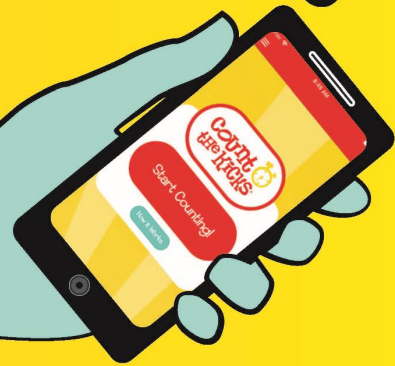
## Save Babies With Us!

A Healthcare Professional's Guide on Talking to Expectant Parents about Count the Kicks and Fetal Monitoring!

Visit [bit.ly/CTK-CE-Training](https://bit.ly/CTK-CE-Training) to register today!

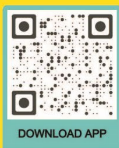


# 3<sup>rd</sup> trimester?



## Start Counting!

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what you should do.  
It's important and easy too!  
**ASK HOW. ASK NOW.**



Download the **FREE**  
**Count the Kicks**® app today!

 [countthekicks.org](https://www.countthekicks.org)

**HEALTHY**  
**birthDAY**  
IMPROVING BIRTH OUTCOMES

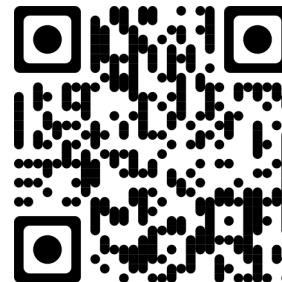
**SA**  
strategic alliance

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Healthy Birth Day, Inc.®, and the Count the Kicks® stillbirth prevention campaign.

## Free Educational Materials

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[www.CountTheKicks.org](http://www.CountTheKicks.org)



**Count**  
**the Kicks**

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**Good oral  
health and kick  
counting go  
hand-in-hand.**



**ORAL HEALTH OFFICE**  
*Promoting Smiles Across a Lifetime*



# What is a *Count the Kicks* Ambassador?

*Count the Kicks* has ambassadors in many states across the U.S.

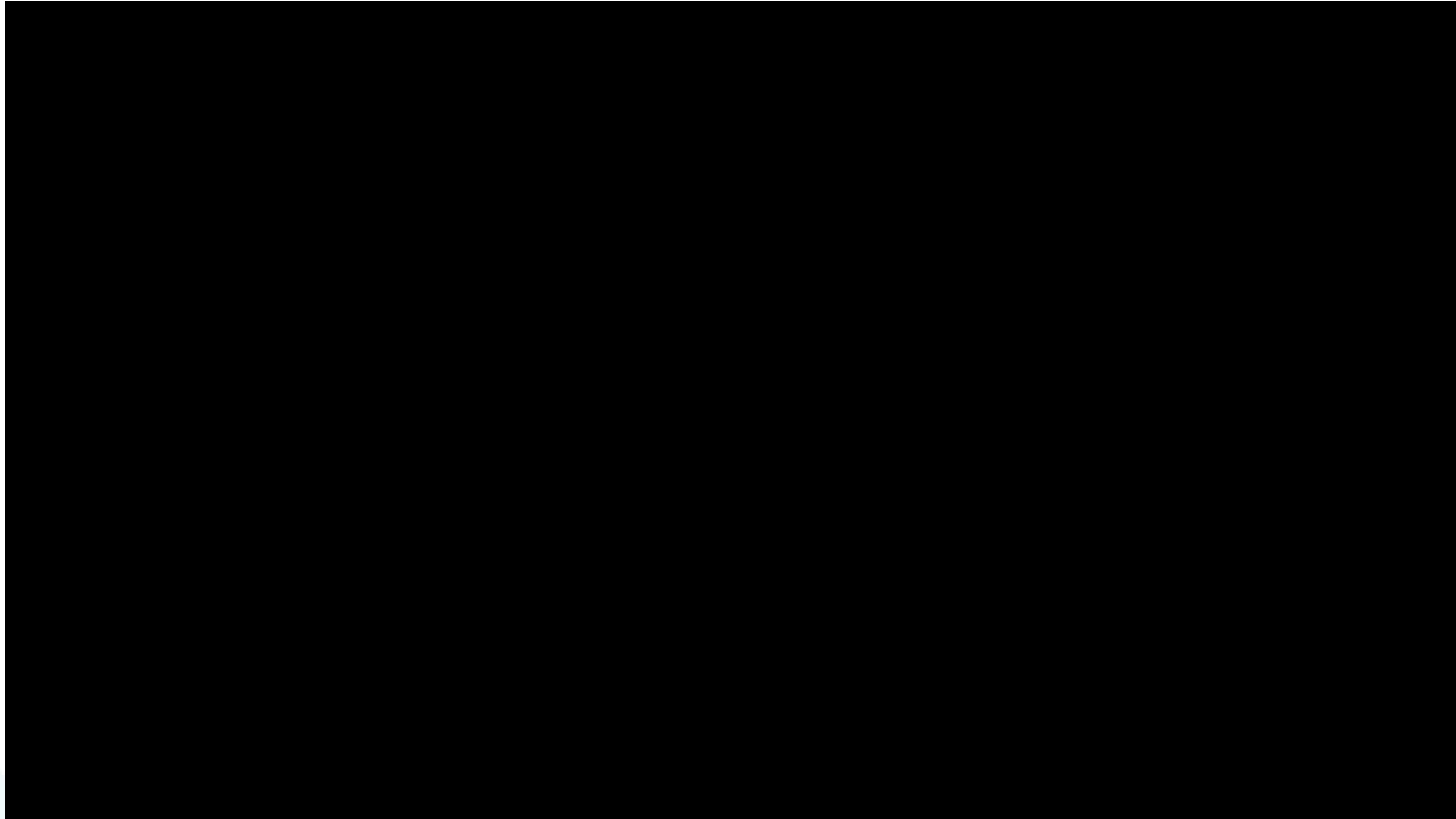
These women are volunteers who are passionate advocates due to their own personal experiences.

Ambassadors attend a variety of events such as medical conferences and baby fairs, give media interviews, work to grow partnerships, fundraise, and more.





# Baby Saves: 110 & Counting!














## Follow Us on Social Media!

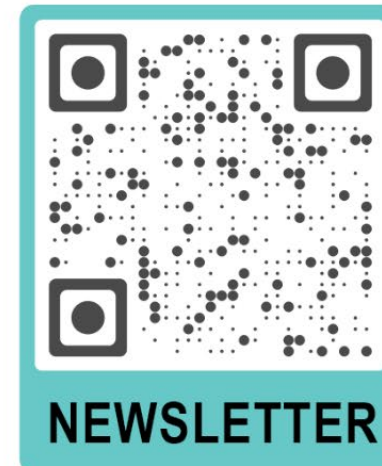
Follow *Count the Kicks* and *Healthy Birth Day, Inc.* to learn more about our work to improve birth outcomes and make kick counting a common practice for all expectant parents.

**HEALTHY**  
**birthDAY**  
IMPROVING BIRTH OUTCOMES

-  @healthybirthday
-  @healthybirthdayinc
-  @Healthy\_Birth
-  Healthy Birth Day Inc.

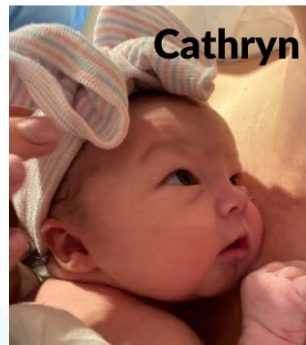
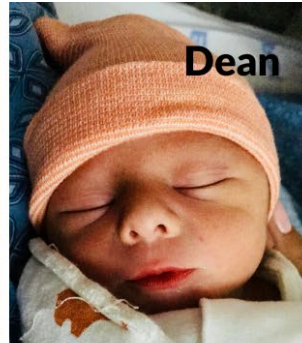
**Count**  
**the KICKS**

-    @countthekicks
-  @countthekicksus
-  @countthekicksUS



**Count**  
**the KICKS**

# We want to help save babies with you.



[www.CountTheKicks.org](http://www.CountTheKicks.org)



Questions?



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1The Harkin Institute for Public Policy & Citizen Engagement, Drake University 2DMU Department of Public Health 3Healthy Birth Day, Inc. “Using Technology to Monitor Baby: the Use of mHealth to Improve Fetal Outcomes.” DOI:<https://doi.org/10.1016/j.ajog.2021.11.774>

<https://www.ajc.com/news/coronavirus/walmart-ij-partner-to-tackle-georgias-black-maternal-health-crisis/QBGYFF7XTBA4LEVTVOQD76CGMI/>

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf

