



## Tennessee Efforts to Reduce Infant Mortality

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### Calendar of Events

Events relating to helping children are available at: [www.tn.gov/tccy/webcalen.pdf](http://www.tn.gov/tccy/webcalen.pdf).

### TCCY

For more information on the Tennessee Commission on Children and Youth and its programs, check out the website at [www.tn.gov/tccy](http://www.tn.gov/tccy).

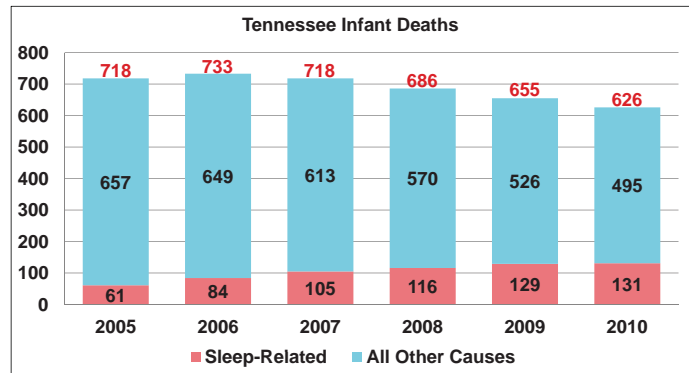
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Tennessee was pleased to rank 36<sup>th</sup> in child well-being in the 2012 KIDS COUNT National Data Book, its highest ranking ever. However, the health domain, one of the four on which the ranking was based and the one with the state's highest ranking, contained some areas of concern. The state ranked in the bottom 20 percent in the rate of low birthweight babies. The Annie E. Casey Foundation now uses low birthweight as a broader measure of birth outcomes than infant mortality.

### Infant Mortality Trends 2005-2010



Sources: Tennessee Department of Health, Division of Health Statistics; Tennessee Child Fatality Review

### Causes of Infant Mortality

- Sudden infant death (SIDS) syndrome and other sleep-related deaths;
- Preterm and low birthweight births;
- Birth defects;
- Maternal complications;
- Accidents.

Infant mortality (the death of an infant before the first birthday) accounts for 61 percent of the deaths to children in Tennessee. Infant mortality rates have dropped fairly consistently since records have been kept and fell by 75 percent between 1960 and 2000. However, the decline slowed after 2000. Efforts to prevent low birthweight and infant mortality continue on many fronts, and modern health care has improved outcomes for babies born too early and at risk.

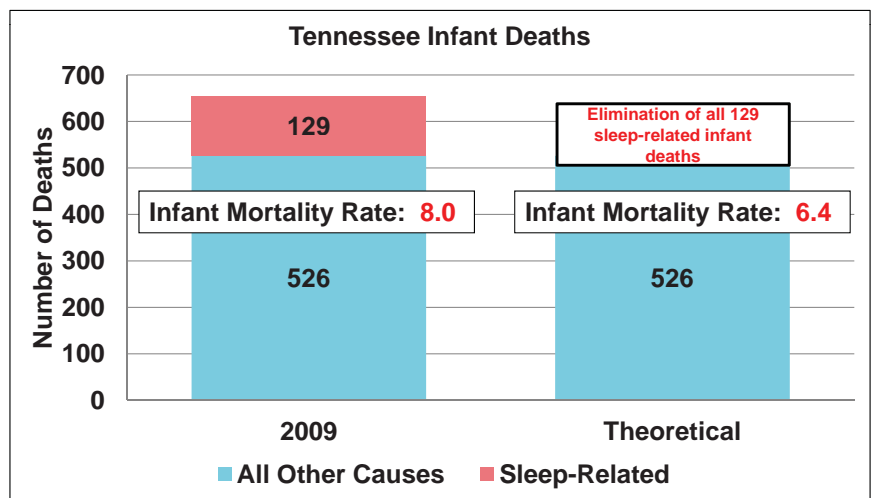
Based on 2008 numbers, Tennessee ranked 43<sup>rd</sup> in infant mortality, with a rate of 8.1, and 41<sup>st</sup> in preterm births, with a rate of 13.5.

A report by the Congressional Research Service identified the top three causes of the high U.S. infant mortality rate as congenital malformations/birth defects, low birthweight/preterm births and sudden infant death syndrome (SIDS). U.S. infant mortality rates vary geographically, with Southern states generally having higher rates. Health system characteristics and individual health and demographic characteristics contribute to geographic differences, and higher Southern rates are also connected with low birthweights and shorter pregnancy terms.

### Sleep-Related Deaths

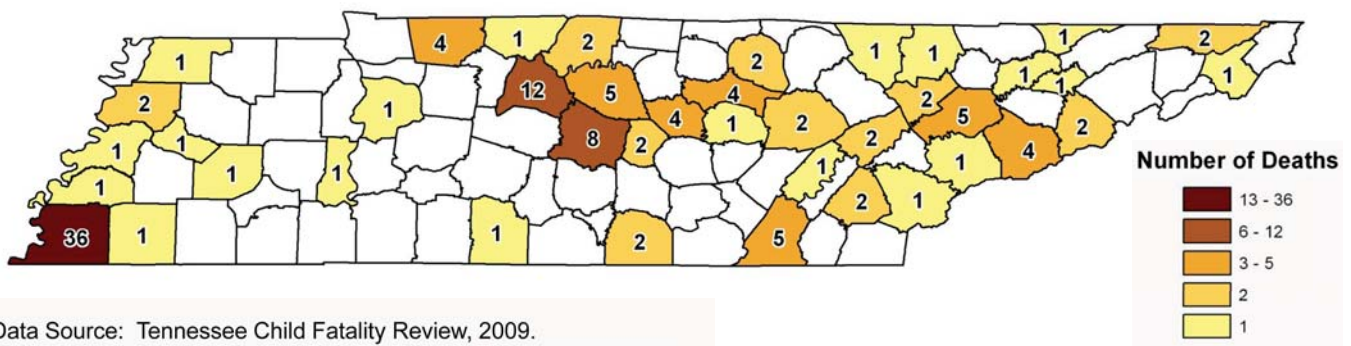
October is SIDS Awareness Month, which also focuses on other sleep-related deaths. SIDS deaths have continued to decline. The Tennessee Department of Health is working to prevent these deaths with its Safe Sleep program. The national Back to Sleep outreach teaching parents how to place their babies in cribs has been successful. In 2010 less than one-tenth of one percent of children’s deaths were attributed to SIDS. However, the number of other types of sleep-related deaths has risen. Tennessee SIDS and sleep-related deaths in 2010 totaled 143. One hundred of the babies who died in their sleep were sleeping with other people.

## Impact of Eliminating Sleep-Related Deaths



Source: Tennessee Department of Health

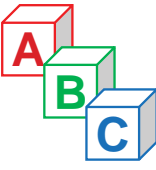
## Sleep-Related Infant Deaths, Excluding SIDS By County, 2009



Data Source: Tennessee Child Fatality Review, 2009.  
Map: Tennessee Department of Health, Division of Health Statistics.

Tips for preventing sleep-related deaths:

1. Avoid smoking and alcohol and drug use during pregnancy.
2. Breast feed babies for at least six months.
3. Have the baby sleep in a crib within arms' reach of you.
4. Place your baby on a firm mattress with a fitted sheet in a crib without toys or soft bedding.
5. Dress children in warm clothing rather than covering them with a blanket or comforter.
6. Avoid letting children get too warm.
7. Place baby on his or her back at sleep time.
8. Make sure everyone who cares for the baby knows proper sleeping techniques.



## ABC's of Safe Sleep

Babies should sleep...

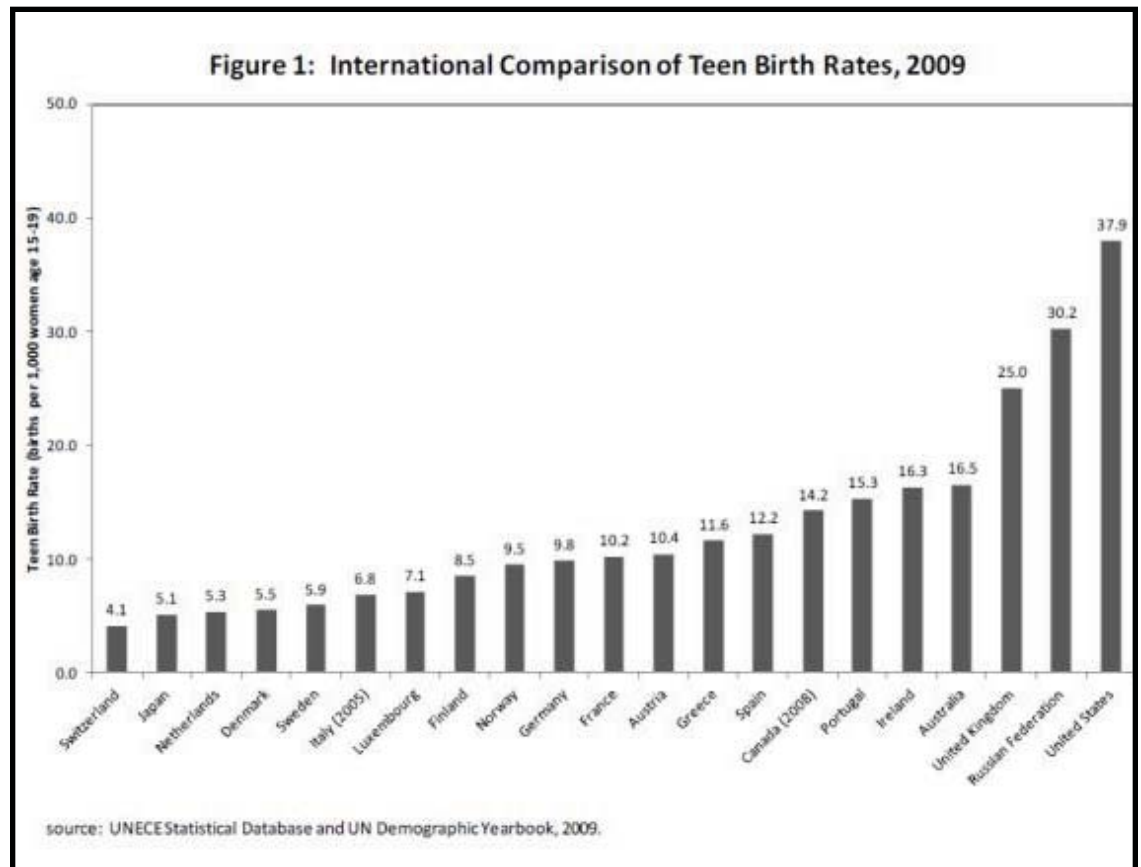
A Alone	B On their Back	C In a Crib
<ul style="list-style-type: none"> <li>• Not with an adult, another child, or pets</li> <li>• Not with pillows or stuffed toys</li> <li>• Not with crib bumpers</li> </ul>	<ul style="list-style-type: none"> <li>• Not on their side</li> <li>• Not on their stomach</li> </ul>	<ul style="list-style-type: none"> <li>• Not in an adult bed</li> <li>• Not on a couch or sofa</li> <li>• Not in a chair</li> </ul>

**Source: Tennessee Department of Health**

The Tennessee Department of Health's multipronged outreach efforts include fliers, bus ads and door hangers. Contact Rachel Heitmann, Injury Prevention and Detection director in the Tennessee Department of Health Division of Family Health and Wellness at (615) 741-0368 or Rachel.Heitmann@tn.gov for more information.

### Preterm Births

The Centers for Disease Control (CDC) reported the main cause of this country's infant mortality rate was its high rate of preterm births. The United States does better than developed European countries caring for children born early, but this country has a higher percentage of preterm births, contributing to the failure of the United States to keep pace with other developed countries in reducing infant mortality.



# Tennessee Teen Birth Rates



Graphic generated by the KIDS COUNT Data Center.

According to a World Health Organization (WHO) Report, one in nine births in the United States, a half a million births, was preterm, ranking this country in the top 10 for the number of preterm births and putting it in the company of less developed countries like Honduras and Thailand. If the United States' rate of preterm babies were halved, 8,000 infant deaths would be prevented.

One Texas study of Latina mothers found the risk of preterm birth to mothers who were born in the United States was three times higher than for those who had been in this country for fewer than 10 years.

The WHO report found that in 2005 the annual medical, educational and lost productivity costs of preterm births in the United States equaled at least \$26.2 billion. Much of the costs were health related, but early intervention and special education services cost \$1.7 billion yearly (with special education alone costing \$2,200 per infant). Lost labor and productivity costs annually added \$5.7 billion to the cost.

*Low Birthweight.* Low birthweight is also associated with infant mortality. TCCY's KIDS COUNT project reports on counties' low-birthweight births, which is often used as a proxy for preterm births, but the Institute of Medicine pointed out that babies may be born early at a normal weight or full term with a low birthweight. County-by-county low-birthweight and infant mortality rates are available at <http://datacenter.kidscount.org>.

*Maternal Age.* Causes for the high U.S. preterm birth rate are unclear. The high U.S. rates of teen births and of women giving birth after age 35 are both associated with preterm births. Teen births have a higher risk of prematurity. A number of evidence-based programs have been found to help young people make smart health choices, including delaying pregnancy. In addition to their other benefits, home visitation programs for teen mothers, like Healthy Start, are successful in preventing subsequent pregnancies. The good news is that in April 2012 the U.S. CDC reported teen pregnancy rates for all demographic groups had dropped.

Older mothers may have had more pregnancies and may have received fertility treatments, which have a higher rate of multiple births. A National Public Health and Hospital Institute (NPHHI) survey of low-income mothers giving birth in 26 urban public hospitals in 16 states, including Erlanger in Chattanooga and the Regional Medical Center in Memphis, also found women with multiple pregnancies felt less need for prenatal care.

## Pre-Pregnancy Health

Half of all pregnancies in the United States are unplanned, according to the National Campaign to Prevent Teen and Unplanned Pregnancies. However, a healthy pregnancy begins before conception. Men and women for whom pregnancy is a possibility should consider whether they are emotionally and physically ready for the birth of a child.

Many influences on the health of a child already have had an impact by the time a woman becomes aware she is pregnant. In order to assure healthy pregnancies, those who are sexually active need to have preventative health care, have considered the possibility of pregnancy and maintain healthy habits. For women, preconception

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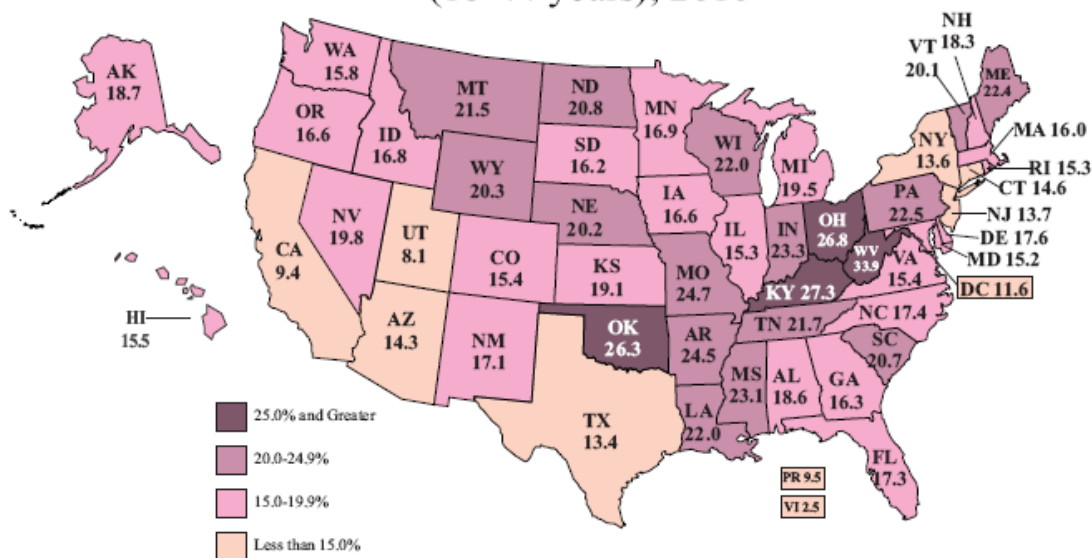
Tawny Spinelli  
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**Percent of Current Smokers Among Women  
(18-44 years), 2010**



Source: National Conference of State Legislators, CDC

health requires reproductive health screenings; addressing tobacco, alcohol and recreational and prescription drug use; addressing stress; exercising and improving fitness; and improving nutrition. Other conditions that should be addressed pre-pregnancy are:

- Diabetes (may have no symptoms or symptoms that seem harmless);
- High blood pressure (also generally symptomless);
- Anemia;
- Thyroid problems;
- STDs.

*Diabetes.* Tennessee Department of Health has also instituted a number of efforts to address diabetes. The incidence of diabetes in Tennesseans nearly doubled between 1996 and 2005, with the state ranking sixth in the nation in the percent of adults diagnosed with diabetes.

*Smoking.* Maternal smoking is unhealthy for both mother and child. Tennessee provides services to citizens wishing to quit smoking, including access to a free coach and a free tobacco quit kit. The Affordable Care Act mandated smoking cessation services for pregnant women in Medicaid programs beginning October 1, 2010.

Other successful efforts include the campaign to promote folic acid consumption among women of child-bearing years and prevention of mother-to-child HIV transmission.

**Prenatal Care**

Another important measure of child health and well-being TCCY reports for every county in Tennessee is adequate prenatal care received by pregnant women.

Prenatal care is necessary for identifying and treating the previously listed conditions related to birth problems. Adequate prenatal care is associated with higher birthweights, fewer preterm births and improved pregnancy.

*Barriers to Prenatal Care.* The NPHHI study of low-income women giving birth in urban public hospitals found a lack of transportation or insurance often resulted in inadequate prenatal care. About a fourth of women were on Medicaid prior to pregnancy; by delivery more than half were covered by Medicaid.

Perhaps most disturbing, however, was that nearly one-fourth of the women surveyed stated they did not know where to get care. Women who were ambivalent over a pregnancy delayed seeking care. Some women believed prenatal care was less necessary in subsequent pregnancies. Women were also likely to avoid care if they felt they were not treated with respect. The need for preconception health, and also the mothers' concern for their children, was underscored by the survey respondents reporting that only one in five took vitamins prior to pregnancy but more than nine of every 10 took vitamins during pregnancy.

*Health Care Access.* Nearly half the women with no prenatal care in the survey of low-income women giving birth in intercity public hospitals (3 percent of the survey respondents) were uninsured at delivery. These women were three times as likely to give birth to children with low birthweight. In 2010, according to the Tennessee Department of Finance and Administration, 40,715 Tennessee births (56 percent) were financed by TennCare.

The survey of low-income women suggested the following policy options:

- Extend health-care coverage to all pregnant women;
- Promote cultural competence in prenatal practices;
- Address transportation as a major barrier to prenatal care;
- Target a public health initiative to women of childbearing age.

*Men's Preconception Health Issues.* Men considering fatherhood should also consider the impact of their alcohol and drug use, tobacco use, nutrition, exposure to environmental toxins and medications on the health of a child, as well as their work, financial and family situation, and genetics.

## **Child Welfare and Pregnancy**

A girl in foster care is 2.5 times more likely to become pregnant by age 19 than girls in the general population. One in every two young men aging out of foster care has fathered a child, compared to one in five of all same-age young men. Frequently young people report wanting to create a loving family by giving birth. This need may be a stronger desire in children in long-term foster care.

Young Americans have had difficulty with health care access. These problems are compounded for young people who lack caring parents and communities. The Affordable Care Act mandated states to include health care components in transition plans for older youth beginning in 2010. The provision extending health care coverage of youth to age 26 on their parents' health plans went into effect in 2010, and another aspect of the law required states to provide Medicaid coverage for youth aging out of foster care until age 26 beginning in 2014. This coverage includes EPSDT preventative screening coverage. Thirty percent of Americans ages 18 to 25 were uninsured, and they made up the largest number of the uninsured in 2010.



The National Campaign to Prevent Teen and Unplanned Pregnancies received funding from the Annie E. Casey Foundation to conduct a survey of youth transitioning out of state custody. Foster youth in a focus group convened for the study reported that:

- Foster youth lack some important relationships;
- In spite of hardships, foster youth see many benefits to having a baby;
- Foster youth face lots of pressure to have sex;
- Foster youth have access to information about sex and pregnancy, but some feel it is offered too little, too late;
- Access to contraception does not always mean teens will use it;
- Foster youth are thinking about future goals, but many are acting on present impulses;
- There is a lack of trust between sexes.

The 2008 Fostering Connections to Success and Increasing Adoptions Act included a mandate to address foster children's health and:


- Improve child welfare policies and practices by expanding support for sexual health education;
- Ensure that children receive health information to remain healthy and increase protective factors;
- Prepare parents and staff to adequately address unhealthy relationships and pregnancy prevention.

## Healthy Start

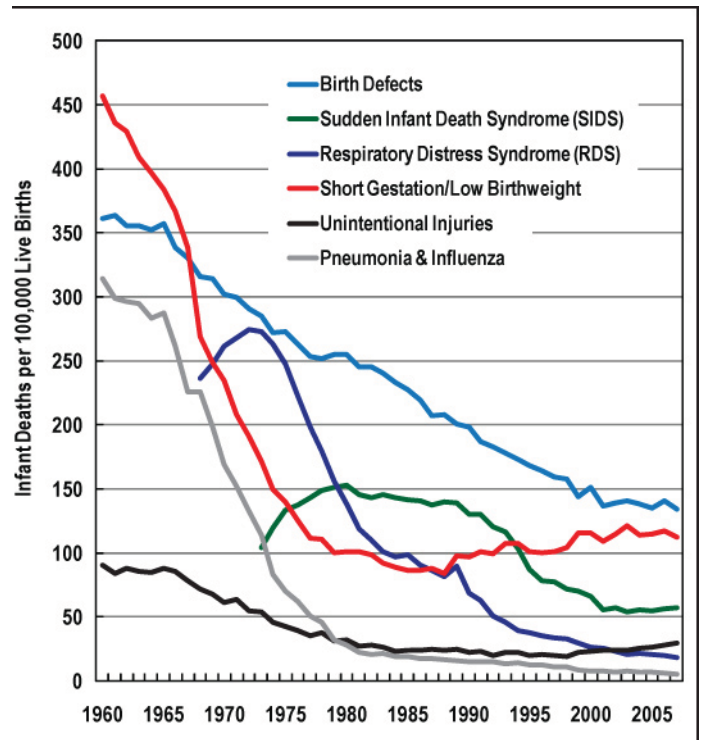
Tennessee's Healthy Start home visitation program, which helps reduce infant mortality, has survived cuts in the state's budget to date, but the current fiscal year's activities are funded with non-recurring dollars. Continuing funding will have to be included in upcoming budgets for the program to survive.

Other funding for prevention programs may come from the federal Maternal and Child Health Services Block Grant funds, which may be used for health, health education and prevention services. These services are coordinated with the Medicaid program. The Affordable Care Act also includes provisions to address infant mortality.

## Sources of Information for Families

- **Toll-Free Pregnancy Information Number:** 1-800-311-BABY (2229) and 1-800-504-7081 (Spanish).
- **Text4Baby:** Sign up for text messages about parenting by filling out an online form (<http://text4baby.org/index.php/sign-up>).
- **Help to Quit Smoking** 1-800-QUIT-NOW (1-800 784-8669) or <http://health.state.tn.us/tobaccoquitline.htm>.
- **National Campaign to Prevent Teen and Unplanned Pregnancy:** [www.thenationalcampaign.org](http://www.thenationalcampaign.org).
- **Tennessee Department of Health, Maternal and Child Health:** <http://health.tn.gov/MCH/> 

## Trends in Infant Mortality from Major Causes of Death, U.S., 1960-200



Source: Infant Mortality in the United States, 1935-2007, U.S. Department of Health and Human Services

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**Tennessee Voices for Children honored TCCY's Children's Program Outcome Review Team Program (CPORT) with its Invisible Child award on September 20. The program, which reviewed care of children in state custody, was eliminated in the state's 2012-13 budget.**

## Raise Your Hand Tennessee

Raise Your Hand Tennessee is a statewide effort to recruit volunteers to read, tutor and mentor children. It is a public-private partnership to improve Tennessee's educational outcomes by linking the community and the schools. Raise Your Hand Tennessee has recruited 2,589 volunteer readers and mentors in the six months since its launch in January 2012. This summer, 60 locations participated in a Day of Action, where volunteers signed up and read to children. Learn more about [www.raiseyourhandtn.org](http://www.raiseyourhandtn.org).

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