

Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the NM Legislature. The LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

Current and previously issued FIRs are available on the NM Legislative Website ([www.nmlegis.gov](http://www.nmlegis.gov)) and may also be obtained from the LFC in Suite 101 of the State Capitol Building North.

## FISCAL IMPACT REPORT

SPONSOR Padilla ORIGINAL DATE \_\_\_\_\_  
 LAST UPDATED \_\_\_\_\_ HB \_\_\_\_\_

SHORT TITLE Shaken Baby Syndrome Educational Materials SB 21

ANALYST Chilton

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY17	FY18	FY19	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
<b>Total</b>	\$300.0	\$300.0	\$300.0	\$900.0	Recurring	General Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

Relates to the General Appropriation Act of 2016.

#### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

University of New Mexico Health Sciences Center (UNM HSC)

Higher Education Department (HED)

Department of Health (DOH)

#### Responses Not Received From

Children, Youth and Families Department (CYFD)

### SUMMARY

#### Synopsis of Bill

Senate Bill 21 would require that all parents of newborns be educated regarding the dangers of shaking babies and the consequences to infant brains of being shaken, using the vivid tool of a “shaken baby simulation doll.” Birth hospitals and birthing centers would be required to provide the education and maintain records of having done so, and the Department of Health would be required to collect the data. DOH, along with the University of New Mexico Health Center’s Department of Pediatrics would approve the training and informational material to be used.

This bill builds on a provision in the 2016 General Appropriations Act, which stated that “The general fund appropriations to the health sciences center research and public service projects of the university of New Mexico and the instruction and general purposes category of the health sciences center of the university of New Mexico include sufficient funds to implement a program

to provide educational materials, including shaken baby simulation dolls, to hospitals and birthing centers in the state to educate parents of newborns to prevent shaken baby syndrome.” (Laws 2016, ch. 11) The UNM HSC Department of Pediatrics indicates that it has purchased the shaken baby syndrome simulation dolls and developed materials already and feels no appropriation is needed despite the failure of 2016 House Bill 11, which made an appropriation for the dolls and materials to be used.

## **FISCAL IMPLICATIONS**

After Laws 2016, ch. 11 directed UNM HSC to make shaken baby simulation dolls and other educational materials available to birth hospitals throughout the state, UNM HSC purchased the dolls and devised an educational program, which has been adopted by many, but not all, New Mexico birth hospitals. Since the materials are in place, there would be minimal additional fiscal requirements with passage of Senate Bill 21.

DOH would be required to monitor compliance with the requirement; its estimate of its costs “to fully implement SB21 [are] based on the assumption that a Health Educator (Operational level) would be needed for each of the four regions in New Mexico, and another administrative assistant position would be needed to maintain records for compliance (including indirect cost).”

## **SIGNIFICANT ISSUES**

According to the National Institute for Neurological Disorders and Stroke (NINDS), shaken baby syndrome (SBS) is “a type of inflicted traumatic brain injury that happens when a baby is violently shaken. A baby has weak neck muscles and a large, heavy head. Shaking makes the fragile brain bounce back and forth inside the skull and causes bruising, swelling, and bleeding, which can lead to permanent, severe brain damage or death. The characteristic injuries of shaken baby syndrome are subdural hemorrhages (bleeding in the brain), retinal hemorrhages (bleeding in the retina), damage to the spinal cord and neck, and fractures of the ribs and bones. These injuries may not be immediately noticeable. Symptoms of shaken baby syndrome include extreme irritability, lethargy, poor feeding, breathing problems, convulsions, vomiting, and pale or bluish skin. Shaken baby injuries usually occur in children younger than 2 years old, but may be seen in children up to the age of 5.” On many occasions, the parent or caretaker, not knowing how vulnerable the infant’s brain is, cause grievous injury when frustrated with a crying child. Once the injuries have occurred, however, there is little to remedy the problems caused, which may include blindness, severe developmental dehydration or even death.

From 2003 to 2007, an estimated 780 (0.76 per 100,000 person-years) US children under age 4 years died of Abusive Head Trauma, and 1759 (8.6 per 100,000 population; this would translate to approximately five infants dying and 11 infants hospitalized each year in New Mexico) were hospitalized annually. An estimate done by the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention indicates medical costs of \$48,000 over the four years following injury of each child injured through shaken baby syndrome (also called abusive head trauma). Costs for special education, ongoing medical services and therapies, and loss of future earnings are incalculable, but are likely to be very high for each injured child.

In a pilot program developed by UNM researcher Kathy Lopez Bushnell, RNC, EdD, MPH, MSN, pediatric resident Christopher Torrez, MD, and Desiree Torrez, BS, new parents delivering infants at UNM Hospital were trained by nursing staff to see the effects of shaking a

newborn's head, graphically illustrated by a special doll which lights up in areas damaged when the doll's head is shaken. They also use printed material, and a video entitled "When Babies Cry."

The results of their work to this point, as reported by Dr. Torrez, suggest that the intervention has been effective. From January 2012 to September 2014 there were 39 cases of diagnosed SBS in infants who were discharged from UNM Hospital units other than those at UNM Hospital where the intervention was carried out. During the same time period there were zero infants discharged from UNM nurseries that were subsequently diagnosed with SBS. This difference is statistically significant.

If this intervention is as successful in New Mexico's approximately 30 birth hospitals as it appears to have been at UNM Hospital, approximately 15 cases of shaken baby syndrome would be prevented per year. At an average four-year cost of approximately \$48,000 per injured baby, the annual saving would be \$640,000, which does not include the eventual savings in special education and lost adult productivity that would be predicted.

In 2016, CYFD noted that it wished to collaborate with UNM on this project. It cites its PullTogether Initiative, a large effort at prevention of child abuse. CYFD hoped to take this educational message to a broader audience, and avoid any duplication of effort. PullTogether invites community leaders across the state to join CYFD in a community engagement initiative to work jointly to improve the quality of life for the state's children. At that time, CYFD stated

Shaken baby syndrome is not limited to just the interaction of children and parents. By taking the educational materials provided by the Health Sciences Center to the larger community that is being drawn together by CYFD's PullTogether initiative, we have the opportunity engage everyone else involved in that child's life: friends, relatives, caregivers. By providing our citizens with the tools to identify, respond to, and prevent shaken baby syndrome, we decrease the risk of child maltreatment, and by extension decrease the risk of preventable fatalities within the state. More, by making those materials available via the PullTogether.org website, we focus efforts in a more comprehensive, less fragmented way.

DOH notes that "The perpetrators in about 70% of cases are males — usually either the baby's father or the mother's boyfriend who is not related to the child, and often someone in his early twenties without good coping skills or experience as a parent. But anyone, including babysitters, grandparents, friends, and extended family, is at increased probability of injuriously shaking a baby if he or she is suffering from sleep deprivation, not otherwise able to handle stressful situations well, has poor impulse control, or has a tendency toward aggressive behavior. Substance abuse among parents and other caregivers often plays a role in AHT, as intoxication of any kind, from drugs, alcohol or some combination thereof significantly lessens coping skills."

### **ADMINISTRATIVE IMPLICATIONS**

Each birth hospital and birthing center would be required to designate and train personnel to show the video, hand out the printed material, demonstrate the effects of shaking using the doll (obtainable now through UNM HSC), and answer parents' questions.

DOH states that:

"The administrative implications to accommodate the provision '...to provide training to

every parent of every newborn ...’ within SB21 are substantial considering that in 2015 alone there were 25,730 live births in New Mexico alone for all types of facilities (<https://ibis.health.state.nm.us/query/result/birth/BirthCntyBirth/Count.html>). This training effort would require 12,865 hours to give every parent a 30-minute training for the 25,730 births in 2015. There are considerable administrative implications for NMDOH to implement all the provisions within this bill, including several Full Time Equivalent positions for the adoption and monitoring of rules and compliance, as well as staff to provide the training.”

It is to be noted that the estimated 12,865 hours of education would be performed by personnel at the birthing centers and birth hospitals rather than being done by DOH personnel.

HED notes that “SB21 would add administrative duties to the DOH, UNM HSC Department of Pediatrics, and every birthing center in the state:

1. The DOH would have to monitor birthing centers to ensure compliance.
2. DOH and UNM HSC personnel would have to approve and review curriculum and instructional material related to the prevention of SBS.
3. Each birthing center would have to train and dedicate personnel to provide SBS in the hospital after delivery, obtain one or more SBS simulation dolls, and maintain training records for each patient.”

#### **WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL**

Some New Mexico birth hospitals and/or birthing centers might not provide the education needed to prevent shaken baby syndrome, absent the requirement to do so.

LAC/al