

Accidental Suffocation and Strangulation in Bed Deaths, Travis County
2018 - 2023

September 4, 2025

# Accidental Suffocation and Strangulation in Bed (ASSB) in Travis County for 2018 - 2023

### **Background**

Accidental suffocation or strangulation in bed (ASSB) is the leading cause of injury death for infants under 12 months of age nationwide, as well as in Travis County and the City of Austin. Data for this report comes from Travis County Medical Examiner's reports for non-natural infant deaths occurring in Travis County for a six-year period (2018 – 2023). Location of injury includes Travis, Williamson, Hays, Bastrop and Caldwell counties. Location of injury and residence of the deceased may not be Travis County.

Non-natural infant deaths categorized as "undetermined" by the Travis County Medical Examiner but included risk factors for Accidental Suffocation or Strangulation in Bed (ASSB) or sleep-related death are also included in this report. This report contains 40 deaths occurring in Austin where the Office of Vital Records report listed cause of death as "suffocation", "positional asphyxia", and "undetermined". There were 11 cases with no cause of death because the death did not occur in the City of Austin and therefore, had no Office of Vital Records report. In each report, the baby was considered to have been in an unsafe sleep environment based on the 2022 American Academy of Pediatrics recommendations for safe sleep. Although no deaths were attributed to Sudden Infant Death Syndrome (SIDS) for this time period, the risk factors and risk reduction strategies are the same for both SIDS and ASSB.

There were 78 cases of non-natural infant deaths in Travis County for 2018 – 2023. Cases that did not have risk factors for ASSB were removed, leaving a total of 51 ASSB infant deaths in Travis County for this time period.

## Terminology

Breastfed – Any amount of breastfeeding or breast milk was noted in the medical examiner's report.

**Gestation** – Period of development that includes three trimesters. Normal gestation is 40 weeks.

**Premature** – Birth occurred before 37 weeks.

**Smoke exposure** – Evidence of tobacco smoke exposure was noted in the medical examiner's report, such as ash trays or cigarette butts as well as self-reported tobacco use by someone living in the household or during pregnancy, even if they stated they did not smoke around baby. No smoke exposure denotes usage was denied; unknown smoke exposure represents no evidence of usage was observed nor mentioned. Marijuana smoke, vapes, or other non-tobacco products were not included in this analysis.

**Non-parental supervision** – Infant was not under the care of one or more parents at the time of the incident.

**Bed-sharing** – Infant is placed to sleep on the same surface as another person and includes bed, couch, sofa or blankets on floor.

### **Data and Methodology**

This report was prepared by the Austin Public Health Chronic Disease and Injury Prevention Program with support from the Epidemiology and Public Health Preparedness Division. Records from the Travis County Medical Examiner for non-natural deaths of infants aged 12 months and under were provided. ICD-10 codes for these deaths included W75 (accidental suffocation and strangulation in bed), J069 (Acute upper respiratory infection, unspecified), Y20 (hanging, strangulation, and suffocation of undetermined intent), and R99 (Other ill-defined and unspecified causes of mortality). Eleven cases had no ICD-10 code.

#### **Suffocation Death Data**

Suffocation death data were extracted through case review of each report and then categorized through an iterative process in an Excel spreadsheet based on known risk factors from the literature or identified trends. Demographic variables included age, gender, race/ethnicity and location of injury. Health risk factors included gestation, breastfeeding, tobacco smoke exposure and infant illness. Sleep environment risk factors included caregiver present, location of infant, bed-sharing, sleep position and bedding. Pivot tables were used to calculate sums and frequencies by category.

#### **Data Sources**

Travis County Medical Examiner's Reports, The Office of Vital Records, CDC Wonder

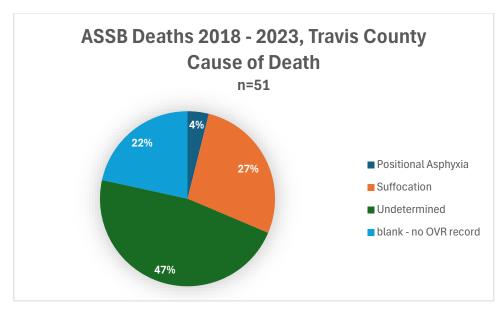
# **Summary of Findings**

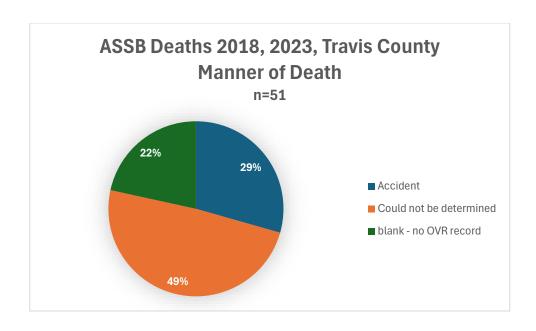
- Many ASSB deaths are categorized as undetermined or could not be determined.
- Forty-seven percent (47%) of ASSB deaths occurred under three months of age.
- African Americans are disproportionately represented in ASSB deaths as compared to other races.
- Nearly three quarters (74%) of babies involved in ASSB deaths were not breastfed.
- The majority (86%) of infants were under the care of a parent or the primary caregiver.
- Sixty-eight percent (68%) of ASSB deaths occurred during the evening or nighttime hours.
- Only 16% of babies were on a safe sleep surface at the time of the incident and 68% were in an adult bed.
- Sixty-one percent (61%) of babies who succumbed to ASSB were bed-sharing with another person.
- Over one-third (39%) were not placed on their back at sleep time, and 63% were found in another position than on their back.
- Blankets were present in 84% of ASSB deaths, pillows were present in 71%.

#### **Charts and Data**

#### **Manner and Cause of Death**

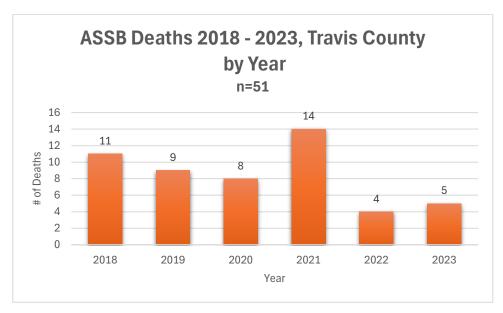
Suffocation or positional asphyxia was listed as the Cause of Death 31% of the time. The Manner of Death could not be determined 49% of the time. Manner and Cause of Death come from the City of Austin Vital Records, which only has data for deaths that occur within the City of Austin (n=40). Those with a blank manner or cause of death are because they occurred outside the city limits but in Travis County (n=11).



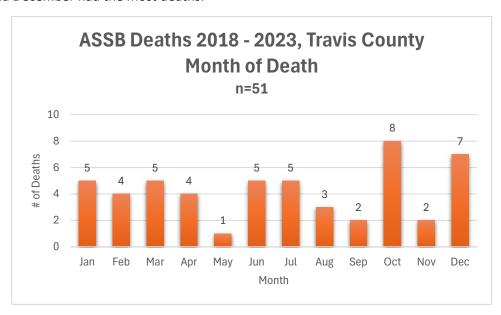


# **Accidental Suffocation Deaths by Year and Month**

On average, there are eight accidental suffocation and strangulation in bed (ASSB) deaths in Travis County per year.

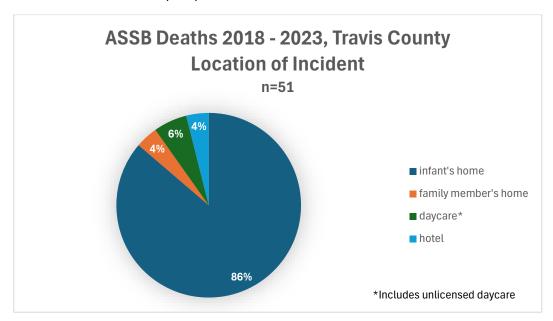


October and December had the most deaths.



# **Location of Injury**

Suffocation deaths are a widespread problem and occurred in 23 total zip codes during the six-year time frame. Over one-quarter (29%) of the injuries resulting in death occurred in three zip codes: 78723, 78724, and 78744. Most of the incidents (86%) occurred in the infant's home.



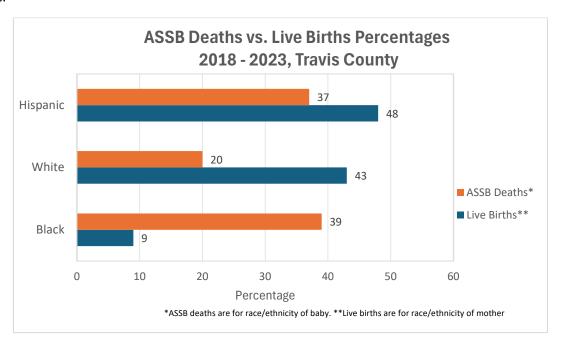
# **Location of Infant's Residence**

Nearly one quarter (22%) had a home residence zip code of 78723.

## **Demographics**

# Race/Ethnicity

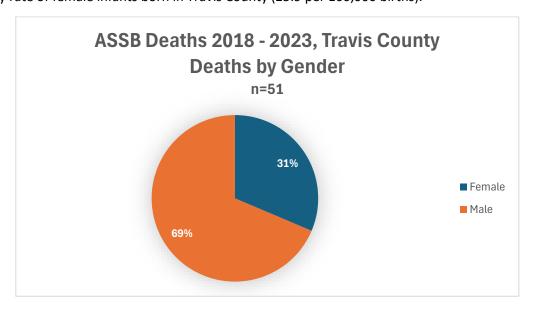
Racial disparities are prevalent in ASSB deaths among African Americans nationally. In Austin, African Americans comprise only nine percent (9%) of live births but represent thirty-nine percent (39%) of ASSB deaths.



Data Source: Travis County Medical Examiner Data, 2018 – 2023. Total Births retrieved from: CDC WONDER

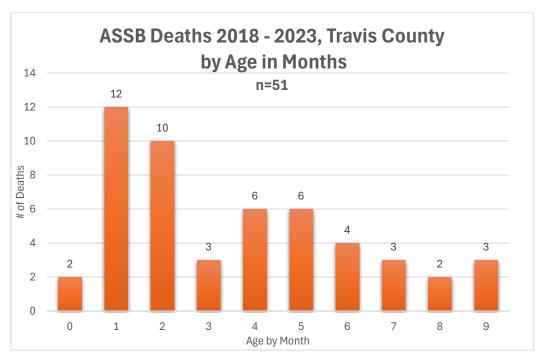
#### Gender

Well over half (69%) involved male infants. From 2018-2023, male infants born in Travis County had a significantly higher mortality rate (54.1 per 100,000 births) due to sleep-related deaths compared to the mortality rate of female infants born in Travis County (25.9 per 100,000 births).



# Age

Forty-seven percent (47% or 24) occurred under three months of age. There is an increased risk of SIDS when bedsharing with a normal weight infant aged under four months.<sup>1</sup> No ASSB deaths of babies over the age of nine months occurred in Travis County for 2018 – 2023.

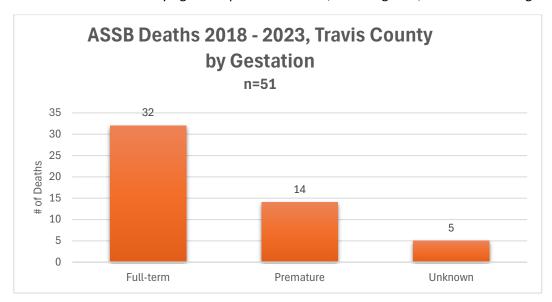


<sup>&</sup>lt;sup>1</sup> Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment.

## **Health History**

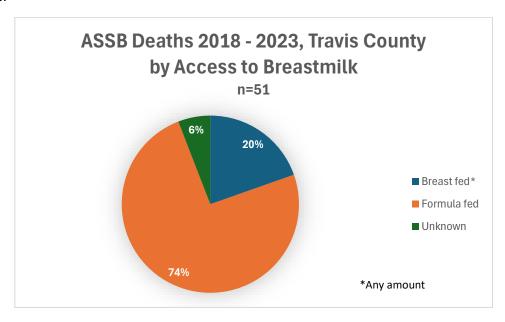
#### Gestation

Just over one quarter (27% or 14) were premature. In comparison, in 2023 ten percent (10.41%) of all babies born in the U.S. were born preterm according to the CDC. Premature infants have a greater risk compared to full-term babies of dying of sleep-related deaths, including SIDS, when bed-sharing.<sup>2</sup>



# **Breastfeeding**

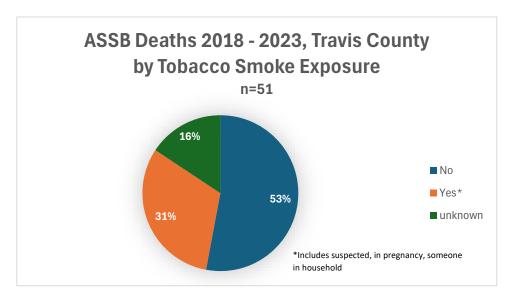
Less than one quarter (20%) of the babies were breastfed. The American Academy of Pediatrics recommends feeding of human milk for the first six months. Breastfeeding is associated with a reduced risk of SIDS.



<sup>2</sup> Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment.

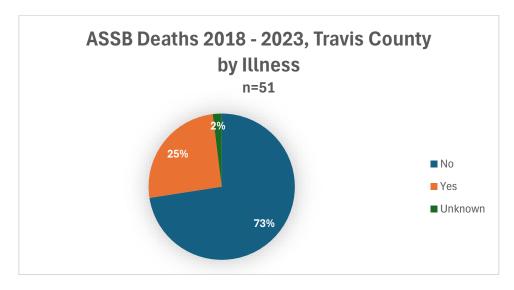
#### Smoke exposure

Smoking from self-reported medical history or smoking materials present in the household was known in 47% of cases. Tobacco exposure was found in 31% of cases. Two moms smoked during pregnancy. Smoking by pregnant people and smoke in the infant's environment after birth are major risk factors for SIDS. <sup>3</sup>



#### Illness

Of the 51 infants, thirteen (13 or 25%) were noted to have had some form of illness or medical condition at the time of incident. This included anemia, ear infection, left ventricular hypertrophy, pyloric stenosis, apneic episodes, rapid heart rate, maternal drug use, congestion, cough, fever, cyanosis, and heart murmur. Ten of the infants (10 or 20%) had been seen by a doctor for illness or a well-child check within two weeks of the incident.



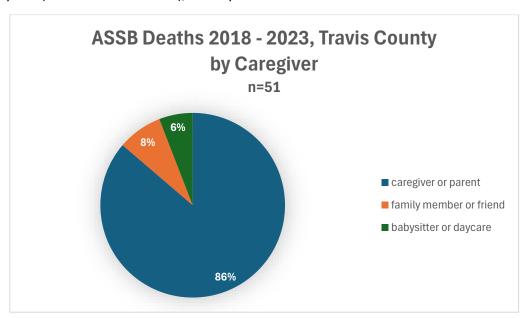
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<sup>&</sup>lt;sup>3</sup> Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment.

## **Sleep Environment**

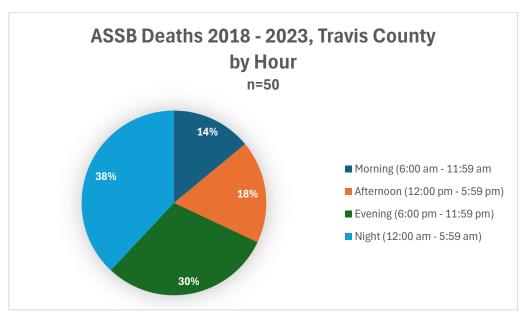
# Caregiver

At the time of incident, eighty-six percent (86%) of infants were under the care of a parent or the primary caregiver. Fourteen percent (14%) were under non-parental supervision, which included family member, friend, daycare (licensed or unlicensed), or babysitter.



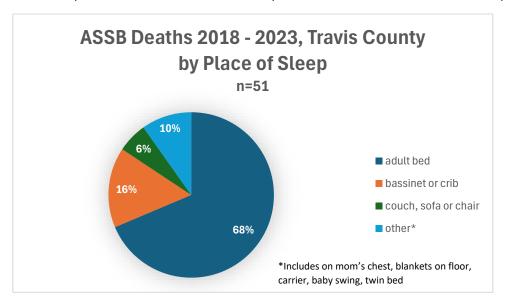
## Hour

Sixty-eight percent (68%) were either put to sleep or last known responsive during evening or nighttime hours (6:00 pm - 5:59 am). There was one infant with no known time of sleep or last known responsiveness.



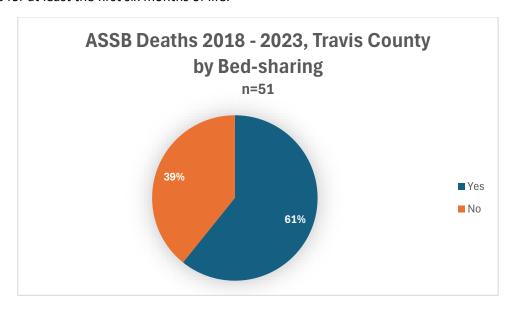
## **Place of Sleep**

Most infants (68%) were placed in an adult bed for sleep. Only cribs, bassinets, portable cribs and play yards that conform to the Consumer Product Safety Commission's standards are recommended for sleep. Twelve families were identified as possibly needing a crib or safe space for the infant to sleep, as there was no mention of the presence of a crib, bassinette, or portable crib in the residence in the report.



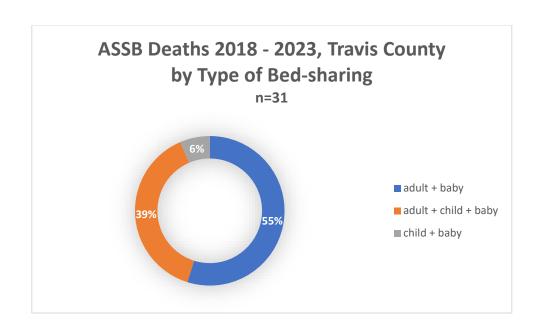
## **Bed-Sharing**

Sixty-one percent (61% or 31) were bed-sharing at the time of incident, the majority with an adult or an adult and a child. Six people (19%) admitted to using alcohol before bed-sharing with baby. The AAP recommends that infants sleep in the same room as the parents, but on a separate sleep surface designed for infants for at least the first six months of life.<sup>4</sup>



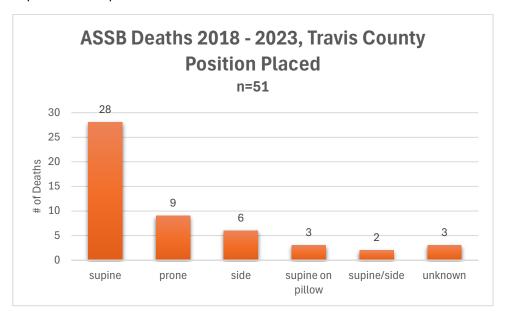
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<sup>&</sup>lt;sup>4</sup> Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment.

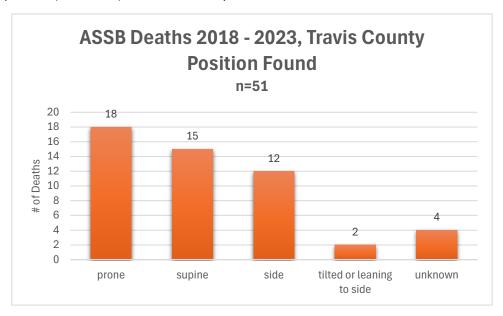


## **Position**

Over one-third (39% or 20 ) were not placed on their back (supine) as recommended, and three of those were placed supine but on a pillow.



Sixty-three percent (63% or 32) were found in a position other than on their back.



# **Bedding**

Most sleep areas were known to have a blanket (84%) or a pillow (71%) present although recommendations state that neither be present in an infant's sleep environment. In eleven cases (21%), it was mentioned that the infant's face was obstructed when found.

