

# TOTS Brief

THE OKLAHOMA TODDLER SURVEY



## HOUSEHOLD & VEHICLE SMOKING RULES

## OKLAHOMA FAST FACTS

Tobacco use remains the leading cause of death and disease in the U.S. In Oklahoma, 7,500 adults die each year as a result of smoking-related illnesses<sup>1</sup> and over 700 non-smokers die from secondhand tobacco smoke exposure.<sup>2</sup> According to a report of the U.S. Surgeon General, there is no safe level of exposure to any form of secondhand smoke (SHS).<sup>3</sup>

Tobacco smoke contains over 7,000 chemicals and about 70 of these can cause cancer.<sup>4</sup> Secondhand smoke is hazardous and harmful even for people who are not smoking, especially infants and children. Studies have shown that children whose parents smoke get sick more often and their lungs grow less than children who do not breathe secondhand smoke.<sup>5</sup> The chemicals in secondhand smoke may also interfere with an infant's ability to breathe.

Children who are exposed to secondhand smoke are at a greater risk of developing serious health conditions such as:

- More frequent and severe asthma attacks
- Increased respiratory diseases
- Ear infections
- Sudden infant death syndrome (SIDS)

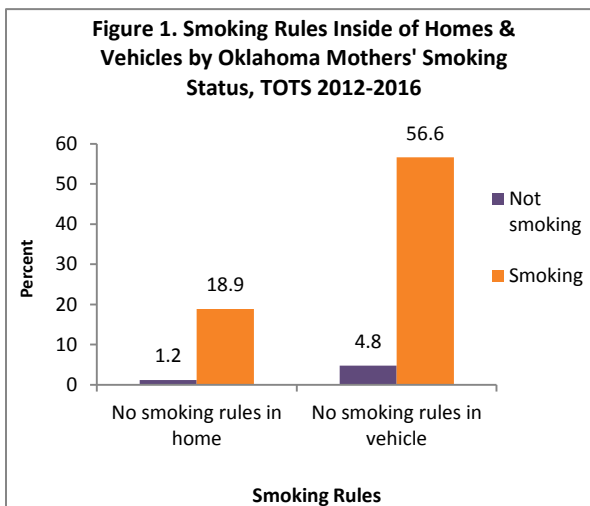
Furthermore, children who are exposed to SHS are more likely to become an adult smoker and experience health conditions as an adult such as poor lung function, difficulty conceiving children, diabetes, heart disease, and cancer.<sup>4,6</sup>

This Brief examines 2012-2016 TOTS data on what Oklahoma mothers allow or do not allow (the "rules") surrounding smoking in both their homes and the vehicles their two-year-old rides in most of the time.

Additionally, the number of days the toddler was sick in the three months prior to the survey and breastfeeding duration were also examined in relation to these rules.

TOTS asked mothers if they smoke cigarettes, even occasionally. Mothers were also asked which statement best described rules about smoking inside their home (No one is allowed to smoke anywhere, smoking is allowed in some room or sometimes, or smoking is allowed anywhere) and inside the vehicle their child rides in most of the time (No one is allowed to smoke, smoking is allowed only when the child is not in the vehicle, smoking is allowed, or there are no rules about smoking).

Overall, just over 18% of mothers reported smoking some days or every day (data not shown). Figure 1 shows that of the mothers who smoke, 18.9% had no smoking rules inside their home while 56.6% had no smoking rules inside their vehicle.



Mothers with no vehicle smoking rules reported that their toddler had fewer days of wellness and more days of sickness than mothers with smoking rules.

18.4%

Percent of mothers who smoked

18.9%

Percent of mothers who smoked who had no rules about smoking in their home

56.6%

Percent of mothers who smoked who had no rules about smoking in their vehicle

51.7%

Percent of mothers with no rules about smoking in their vehicle who reported their toddler had been sick

39.7%

Percent of mothers with smoking rules in their home who breastfed for at least 6 months

41.9%

Percent of mothers with smoking rules in their vehicle who breastfed for at least 6 months

**“I want my kids to know more about health, wellness, good nutrition, exercise, & the dangers of smoking.”**  
-TOTS mom

The Oklahoma Toddler Survey (TOTS) is an ongoing, two-year follow-back survey to the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) survey. Monthly, TOTS samples between 125 to 175 mothers with live infants who responded to PRAMS. Mothers are sent a TOTS survey the month their child turns two-years-old. They receive up to three mail surveys in either English or Spanish seeking their participation. Follow-up phone interviews for non-respondents are conducted.

The unweighted response rate for 2012-2016 data was 68% (n=9,008; excluding women ineligible to complete TOTS). Data were weighted to represent the two-year-old’s birth cohort for those years. Prevalence rates were calculated using SAS callable SUDAAN.

Special assistance for this Brief was provided by: Ayesha Lampkins, MPH; Christin Kirchenbauer, MPH; Fahad Khan, MPH; Rebekah Rodriguez, and Binitha Kunnel, MS.

Funding was made possible by the Maternal and Child Health Bureau, Department of Health and Human Services, Maternal and Child Health Services Title V Block Grant, grant number is B04MC30635.

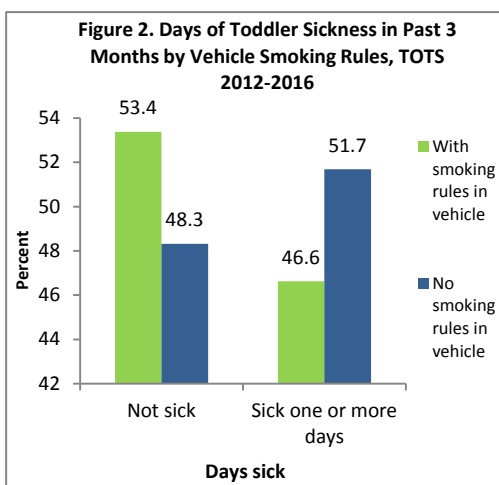
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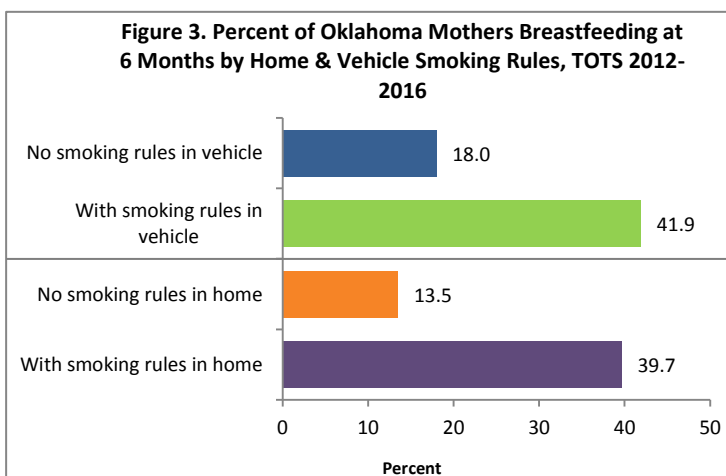
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Figure 2 shows that in the three months prior to the survey, 48.3% of mothers without vehicle smoking rules (and 53.4% of mothers with rules) reported that their toddler had not been sick.

Moreover, 51.7% of mothers without vehicle smoking rules (and 46.6% of mothers with rules) reported that their toddler had been sick at least one day. This same trend was not reflected in the case of home smoking rules.



Mothers with home smoking rules had significantly higher rates of breastfeeding at six months than mothers with no home smoking rules (39.7% compared to 13.5%, figure 3). Additionally, mothers with vehicle smoking rules had significantly higher rates of breastfeeding at six months than mothers with no vehicle smoking rules (41.9% compared to 18%, figure 3).



**Limitations**

Mothers may not think of allowing or not allowing smoking in terms of “rules.” Additionally, social desirability bias for the smoking questions and recall bias for the breastfeeding duration question may be a factor.

**Conclusion**

The only way to offer the greatest protection for children and infants is to provide an environment that is completely free of all smoke exposure, including secondhand smoke in any form. The U.S. Surgeon General states that there is no safe level of SHS exposure and research has shown that exposure in the home and vehicle has the greatest impact on children and infants.

Moreover, those demographic groups with lower rates of home smoking rules (mothers 35 years and older and Non-Hispanic Black mothers; data not shown) and lower rates of vehicle smoking rules (mothers less than 25 years old and Non-Hispanic American Indian mothers; data not shown) may benefit from targeted education and interventions.

Making homes and cars completely smoke free reduces SHS exposure among infants and children, as well as other non-smokers. This also lessens the chances that children will become addicted to tobacco as they get older. It is imperative to eliminate infant and children smoke exposure to decrease the risk of both acute and chronic health conditions over the lifespan.

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