



Reasons for Delaying Immunizations

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Immunizations protect children from a range of potentially deadly diseases. Receiving the recommended 4:3:1:3:3:1 series of immunizations before age 3 is a priority for the Oklahoma Children's Health Plan and the Maternal and Child Health Title V Block Grant.¹

The series consists of 4 doses of Diphtheria, Pertussis, and Tetanus (DPT) vaccine, 3 doses of poliovirus vaccine, at least 1 dose of Measles, Mumps, and Rubella (MMR), 3 doses of Haemophilus influenzae type b (Hib), 3 doses of Hepatitis B, and 1 dose of varicella.¹ According to 2012 National Immunization Survey data, 64.7% of Oklahoma toddlers had this series of shots completed by 35 months of age.²

This Brief explores some of the reasons mothers reported for delaying or not getting one or more immunizations for their 2-year-old.

Among 2-year-olds born in Oklahoma, 16.0% had delays or shots they did not receive (Figure 1).

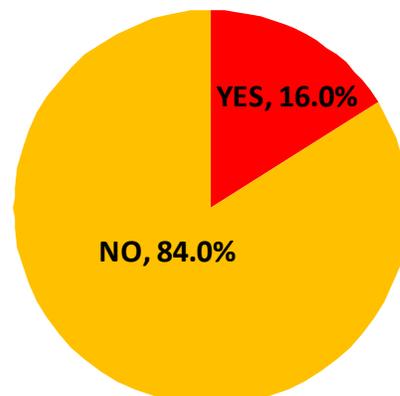
Mothers with a high school education were less likely to have a toddler with an immunization delay (11.5%) than both mothers with less than a high school education (15.5%) and mothers with more than a high school education (18.5%). Maternal age, race, ethnicity, and marital status were not statistically significantly different.

Thirty-two percent of children without health insurance (31.9%) had delays or shots they did not receive

In Oklahoma:

- 16.0% of 2-year-olds had delays or shots they did not receive.
- 4 in 10 mothers who reported delays for their 2-year-old stated it was because they thought too many shots were given at once.
- 31.9% of toddlers without health insurance had delays or shots they did not receive.
- 1 in 5 mothers with a subsequent pregnancy reported delays or shots their 2-year-old did not receive.

Figure 1. Did Mother Decide to Delay or Not Get Immunizations for Toddler, TOTS 2011-2012



compared to 15.0% of 2-year-olds with health insurance. Among toddlers with health insurance, there was no statistically significant difference in delays for those with or without Medicaid.

Mothers with a subsequent pregnancy since the birth of their 2-year-old were significantly more likely to report delays or shots their toddlers did not receive (20.8%), when compared to mothers without subsequent pregnancies (14.2%).

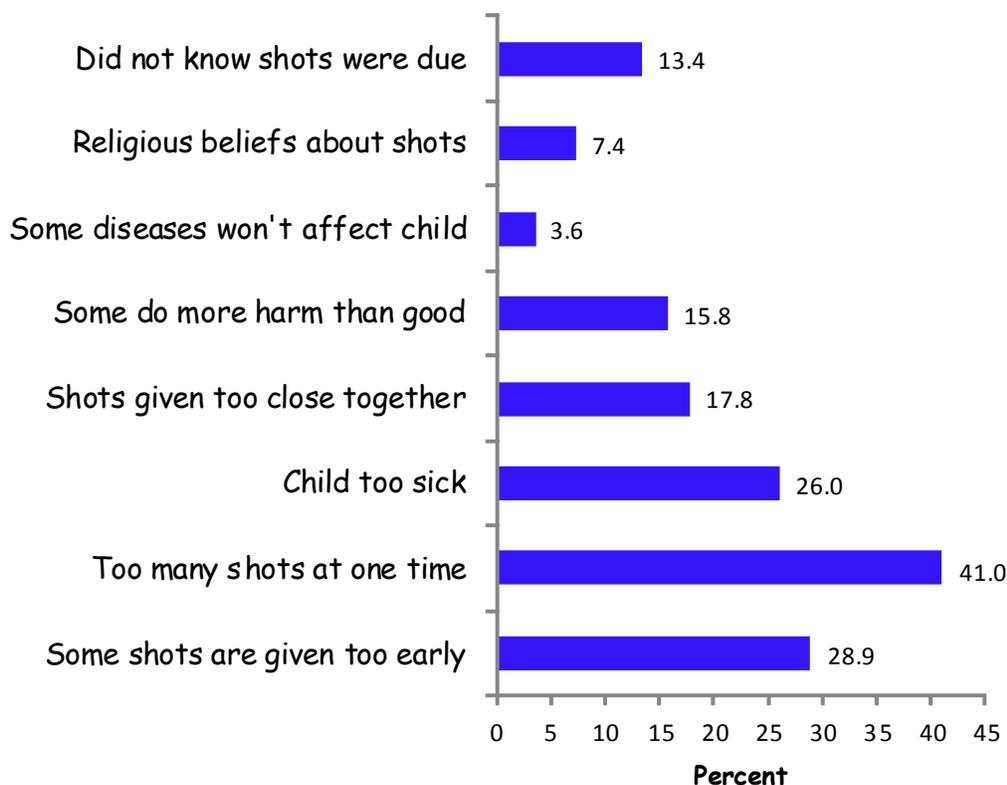
Those mothers who delayed or decided not to get one or more of their toddler's shots were asked why. Ten possible reasons were listed (more than one could be selected). Mothers also had the option to write-in why, if their reason was not on the list.

The most common response was "too many shots are given at once" (41.0%), followed by "some shots are given too early" (28.9%). Lack of time and transportation issues were selected by fewer than 30 women and therefore are not reportable. See Figure 2 for a breakdown of reasons given.

References:

1. Oklahoma Children's Health Plan. Keeping Kids Healthy 2011-2014. Available at: <http://www.ok.gov/health2/documents/OHIP-ChildrensHealthPlan.pdf>. Accessed February 3, 2014.
2. Centers for Disease Control and Prevention. Vaccines and Immunizations: 2012 Table Data. National Immunization Survey. Available at: http://www.cdc.gov/vaccines/stat-surv/nis/data/tables_2012.htm. Accessed February 3, 2014.

Figure 2. Reasons Mothers Had for Delaying or Not Receiving Immunizations for Their Toddlers, TOTS 2011-2012



The Oklahoma Toddler Survey (TOTS) is a two-year follow-back survey to the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) survey.

Mothers with live infants who respond to the PRAMS survey are sent a TOTS survey the month their children turn two-years-old. TOTS is a mixed-mode surveillance system. Two mail surveys are sent in an effort to gain participation followed by telephone surveillance for non-respondents. The unweighted response rate for 2011-2012 data was 70.3% (n=2,663; 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 the Cochran-Mantel-Haenszel Chi-Square (χ^2) Test.

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