

## Effect of Medicaid status on up-to-date vaccination rates among two-year-old children in Georgia, 2015

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**Background:** The annual Georgia Immunization Study (GIS) employs a retrospective cohort design to determine the up-to-date (UTD) immunization rate of 24-month-old children in Georgia. Previous results have shown lower vaccination rates in the second year of life, particularly for DTaP. We sought to determine if a discontinuation of Medicaid coverage after the infant year contributed to lower immunization rates in the second year.

**Methods:** A stratified random sample of 2,002 Georgia children born in January 2013 was drawn from electronic birth records. Immunization history and Medicaid status were obtained from the Georgia Registry of Immunization Transactions and Services (GRITS). Parents and providers of children inadequately immunized according to the Advisory Committee on Immunization Practices' (ACIP) immunization schedule were contacted for additional information. UTD immunization rates were compared among participants based on Medicaid status (Medicaid both years, first year only, second year only, never on Medicaid). The relationship between Medicaid status and specific immunizations was also explored. Reasons for loss of Medicaid among children who were not UTD were sought via parent interview. Significance testing was performed using Chi-Square tests in SAS version 9.4.

**Results:** Children covered by Medicaid both years or never covered by Medicaid were more likely to be UTD by 24 months (90.4% and 84.5%, respectively) than children no longer covered by Medicaid in their second year of life (49.2%). These children also demonstrated a significantly lower immunization rate for the 4th DTaP dose ( $p < 0.0001$ ).

**Conclusions:** A discontinuation of Medicaid coverage after the first year of life was associated with a lower UTD immunization rate among 24 month old children, particularly the 4th DTaP dose. Although reasons for discontinuation of Medicaid were beyond the scope of this study, lower vaccination levels among this group may reflect a lack of understanding of vaccine support services, and deserves further examination.

**Key words:** immunization, Georgia, two year old, Georgia Immunization Study, GIS, 2015

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