





Placing Social Determinants of Health in Context: Vaccinations




Physical Environment

<p>Commute <25 Min</p> 	<ul style="list-style-type: none"> Distance to healthcare providers was identified as a barrier to childhood vaccination in rural settings. (Albers, 2022) In one study in Montana, children living in rural areas were significantly less likely to have completed the combined 7-vaccine series than children in metropolitan areas. (Freeman 2023)
<p>Affordable Housing/ Year Structure Built/ Owner Occupied Housing</p> 	<ul style="list-style-type: none"> One study found a lower chance of initiation and completion of the HPV vaccination for children living in lower-quality housing. (MacLaughlin, 2020) Frequent changes in residence were found to be a substantial barrier to childhood vaccination. (Kaufman, 2021)




Economic & Work Environment

<p>Graduated High School</p> 	<ul style="list-style-type: none"> An increase in maternal literacy and education is associated with an increase in childhood vaccination. (Forshaw, 2017) Children of mothers with a lower education level were found to be less up-to-date on their childhood vaccinations. (Chen, 2017)
<p>Employed</p> 	<ul style="list-style-type: none"> Higher statewide employment rates are associated with greater use of preventative medical services, including vaccines. (Tefft, 2014) Unemployment impacts access to healthcare, including vaccinations. Cost is a barrier despite the availability of program like the Vaccines for Children program. (Kaufman, 2021)

Economic & Work Environment (continued)

<p>Household Income</p> 	<ul style="list-style-type: none"> • Babies in low-income families were less likely to receive all recommended vaccines. (Keating, 2022) • Populations with higher annual household incomes were found to have increased knowledge, awareness, and initiation of the HPV vaccine across many populations. (Kepka, 2021)
<p>Above Poverty Level</p> 	<ul style="list-style-type: none"> • Poverty and other local economic factors make it harder for teens to get the HPV vaccine, and future programs should focus on these issues to improve vaccination rates. (Xiong, 2024) • Overall vaccination coverage was lowest among adults aged 65 and older who fell below the federal poverty level. (Norris, 2017)
<p>Children Above Poverty Level</p> 	<ul style="list-style-type: none"> • Children under two years old living below the federal poverty level had lower rates of completed childhood vaccine coverage. (Hill, 2021) • Girls and boys from high-poverty, rural areas had lower odds of initiation and completion of the HPV vaccine. (Swiecki-Sikora, 2019)

Service Environment

<p>Health Insurance/ Employer-Based Health Insurance</p>  	<ul style="list-style-type: none"> • Vaccination coverage among adults is lower among uninsured populations compared to those with health insurance. (Lu, 2015) • Children with private health insurance had higher HPV vaccination rates compared to those covered by Medicaid or uninsured. (NCHS, 2024)
<p>Internet Coverage</p> 	<ul style="list-style-type: none"> • A review of digital health interventions to improve HPV vaccination awareness found that digital tools can help educate parents and adolescents and lead to more vaccine-related conversations with their healthcare provider. (Choi, 2023) • Digital games can be an effective method to increase knowledge of vaccines and potentially increase vaccine coverage. (Montagni, 2020)

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Physical Environment

- **% With Commute <25 Min**
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Economic & Work Environment

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Service Environment

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