





Placing Social Determinants of Health in Context: Heart Disease




Physical Environment

<p>Commute <25 Min</p> 	<ul style="list-style-type: none"> • Longer commuting distance is associated with lower levels of physical activity, which can lead to increased risk of obesity, hypertension, and poor overall physical health (Hoehner, 2012) • Long commute time increases purchasing out-of-home foods, which can have negative cardiovascular health consequences (e.g., high sodium, high calorie fast food, hypertension and obesity) (Osstenbach, 2022)
<p>Affordable Housing/ Year Structure Built/ Owner Occupied Housing</p> 	<ul style="list-style-type: none"> • Adults who live in older, public, or low-income housing are more likely to have cardiovascular disease due to structural problems, insufficient heating/cooling, and exposure to pollutants such as mold, lead or secondhand smoke (Sims, 2020) • Cardiovascular health was better in cities with zoning policies with more affordable housing for lower income residents (Jones, 2021) • Poor housing quality can lead to negative health outcomes including higher exposure to pollutants, increased risk of asthma, and poor mental health, which can all have negative impacts on cardiovascular health (Habitat for Humanity, 2021)




Economic & Work Environment

<p>Graduated High School</p> 	<ul style="list-style-type: none"> • Lower educational level predicts negative cardiovascular outcomes (Kelli, 2019) • Those with less than a high school education had a significantly higher rate of a cardiovascular disease event than those with a high school degree (Kubota, 2017)
<p>Employed</p> 	<ul style="list-style-type: none"> • Job insecurity can lead to poorer socioeconomic conditions and increased risk for coronary heart disease (Virtanen, 2013) • Middle-aged women employed outside the home had a lower risk of coronary heart disease and stroke (Carson, 2009)

Economic & Work Environment (continued)

Household Income 	<ul style="list-style-type: none"> Household income is strongly associated with heart disease via behavioral risk factors, such as lower physical activity and smoking (Lemstra, 2015)
Above Poverty Level 	<ul style="list-style-type: none"> Low socioeconomic status is substantially associated with early coronary heart disease burden (Hamad, 2020) and a greater risk of major cardiac events (Tawakol, 2019)
Children Above Poverty Level 	<ul style="list-style-type: none"> A higher prevalence of Adverse Childhood Experiences (ACEs) was found in a lower income population, which can lead to increased cardiovascular risk factors (Allen, 2019) Children who grew up in poverty were 83% more likely to suffer from metabolic syndrome, which increases the risk of cardiovascular events or death (Gami, 2007)

Service Environment

Health Insurance/ Employer-Based Health Insurance  	<ul style="list-style-type: none"> Treatment and control of cardiovascular disease risk factors are lower among uninsured adults (Brooks, 2011) In established cardiovascular disease, a lack of insurance has been associated with poorer care quality and worse short-term outcomes (Wadhwa, 2017) Low-income urban white individuals with public insurance had higher odds of reporting any chronic condition compared to the privately insured (Smolen, 2014)
Internet Coverage 	<ul style="list-style-type: none"> Telehealth is associated with medication adherence and symptom monitoring in both coronary artery disease and congestive heart failure (Takahashi, 2022) Internet access was found to be associated with lower levels of cardiovascular disease mortality (Moorhead Jr., 2022)

References

Physical Environment

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

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- **% Employed**
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References

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- **% Above Poverty Level**

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Service Environment

- **% With Health Insurance/% With Employer-Based Health Insurance**

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