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Dfc^YWh. SARS-CoV-2 Research

H]h`Y. Analysis of SARS-CoV-2 Infection Rates in Families within the Finger Lakes Region of New York.

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SARS-CoV-2 is the virus that causes COVID-19. In 2019, this virus caused a global pandemic with infections varying from no symptoms to very severe symptoms. Early in the pandemic, data suggested that children were infected with SARS-CoV-2 less frequently than adults, however, this was during a period of relative isolation when children were tested less frequently⁴. This period of low-frequency testing among children may have been the result of children experiencing much milder symptoms than adults². However, more recent studies have shown children are infected at a similar rate as adults¹. Furthermore, studies have noted that children's viral levels are just as high as adults³. In addition, viral load was not found to be correlated with symptom severity which means children who may experience more mild symptoms are just as likely to spread the disease as a child with minor symptoms⁵. We conducted an infection analysis evaluating rates of COVID-19 within families in the Finger Lakes region of New York to further investigate the COVID-19 infection rate among children and adults, as well as differences associated with sex, income, race, etc.

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- Conduct an infection analysis evaluating rates of COVID-19 infection in families within the Finger Lakes Region.
- Determine if COVID-19 infection occurs at the same frequency in children and adults.
- Determine the role of various socioeconomic factors on infection rates.

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- Children were infected with COVID-19 at a rate of 31.75%. Similarly, adults were infected at a rate of 34.83%.
- The group with the lowest infection rate was 16-18 year-olds at a rate of 22.22%. While 2-4 year-olds had the highest infection rate at 39.53%.
- Blacks and Whites had the highest infection rate at 33%.
- Families where every member in the household was vaccinated, had only an 18.75% chance of every member becoming infected with COVID-19. In households where only some members were vaccinated, this rate was

much higher at 50%.

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- Children and adults have similar COVID-19 infection rates at 31.75% and 34.83% respectively.
- The 2-4-year-old age group had the highest infection rate at 39.53%. This may