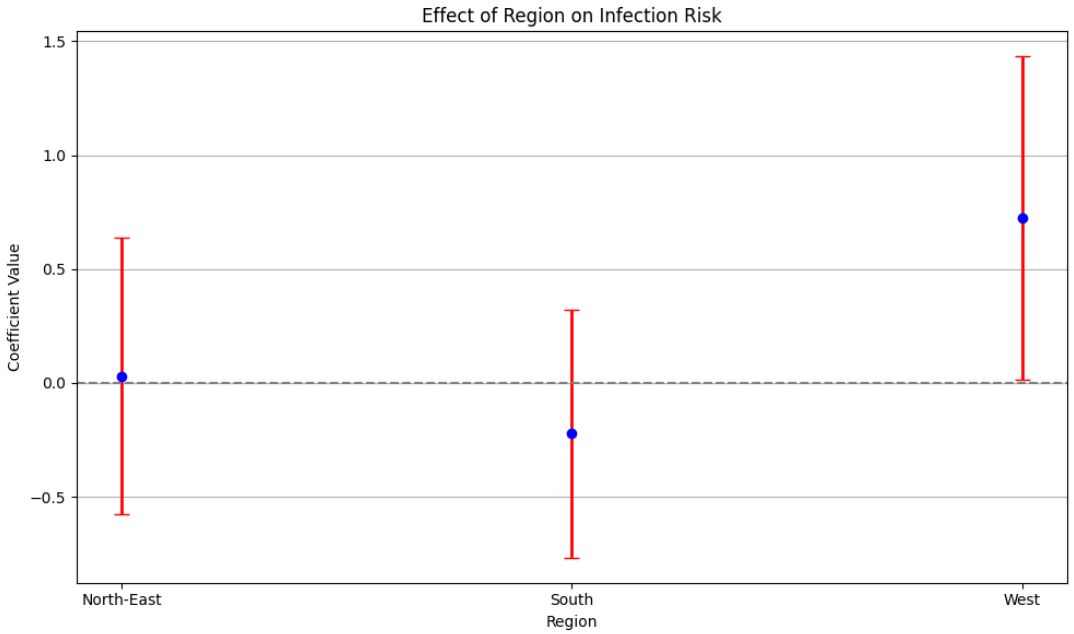
Report on the Impact of Hospital Location on Infection Risk

We analyzed the provided infection data to determine the effect of a hospital's region on infection risk. Using data from various hospitals, we employed regression modeling to understand variables relationships, while controlling some factors such as average patient age, length of patient stay, the presence of a medical school, and the number of beds.

We used data on infection risk, patient age, length of stay, presence of a medical school, region, and the number of beds to create a statistical model to identify relationships between variables. We also included various factors that might affect infection risk, we aimed to isolate the specific effect of the region on infection risk.



From the graph, we can see that the North-East Region impacts infection risk. The South Region suggests a non-significant decrease in infection risk. The West Region indicates a potential increase in infection risk.

In conclusion, the geographical location of hospitals plays a role in the variability of infection risk. The Health Department might consider conducting more regional studies, focusing on the West, to better understand factors contributing to higher infection risk.