

## **Abstract**

This thesis focuses primarily on determining the potential effect of Covid-19 on road traffic safety in the Czech Republic, measured by the daily volume of traffic collisions. The additional incorporation of weather and seasonal factors contributes to the complexity and uniqueness of this work. Although it is possible to find relevant foreign literature on the relationship between the pandemic and traffic accidents, this phenomenon has not been widely studied in the Czech Republic.

The hypotheses were tested by applying the Ordinary Least Squares estimation on time series data. The frequency of traffic accidents significantly decreased with the presence of Covid-19 disease, especially during the state lockdown periods. A similar pattern was observed by the remaining analysed categories of collisions, except for those with alcohol and drugs detected by the offender, which were positively influenced by the pandemic. The wind is the only statistically insignificant weather variable in our analysis, and the state holidays all turn out to significantly affect the number of traffic accidents. Overall, the thesis contributes to the revelation of traffic trends during the Covid-19 disease and helps to predict the traffic safety situation in a possible future state of emergency of a similar kind.