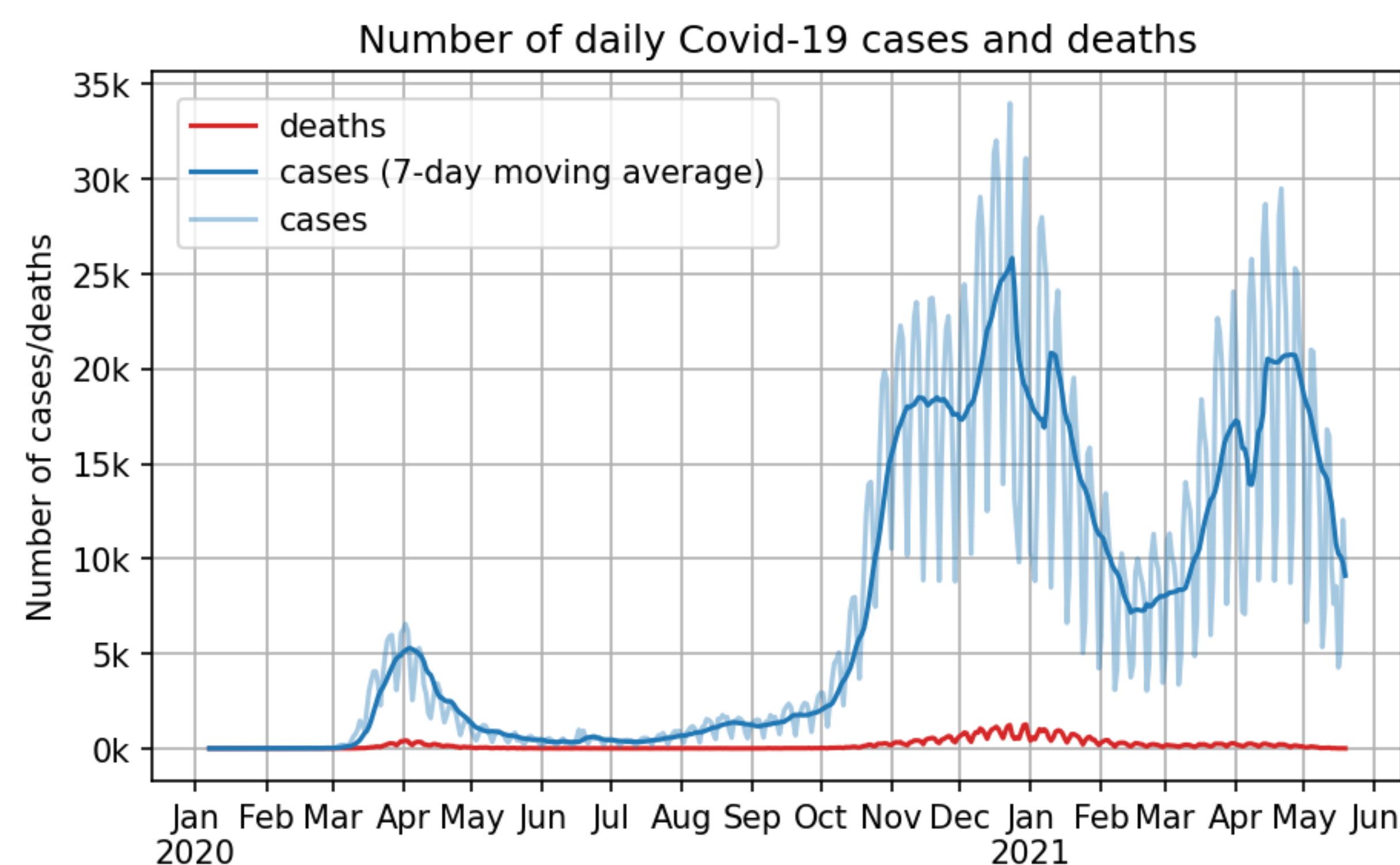


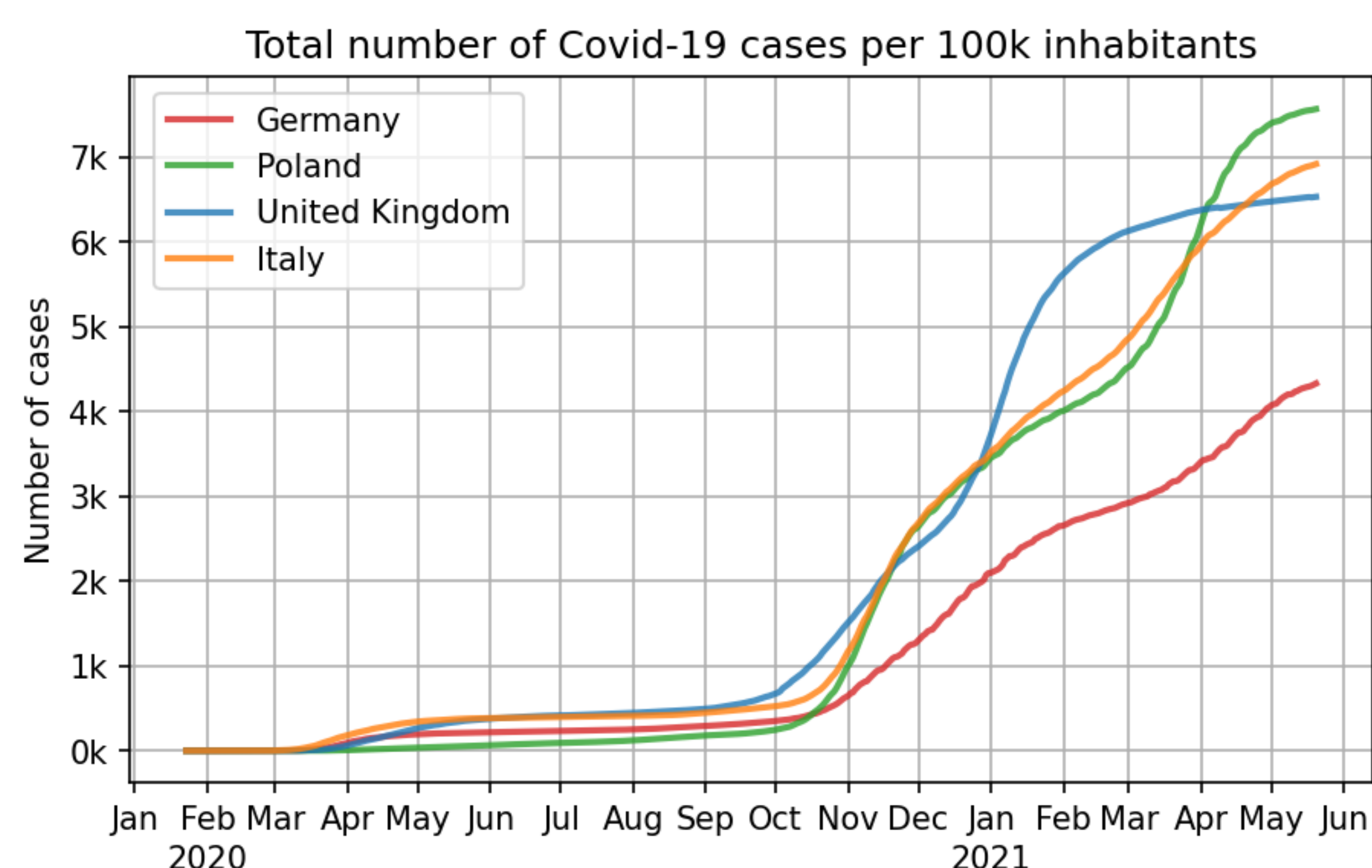
# COVID-19 in Germany

Barbara Jurzysta, Karol Mućk

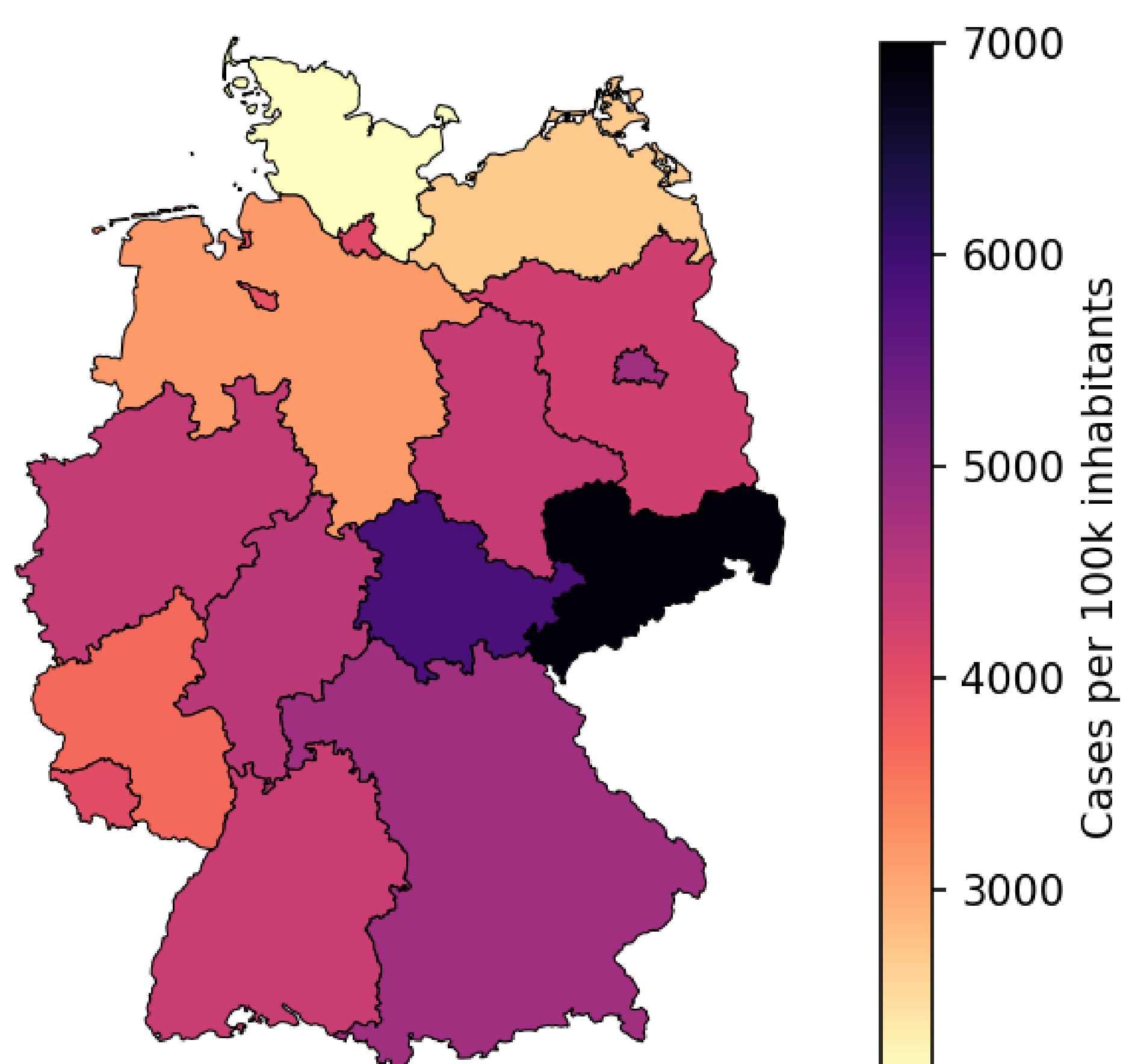
The first case of COVID-19 in Germany was confirmed on 27 January 2020 near Munich. Since then three waves of the COVID-19 pandemic passed through the country. Until this day (21 May 2021) they confirmed a total of 3,640,085 cases and 87,667 deaths. Vaccinations started on 27 December 2020 and now almost 40% of the population have received at least first vaccination dose and 13% are fully vaccinated.



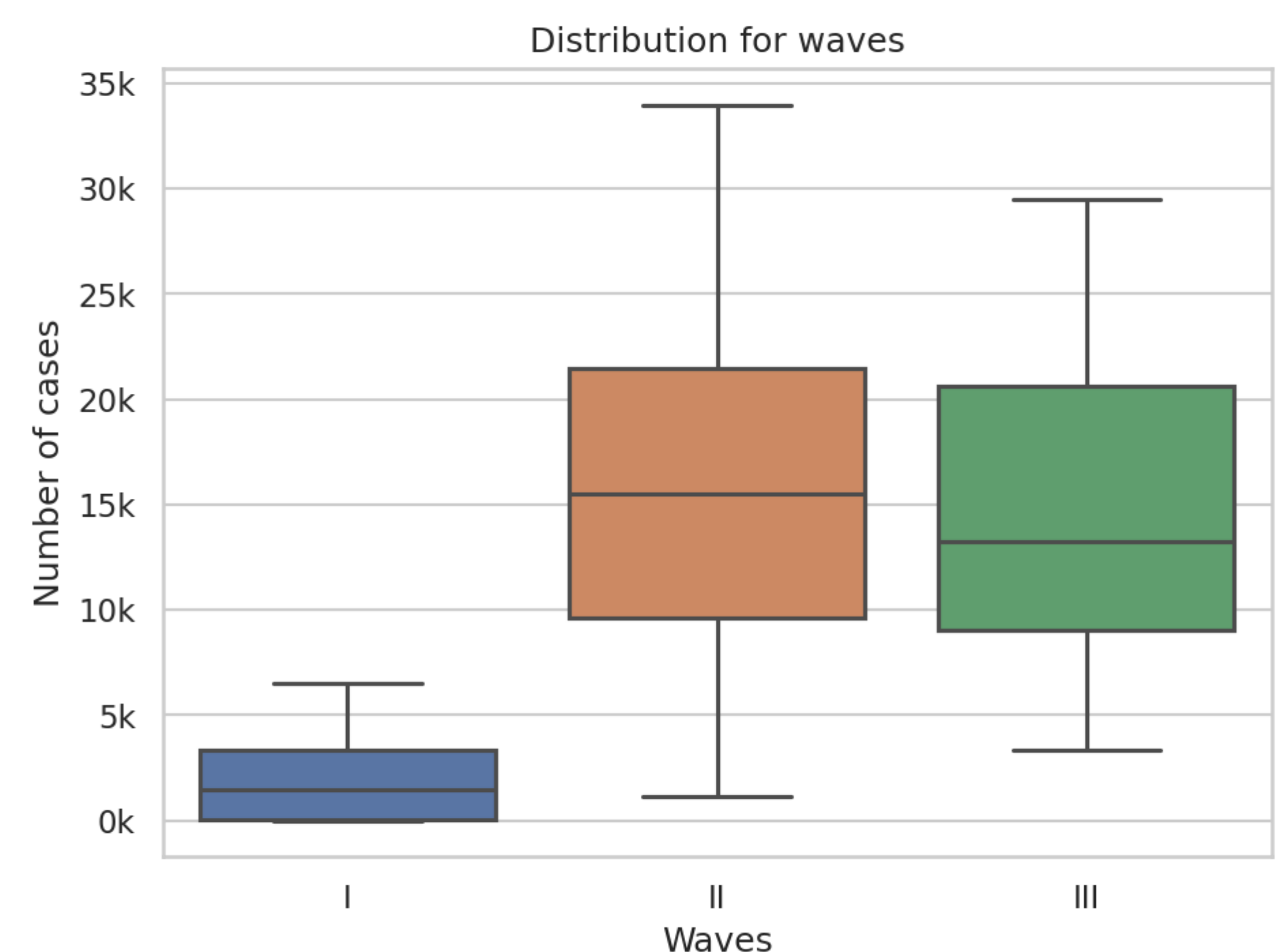
Total number of COVID-19 cases in Germany (per 100k inhabitants) is significantly smaller than in other European countries. Within Germany, most cases per 100k inhabitants were confirmed in Saxony and Thuringia and fewest cases were confirmed in Schleswig-Holstein.



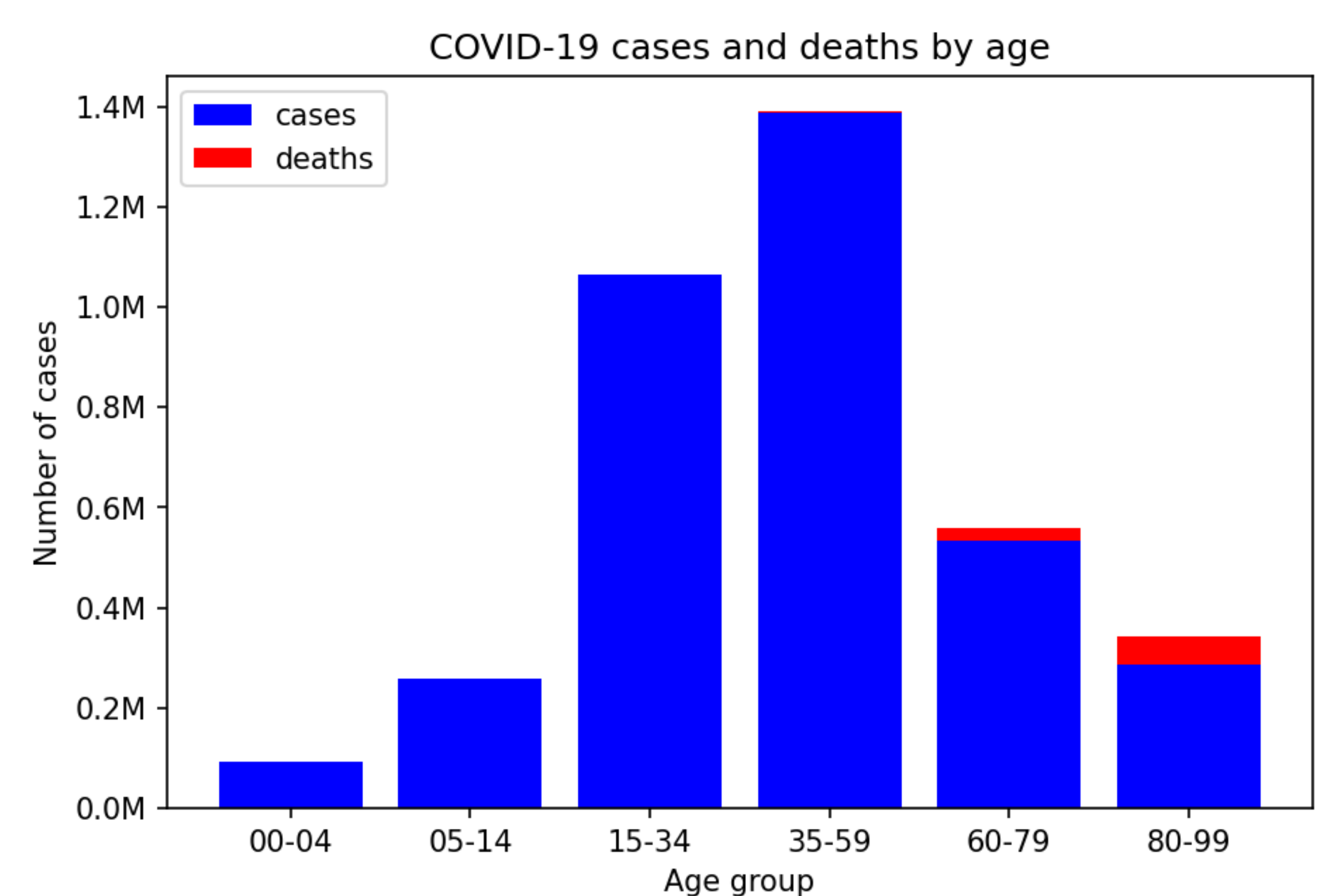
Number of confirmed cases by state



The second wave of COVID-19 in Germany was the most severe. Median of new daily cases for this period of time is over 15,000. This is also when the highest number of daily cases were confirmed (33,990 cases on 23 December 2020). The third wave wasn't as strong - it was shorter (it is currently ending) and it had much lower mortality, probably due to vaccinations.



Distribution of COVID-19 cases and deaths by age shows that the most infected people are aged 35-59 but this is also the biggest age group. The most deaths occur in age group 80-99.



To gain insight into the problem we calculated what percentage of people from each group were infected or died because of COVID-19 in Germany. We can see that it is the most likely for a person to be infected in age 15-34 (probably because of their active lifestyle, socializing and going to work) and in age 80-99 (it can be caused by weaker immune system of the elderly).

The lethality of COVID-19 increases with age: for people under 60 it very rarely causes death, for people aged 60-79 the mortality rate is about 5% and for people over 80 it grows to 20%.

