22.04.2020: COVID-19 Pandemic: Germany: Stagnation predicted for 27.4.; estimated upper limit now higher than 150 000

The figure shows the daily real (bold line) and predicted (dotted line) increases of COVID-19 infections for Germany, real increases as reported by the Robert-Koch-Institut (RKI, Berlin) at the 22.4., predictions as generated by an optimally fitted weighted Logistic Model, putting more weight on the forth, third and second last observation. Vertical blue dotted lines indicate Mondays, the red vertical dotted line the predicted start of stagnation of new infections (< 500). The horizontal dotted line indicates an increase of 500.

The representation of increases shows that the numbers reported by the RKI follow waves related to weekdays. Obviously, numbers are relatively the lowest at Mondays (with the exception of the week after Easter where Monday is a public holiday; note that the last entry is very preliminary). The public health authorities obviously do not report cases that much for weekends. Moreover, increases tend to get smaller. However, since the model mostly underestimates increases, possibly because of the waves, our predictions might be somewhat optimistic.

Stagnation (< 500 new infections) we now predict for the 27.4. for Germany (and for the beginning of May for Italy). The estimated upper limit of the no. of infected people in the first wave of the pandemic is now higher than 150 000 for Germany (and around 195 000 for Italy).