

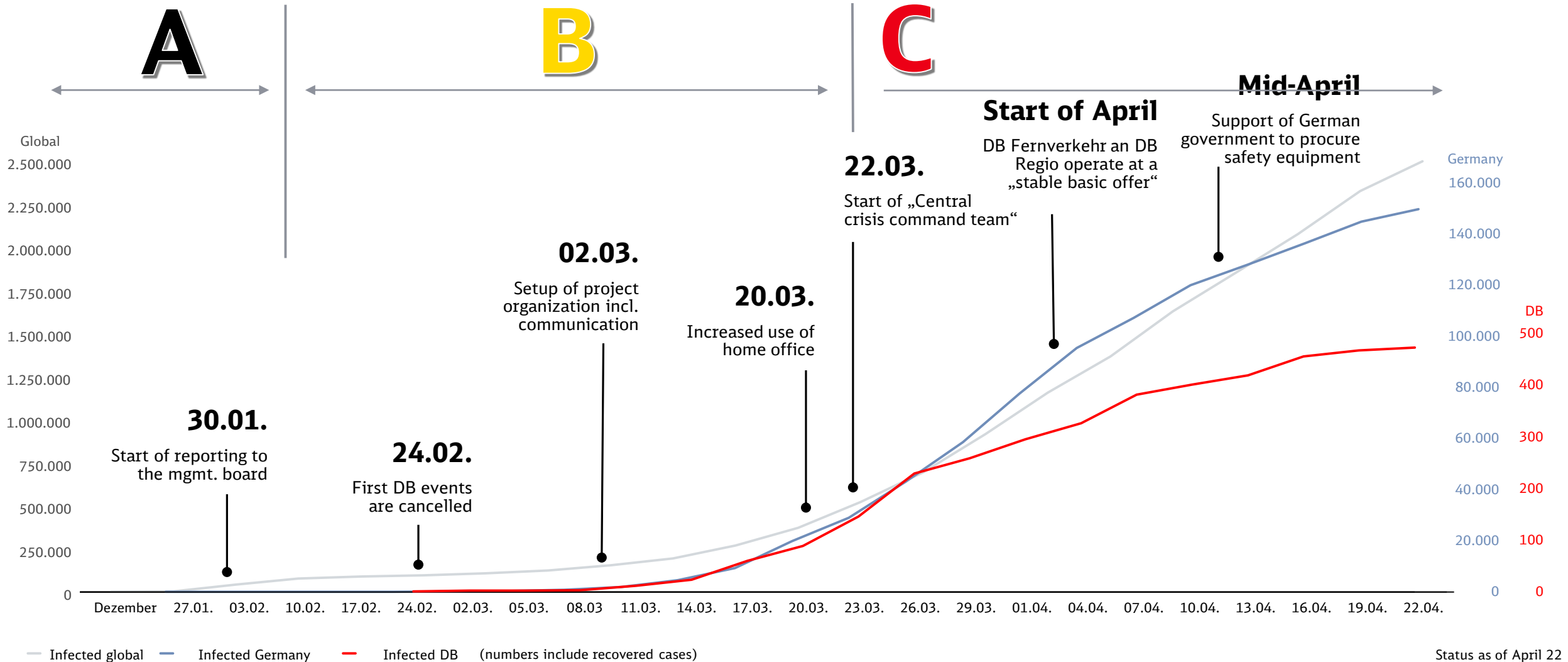


Coronavirus SARS-CoV-2 Corporate Pandemic Team

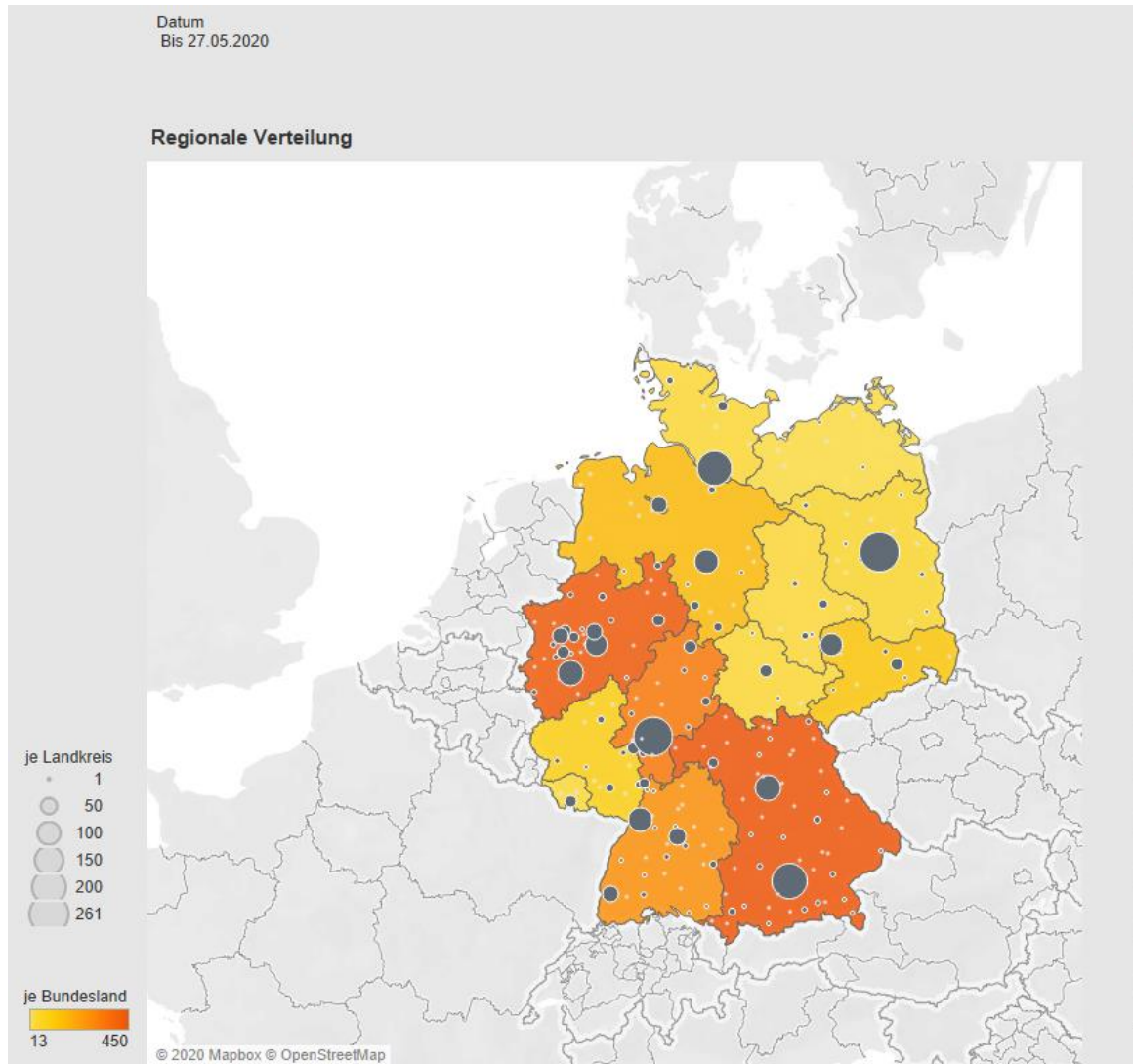
**CER Online workshop on rail passenger
health & safety during the corona crisis**

June 2020

DB's corporate pandemic team started already in January; since April the increase in Corona infected employees has been below German average



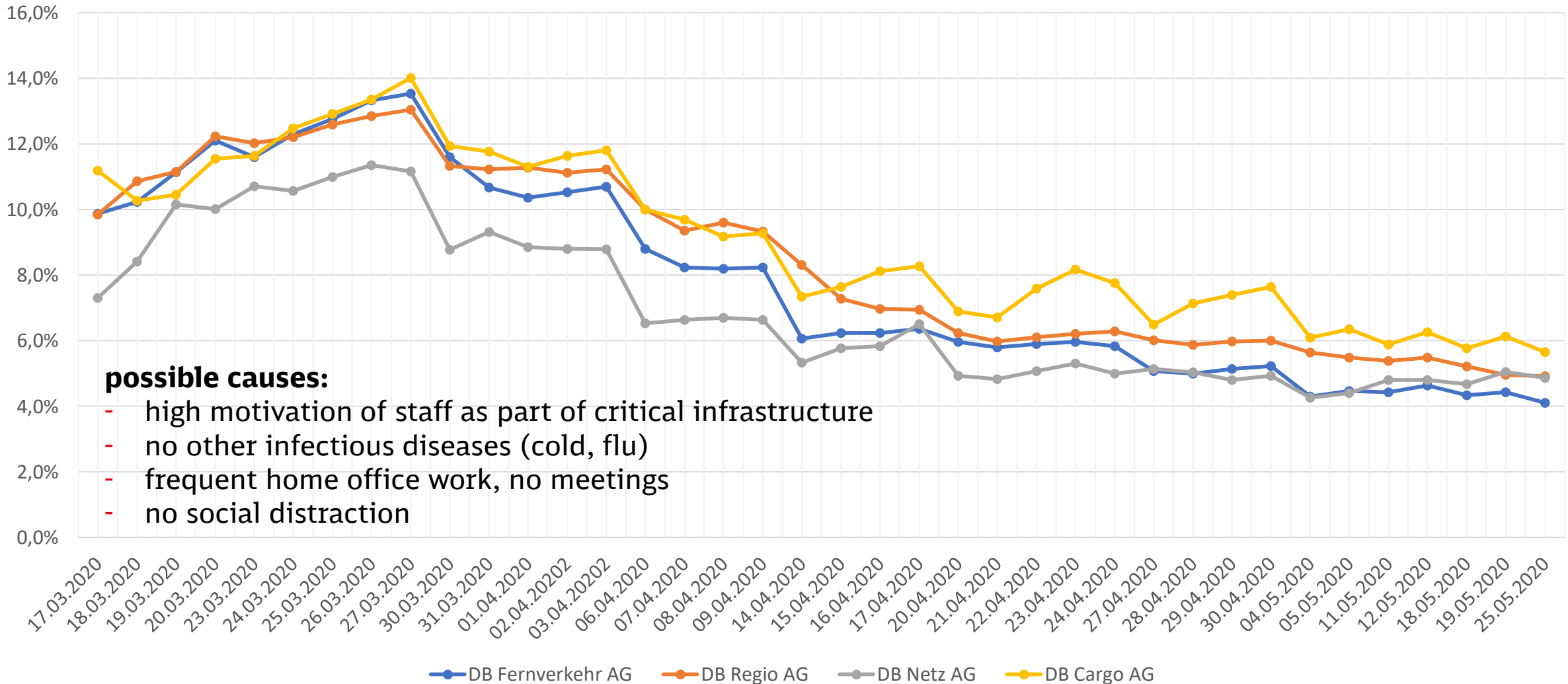
Currently 160 confirmed Corona virus cases at DB, another 548 employees have recovered



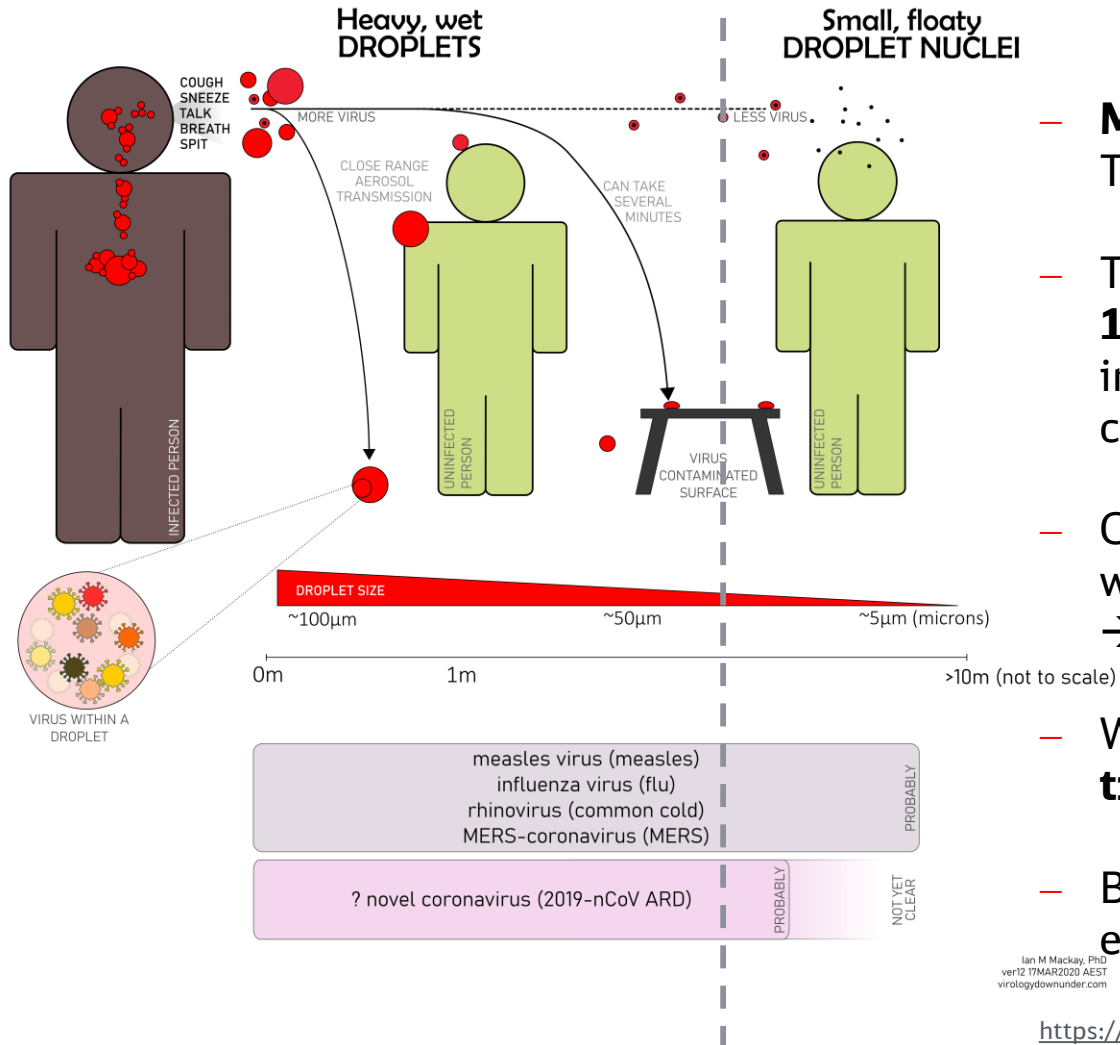
Top countries	acute	recovered
Germany	27	318
Spain	28	74
UK	8	49
Mexico	30	2
USA	19	19

Average rate of staff on sick-leave continues to stay at very low levels

(operative staff of DB Fernverkehr, DB Regio, DB Netz und DB Cargo)



Transmission of Coronavirus: no elevated risks of infections in trains



- **Main transmission of SARS-CoV-2 are heavy wet droplets.** Transmission via aerosol mainly in stuffy air without ventilation
- Transmission of viruses is 80% lower with **physical distancing of 1m or more.** **Face mask use** results also in a reduction in risk of infection (Metastudy of 172 observational studies across 16 countries and six continents, in Lancet June 2020)
- Coarse filter are sufficient to separate wet droplets >10 µm. The way of the air in ventilation systems is > 2m.
→ **no risks of transmission via ventilation systems**
- Worldwide only very few cases of SARS-CoV-2 **transmission in trains.** For Germany and Austria **not a single confirmed case.**
- Beneficial are **good ventilation** (open windows or high air exchange rate), **vertical air flow**, plus distance rules and masks

Ian M Mackay, PhD
ver12 17MAR2020 AEST
virologydownunder.com

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31142-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext)

Dos and Don'ts at Deutsche Bahn

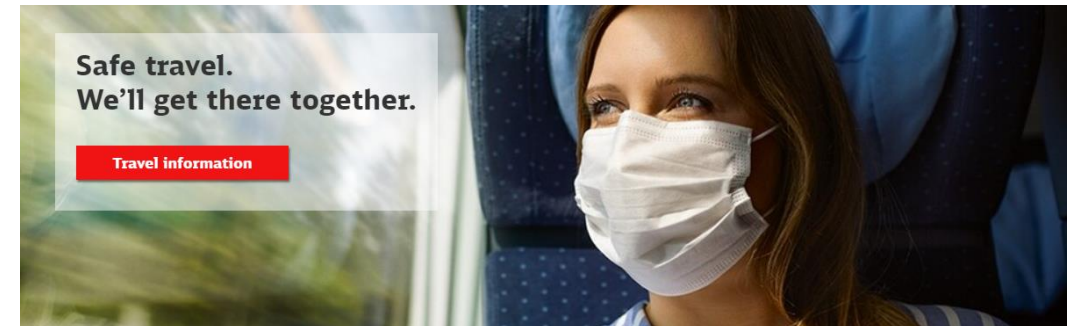


General rules

- keep distance > 1.5m wherever possible
- wash hands or use hand rub frequently
- wear community masks

Plus:

- frequent cleaning of grip surfaces
- offering hand rubs to passengers
- toilets and air conditioning in good function
- testing of staff (PCR throat swabs)
- leaving seats empty in-between



dubious:

- frequent disinfection of floors, rooms, vehicles with UVC-light, ozone, hypochlorite (bleach) spray
- „antiviral“ coatings and materials

(further research necessary; clinical relevance not clear; no targeting of transmission ways)

Dem Virus keine Chance! No chance to the virus!

- Regelmäßiges Händewaschen für mind. 20 Sekunden
- Wash hands regularly for min 20 sec. with water and soap
- Ersatzweise Händedesinfektion, wenn Händewaschen nicht möglich ist
- Use hand sanitizer when soap and water are not readily available
- Beim Husten und Niesen Mund und Nase mit gebeugtem Ellbogen oder Papiertaschentuch bedecken
- Cover coughs and sneezes with paper tissue or elbow
- Möglichst nicht ins Gesicht fassen, auf Händeschütteln verzichten
- Avoid touching your face and shaking hands
- Abstand halten (>1,5 Meter), auf Treffen mit sozialen Kontakten verzichten
- Keep a distance (>1.5 meters), avoid social contacts
- Mit Maske (MNS) zum Infektionsschutz beitragen
- Wear a mask as a mean of infection control
- Wenn Sie Fieber, Husten und Atembeschwerden haben, suchen Sie frühzeitig medizinische Hilfe auf und teilen Sie die frühere Reiseanamnese mit Ihrem Arzt
- Monitor your health. Seek medical attention if you develop symptoms, inform the doctor about your travel history

backup



Crisis management prepares for de-escalation after 10 weeks in highest status „level C“

backup



Criteria for de-escalation of crisis management at DB

- 1 **Less infections in Germany and in Europe per week**, „reproduction factor R“ is below critical value of 1
- 2 Further easing measures of German Government and federal States; economy starts to recover
- 3 **Ramp-up of train traffic in Germany is completed**, the demand for transportation increases
- 4 Re-opening of European borders
- 5 **Sustainable low levels of sick leave at DB**

