

The University of Manchester



Perceptions of COVID-19 risk on public transport: Reporting on a phased Deep Dive

Dr Nicola Gartland*, Dr Anna Coleman, Prof David Fishwick, Prof Sheena Johnson, Prof Martie van Tongeren

*nicola.gartland@manchester.ac.uk



Background:

Since the COVID-19 pandemic began, cities around the world have changed their public transport services to help restrict the spread of SARS-CoV-2 (the virus that causes COVID-19) and ensure safe service provision for essential workers and passengers. In our research, we explored the changes in the UK public transport sector across the course of the pandemic (Gartland et al., 2022; Gartland et al., in press).

There are a number of **contextual factors** that have varied across this period, which are important to consider when interpreting data related to public transport, including:

- ridership across transport modes (see Figure 1);
- levels of concern about transmission risk on public transport;
- funding schemes and subsidies provided to the sector;
- travel restrictions and travel habits.

 Research Questions: 1. What are the perceptions of risk of transmission by the various stakeholders within public transport? 2. What are the mitigations being put in place and the perceived effectiveness of these risk mitigation strategies? Are these perceptions different between stakeholders? 	Interviewee Type	Phase 1 (Jan - May 2021)	Phase 2 (Dec 2021 - Feb 2022
	Expert	17	5
3. What are the major knowledge gaps that will need to be addressed in the short and longer term?	Organisational Leader	13	5
 Methods: Qualitative 'deep dive' approach Phased data collection Phase 1 – Jan-May 2021, second national 'lock-down' Phase 2 – Dec 2021-Feb 2022, winter 'Plan B' regulations 	Worker	5	2
	Passenger	12	5
	Total	47	17
 Semi-structured interviews conducted with a variety of stakeholder groups including: experts (research, policy, industry, regulators), organisation leaders (industry, unions), workers and passengers 			
	Public Transport Ridership Through the Pandemic		
Results (Coleman et al., 2022; Coleman et al., in press):	100%		

- Six broad categories of mitigation were introduced in the public transport industry (see right); facilitators and barriers to implementation were identified.
- Mitigations were perceived by all groups of stakeholders to reduce risk (at time of research)
 - By Phase 2, division between those who relied on personal mitigations (social distancing, face coverings) and those who relied on high-level mitigations (ventilation, vaccination).
- Ridership on public transport has not recovered to pre-pandemic levels, despite the removal of restrictions and behaviour mandates, and this is impacting business viability.





Passengers wanted strong service provision as well as safety measures; whereas
organisation leaders were cutting services to meet reduced demand (see Fig. 2). This had
impacts for business viability.

Ventilation

Reducing contact

Prioritising employee health

Figure 1. Values are percentages of an equivalent day or week, **boxed dates** valid at the time of interviews. *1st Lock down (23/3/20) **Day most remaining restrictions lifted in England. *** Plan B restrictions / School holidays ****Plan B restrictions only. NB 27/1/22 Plan B restrictions relaxed

"I mean, to build my confidence as far as the overall use of public transport's concerned, we need more services, we need faster services, we need cheaper services. But, to me, the overall confidence is not just now on COVID, it's the overall climate change, environment, everything else. To me, that's now coming up in importance, and COVID, personally, is not disappearing, but it is going down in importance." (P8, Phase 2)

SERVICE PROVISION

> PASSENGER DEMAND

PASSENGER

CONFIDENCE

Figure 2: Interactions between factors related to business viability

BUSINESS

VIABILITY

"The view is now that really we want a playbook of just things we can pull out and we want to know what the deal is without having to go through a huge faff and a huge bit of confusion and last minute policymaking. That's what people want now." (EX3, Phase 2)

Conclusions:

The public transport sector continues to face challenges in the new phase of the pandemic: 'Living with COVID-19'. It is important now to:

- 1. Document the lessons learned through the COVID-19 pandemic
- 2. Consider ways to promote the safe recovery of the public transport sector (see Recommendations)



Recommendations:

CONFIDENCE IN SAFETY

CONFIDENCE IN SERVICE

Communication

- 1. Develop messages that are clear and help encourage footfall rates to increase / fall on public transport as circumstances necessitate.
- 2. Consider observable COVID-19 risk mitigations (e.g. cleaning, face coverings) as these are important points of visible reassurance; however, communications should also appropriately promote reliance on less visible mitigations.
- 3. Consider the impact of discipline fatigue and risk habituation for future messages.

Well-being

- 1. In the move to the self-management of risk, ensure vulnerable individuals are able to manage their own risk adequately.
- 2. Maintain worker well-being initiatives.

References:

Coleman A, Gartland N, Fishwick D, Johnson S and van Tongeren M. (2022) Perceptions of transmission and mitigation of SARS-CoV-2: public transport: Views of experts, organisational leaders, workers and passengers between January – May 2021. March March March Median March Median March Median March Median March Median March Median March March

Gartland N, Coleman A, Fishwick D, Johnson S, Armitage C and van Tongeren M. (in press) Experiences, perceptions of risk and lasting impacts of COVID-19 for employees in the public transport sector. Annals of Work Exposure and Health. Special Issue: The lasting impacts of COVID-19.

Top image: Creative Comms, source: https://ggwash.org/images/posts/_resized/mask_wearing.jpg. Bottom image: Open Government Licence v3.0, sourced from ORR (https://www.orr.gov.uk/search-news/orrs-assessment-network-rails-north-west-and-central-region-finds-improvements).