## 6. CONCLUSIONS

This analysis confirmed that bus drivers in London had higher mortality from Covid-19 than the rate in all occupations. It has shown that many of the TfL bus drivers who died, as well as all working in a front-line occupation, possessed several other characteristics that put them at higher risk of death from COVID-19 in the period March to May 2020 – living in more deprived areas in London (and in particular in boroughs with the highest COVID-19 rates), being from a BAME background and age 65 and older. From the incomplete audit of deaths, we were able to undertake, several had underlying health conditions that have long been associated with bus driving as a sedentary occupation and likely contributed to the severity of their COVID-19 infection.

Levels of risk of death from COVID-19 associated with each of these have only recently been quantified by both ONS and PHE i.e. well after the deaths occurred. While most of these factors are out of the control of the bus operators, it is important that they do their best to both minimise exposure to risk by all drivers and consider how those at heightened risk can be identified and given guidance on both reducing and preventing those risk factors that are avoidable.

In particular, the audit of death certificates, revealed that where certifying doctors identified hypertension as a contributory factor to the death of a bus driver from COVID-19, it was not recorded on the information held by bus companies. As such, bus companies need to be more proactive in understanding existing health conditions of bus drivers, supporting better health and identifying those most at risk of COVID-19 mortality.

PHE have, in recent weeks, published a report on understanding the impact of COVID on BAME groups. This sets out a series of recommendations. Among these, those most relevant to every employer in the country is the need for strategies to create healthy and supportive workplaces (within and outside the health service) that have zero tolerance for discrimination and empower BAME staff to raise concerns about occupational risk and safety (6).

We also analysed 14 of the actions that were identified by bus operators and TfL as potentially reducing Covid-19 transmission and were initiated in the period March to early June by most operators. On average, they implemented 13.3 of these actions. However, there was variation in the timing of implementation. On average, 5.3 actions were taken before lockdown took place on 23rd March and a similar number after the peak of mortality was reached in the week ending 3<sup>rd</sup> April. While the timing of actions by most companies was similar – largely related to the advice they were getting at the time – this indicates that the majority of actions were probably initiated after most of the drivers who died had become infected and were certainly initiated after lockdown reduced passenger numbers and changed many other aspects of community behaviour. There was, additionally, variation between bus operators in the timing of initiating these actions before 23<sup>rd</sup> Marchand after 3<sup>rd</sup> April.

Despite the variation between bus companies, the data on the relationship between death rates and actions taken, as well as on the number of actions taken before the first driver ceased work prior to dying, suggest that delays in taking action are unlikely to have contributed to the death rates from COVID-19. This does not mean that all the actions were ineffective – simply that so many were taken close to or after lockdown on 23<sup>rd</sup> March and hence they were not really tested. Lockdown changed the environment both within buses (fewer passengers) and in the community (more people staying at