COVID-19, distress and potential trauma exposure in the police service of England and Wales: A mixed method approach

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Abstract
This study provides an initial exploration into the impact of COVID-19 on the exposure of police officers to potentially traumatic events and their subsequent impacts on wellbeing. Qualitative and quantitative data were gathered from over twelve thousand rank-and-file officers across England and Wales in Autumn 2020, via an online survey. The results not only identify several frequently experienced COVID-related duties and events that are potentially detrimental to officer wellbeing; but that these exposures are related to an officer’s rank and role. These results offer valuable information that may help forces target key resources towards those that need it most.

Keywords
COVID-19, police, trauma, wellbeing

Introduction
In March 2020, the British Prime Minister addressed the nation to announce extraordinary measures and legislative changes to slow the spread of the worldwide pandemic caused by COVID-19 (Brown and Kirk-Wade, 2021). The Police Service was given new powers to enforce these legislative changes, and whilst the majority of the country faced a legal directive to stay at home, police officers were compelled to continue working on the
frontline in direct contact with the public, and, as a consequence, potentially in direct contact with the virus itself. Officers have not only been responsible for engaging with the public and enforcing government mandated restrictions, but they have put the health and wellbeing of themselves and their families at risk to maintain continuity of service and support the public during the pandemic (Davidovitz et al., 2021; Elliott-Davies, 2021a).

Whilst much research has, quite rightly, focused on the impact of the current crisis on healthcare professionals, less attention has been given to the impact of COVID-19 on other public sector personnel such as police officers (Alcadipani et al., 2020). Nonetheless, some research has already been conducted on policing during the pandemic; with several studies focussing on practical responses to the immediate challenges faced by the police, such as the impact of social distancing on crime or access to personal protective equipment (PPE), whilst others have taken a more humanistic approach by examining the impact of COVID-19 on officer health and wellbeing (De Camargo, 2021a, 2021b; Frenkel et al., 2021; Langton et al., 2021; Kyprianides et al., 2021; Laufs and Waseem, 2020; Mohler et al., 2020).

Interest in the mental health and wellbeing of police officers, however, is not a new development. Policing has long since been recognised as a high-stress occupation compared to other professions (Duran et al., 2019) and is, by nature, both unpredictable and remarkable. As the service of first and last resort, officers are often required to attend a range of critical incidents and civil emergencies (Home Office, 2015, Home Office, 2020a, Winsor, 2016, 2020) that might expose them to accident scenes, distressing situations, violence and threats to the safety of themselves or others; and as such, are likely to be at higher risk of adverse mental health and wellbeing outcomes (Finn et al., 2000).

Given the unique characteristics of their profession, perhaps it is unsurprising that previous research has identified that exposure to potentially traumatic events is relatively commonplace amongst the policing population (Cartwright and Roach, 2020; Elliott-Davies, 2018; Miller et al., 2021; Syed et al., 2020; The Royal Foundation College London, 2020), and that up to one in five police officers may suffer from undiagnosed Post Traumatic Stress Disorder (PTSD) or Complex Post Traumatic Stress Disorder (CPTSD) within the police population of England and Wales (Miller et al., 2020).

Traumatic incidents can be described as an extremely threatening or horrific event, or series of events (Maercker et al., 2013), and can include a wide range of experiences, many of which may shatter the fundamental beliefs that an individual may hold about themselves and the life that they lead. The impact of trauma on policing needs to be addressed, to not only protect the resilience of new joiners and ensure that support is provided to those that need it, but also to reduce the financial burden that accompanies these human costs.

Though the role of the police is unlikely to ever be without some psychosocial hazards, there is a not only a moral imperative to manage, monitor, and mitigate these risks as much as possible, but there is also a financial incentive. Previous research has found that poor mental health and wellbeing is twice more likely to force officers to take significant time off work than physical injuries (Police Care UK, 2016), and poor mental health has been estimated to cost the Police Service between £189.8 million and £229.9 million annually (PFEW, 2019).
Regardless of the above, until recently, there has been a marked lack of UK-centric research on trauma exposure in policing, especially in regard to assessing and quantifying types of traumatic event; and without a standardised way to identify, record or measure levels of exposure, the psychological needs of officers cannot be adequately met and maintained.

This deficit in the requisite ‘toolbox’ was the driving force behind the recent development of a UK-centric policing-specific traumatic events checklist. Using the qualitative experiences of over a thousand police officers and staff collected via an online survey in 2018, Miller et al. (2021), created the ‘Police Traumatic Events Checklist’ (PTEC) to help identify the ‘worst’ traumas that police officers in England and Wales were most frequently exposed to. The resulting tool presented a list of ten ‘types’ of traumatic event that accounted for 70% of the typical ‘worst’ traumatic experiences reported by participants, such as sudden deaths (including homicides, suicides and accidental deaths). However, much has happened since 2018 when the data that underpins this tool was collected, and whilst the PTEC had been augmented to retrospectively account for the potential contextual influence of COVID-19, it may be that the emergence and spread of a global pandemic has fundamentally affected the types of trauma that officers are most frequently exposed to. For example, whilst some UK policing demands have fallen since March 2020, others, such as road traffic collisions, domestic violence and child abuse, have been on the rise since the start of the pandemic (Refuge, 2020; Winsor, 2020, 2021). Officers in some regions have also been drafted in to support specialist teams to handle deaths that occur in the community (e.g. ‘Pandemic Multiagency Response Teams’ or ‘COVID cars’), whilst others have suffered violence at significant public order events, and some have been managing additional demands created by the withdrawal or reduction of frontline services by other public bodies (BBC, 2020a; BBC, 2020b; BBC, 2021; Hockaday, 2021; Winsor, 2021).

In summary, whilst exposure to traumatic events is considered as routine within UK policing and recent research has documented the detrimental impact of the global pandemic on the general health and wellbeing of officers (De Camargo, 2021b; Frenkel et al., 2021; Graham et al., 2021; Kyprianides et al., 2021), the impact of COVID-19 on potential trauma exposure has yet to be explored. As such, this paper aims to provide a preliminary exploration into the impact of the pandemic on the type of trauma that officers have been exposed to and, where possible, quantify the scope of these impacts and identify high-risk roles. In doing so, it may assist forces to target the oft sparse but vital provision of mental health and wellbeing support services towards those that need it most, and to help inform future emergency planning to ensure organisational responses to similar crises include actions to monitor and reduce any potentially harmful impacts on those that work on the frontline.
**Method**

**Data set**

Both qualitative and quantitative data were drawn from the 2020 Police Federation of England and Wales’ Officer Demand, Capacity and Welfare Survey; a biennial cross-sectional survey that collects self-reported measures across a range of issues. Respondents are anonymous and free to decline to answer any given question. At the beginning of the survey, participants were informed that they may be asked questions about their mental health and wellbeing and were signposted to sources of support.

All officers of federated ranks (Constable to Chief Inspector) across the 43 territorial forces in England and Wales were invited to take part in the survey, which was open between the 5th of October and the 23rd of November in 2020. As such, the data were collected whilst more restrictive public controls were being reintroduced (September to October 2020), including the second national lockdown in England (5th of November 2020; Brown and Kirk-Wade, 2021), and before the national the vaccine roll-out commenced in December 2020 (Baraniuk, 2021). Data were analysed during the Spring and Summer of 2021 and analysis was concluded before the revocations amendments came into force and there were no longer any lockdown laws in force in England (September 2021; Brown and Kirk-Wade, 2021). Over twelve thousand usable responses were received ($n = 12,471$), representing a 10% response rate based on officer numbers as of 31 March 2020 (Home Office, 2020b). Though the survey sample was broadly representative of the policing population across key socio-occupational demographics (i.e. gender, age, rank etc.), the data were not geographically representative and as such, weighting was applied to the data to ensure that police forces were represented proportionately.

Due to increasing interest in trauma within the policing population and the onset of the global pandemic, six bespoke items were developed for the 2020 Demand, Capacity and Welfare Survey that attempted to broadly gauge respondents’ exposure to potentially traumatic incidents related to COVID-19. The first four items were in relation to the weaponisation of COVID-19 by the public. More specifically, participants were asked to indicate how often, over the previous 6 months, members of the public that were suspected of carrying COVID-19 had: threatened to spit at them, attempted to spit at them, threatened to breathe or cough on them and actually attempted to breathe or cough on them. Participants were given a five-point response scale of: *Never* (i), *Once or twice* (ii), *More than twice* (iii), *Once a month* (iv), *Once a week* (v), *Daily* (vi).

The next four items consider specific events that might be directly related to the current pandemic, and could be considered as extremely stressful, upsetting or potentially hazardous. Given previous trauma research indicates that many officers find working with the deceased and performing death notifications to be particularly distressing (Miller et al., 2021), respondents were asked to indicate whether they had experienced either of the following, in the line of duty, over the last 6 months: ‘*Seen the body of a person who has died from natural causes (including confirmed and suspected COVID-19 cases)*’, and
‘Performed death notifications in instances where people have died from natural causes (including confirmed and suspected COVID-19 cases)’.

Due to the contagious nature of COVID-19, officers were also asked whether or not they had ‘Been exposed to bodily fluids that are suspected of carrying the COVID-19 infection’, over the previous 6 months. Participants were provided with the following six-point response scale for the three items above: No (i), Yes, once (ii), Yes, twice (iii), Yes, 3 times (iv), Yes, 4 times (v), Yes, 5 times or more (vi). In light of the unprecedented nature of the current crisis, respondents were also given an open text box and asked to list any other COVID-related event(s) that they had attended and that they had found particularly disturbing and/or had caused a significant amount of emotional distress.

Officers’ mental wellbeing was measured using the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS). This asked participants to rate their experience during the previous 2 weeks for seven positively framed items. Respondents were provided with a five-point response scale for each of the seven items, ranging from ‘None of the time’, to ‘All of the time’, and a metric score was calculated to indicate participants’ overall mental wellbeing.

Finally, a single-item indicator was used to determine work-related stress. More specifically, respondents were asked ‘In general, how do you find your job?’ and provided with a five-point scale of: Not at all stressful (i), Mildly stressful (ii), Moderately stressful (iii), Very stressful (iv) and Extremely stressful (v).

**Analytical approach**

Frequencies and inferential statistics for quantitative data were calculated using SPSS, with simple contingency tables (chi square) being used to determine whether there were any statistically significant differences in exposure across basic occupational demographics (i.e. officer rank and role). Simple bivariate correlations were also used to assess the relationships between officer wellbeing (as indicated by metric SWEMWBS scores and occupational stress ratings) and their exposure to COVID weaponisation and distressing events related to COVID-19. Spearman’s Rho was chosen over Pearson’s correlation due to non-normally distributed data and the more conservative nature of the analysis.

Qualitative data was subjected to thematic analysis loosely based on the six-phase method described by Braun and Clarke (2006). A semi-inductive approach to data coding and analysis was taken within the epistemological framework of contextualism. The data was coded and where appropriate, organised into themes. These themes were then grouped into wider global themes to simplify the concepts and the overarching relationships between data. Interpretations of themes will be illustrated by direct quotes from the data, or extracts from therein; thus, providing evidence of grounding and enabling evaluation of persuasiveness (Elliott et al., 1999).
Quantitative analysis

**COVID weaponisation.** Overall, the weaponisation of COVID-19 was not uncommon, with over a third of respondents indicating that they had suffered violent victimisation in this manner at least once over the previous 6 months (37%). More specifically, almost one in three respondents reported that they had been threatened with being spat at, at least once, by a member of the public suspected of carrying COVID-19 (30%); whilst a similar proportion reported that they had been threatened with being coughed and/or breathed on (32%). Furthermore, just over one in five officers reported that they had been spat at, at least once, by a member of the public suspected of carrying COVID-19 over the same time frame (21%); and almost a quarter of respondents reported that a member of the public had attempted to breathe or cough on them deliberately (24%). All four of these items were correlated with self-report ratings of occupational stress (rs (10,974) = 0.118, p < 0.000; rs (10,967) = 0.127, p < 0.000; and rs (10,959) = 0.124, p < 0.000, respectively) and negatively correlated with metric SWEMWBS scores (rs (10,743) = −0.046, p < 0.000; rs (10,737) = −0.061, p < 0.000; and rs (10,731) = −0.055, p < 0.000), indicating that the more frequent these events were experienced, the higher officers rated their job-related stress and the poorer their mental wellbeing scores were (Table 1).

When breaking the responses to these items down by occupational demographics, a statistically significant difference was found for officer role across all four items: threatened with being spat at (χ² (8, N = 9504) 1935.320, p < 0.000, V = 0.451), threatened with being coughed or breathed on (χ² (8, N = 9494) 1768.015, p < 0.000, V = 0.432), being spat at (χ² (8, N = 9489) 1404.330, p < 0.000, V = 0.385) and being deliberately coughed or breathed on (χ² (8, N = 9490) 1324.808, p < 0.000, V = 0.374); with Custody officers being most likely to report being exposed to each type of COVID weaponisation listed above, followed by Response officers. A similar effect was found for officer rank, with those in inspecting ranks consistently being less likely to report being exposed to COVID weaponisation than their colleagues (χ² (2, N = 9544) 161.007, p < 0.000, V = 0.130; χ² (2, N = 9536) 175.246, p < 0.000, V = 0.136; χ² (2, N = 9531) 90.028, p < 0.000, V = 0.097; χ² (2, N = 9531) 90.028, p < 0.000, V = 0.097;
χ² (2, N = 9525) 110.689, p < 0.000, V = 0.108, respectively). Table 2 presents rank and role breakdowns in relation to the proportion of respondents reporting COVID weaponisation.

COVID-related duties and events. Overall, 38% of the full survey sample reported seeing the body of a person who had died from natural causes, including COVID-19, at least once, over the previous 6 months; 17% reported performing death notifications in instances where people had died from natural causes (including COVID-19 cases), and the same proportion reported being exposed to bodily fluids that were suspected of carrying the COVID-19 infection. Whilst all three of these items correlated with self-report ratings of work-related stress (rs (11,216) = 0.109, p < 0.000; rs (11,198) = 0.066, p < 0.000; rs (11,071) = 0.121, p < 0.000, respectively), only being exposed to bodily fluids was correlated with overall wellbeing scores (rs (10,820) = −0.061, p < 0.000) (Table 3).

When breaking the responses to these items down by occupational demographics, a statistically significant difference was found for officer role across all three of the items above: seeing the body of a person who has died from natural causes, including COVID-19 (χ² (8, N = 10,071) 2768.470, p < 0.000, V = 0.524), performing death notifications where people have died from natural causes, including COVID-19 (χ² (8, N = 10,052) 1543.193, p < 0.000, V = 0.392) and being exposed to bodily fluids that are suspected of carrying the COVID-19 infection (χ² (8, N = 9932) 748.387, p < 0.000, V = 0.275). Response officers were the most likely to report seeing the body of a person that had died

### Table 2. How often have citizens, that you believed to have COVID-19, directed the following towards you during the last 6 months?

| % of respondents reporting once or more | Threatened to spit at you | Threatened to breathe or cough on you | Attempted to spit at you | Deliberately attempted to breathe or cough on you |
|---------------------------------------|---------------------------|--------------------------------------|--------------------------|-----------------------------------------------|
| Full sample                           | 30%                       | 32%                                  | 21%                      | 24%                                           |
| Rank*                                 |                           |                                      |                          |                                               |
| Constable                             | 31%                       | 34%                                  | 22%                      | 26%                                           |
| Sergeant                              | 32%                       | 34%                                  | 23%                      | 26%                                           |
| Inspecting ranks                      | 10%                       | 11%                                  | 8%                       | 9%                                            |
| Role*                                 |                           |                                      |                          |                                               |
| Neighbourhood                         | 35%                       | 40%                                  | 24%                      | 30%                                           |
| Response                              | 58%                       | 59%                                  | 42%                      | 46%                                           |
| Custody                               | 65%                       | 66%                                  | 52%                      | 53%                                           |
| Roads                                 | 33%                       | 41%                                  | 20%                      | 29%                                           |
| Operational support                   | 25%                       | 30%                                  | 16%                      | 20%                                           |
| Intelligence                          | 6%                        | 8%                                   | 4%                       | 6%                                            |
| Investigations                        | 10%                       | 13%                                  | 6%                       | 9%                                            |
| Training                              | 13%                       | 13%                                  | 9%                       | 9%                                            |
| Other functions                       | 12%                       | 14%                                  | 9%                       | 10%                                           |

Asterisks denote significance at p < 0.00.
of natural causes, including COVID-19, at least once over the previous 6 months (80%) and to have reported performing death notifications in similar instances (41%); whilst Custody officers were the most likely to report having been exposed to bodily fluids that were suspected of carrying the COVID-19 infection over the previous 6 months (42%; please see Table 4 below).

A similar effect was found for officer rank, with those in inspecting ranks consistently being less likely to report being exposed to the three COVID-related events included within the survey ($\chi^2 (2, N = 10,111) 28.133, p < 0.000, V = 0.053$; $\chi^2 (2, N = 10,092) 145.221, p < 0.000, V = 0.120$; $\chi^2 (2, N = 9973) 47.397, p < 0.000, V = 0.069$, respectively). Table 4 presents rank and role breakdowns in relation to the above three items.

### Qualitative analysis

Over one thousand officers ($n = 1039$) provided textual feedback when asked if they had experienced any other events, in the line of duty, related to the current COVID-19 crisis that they had found particularly disturbing and/or had caused a significant amount of emotional distress.

Interestingly, the participants seemed to use the space in several distinct ways. The first of which, was to confirm that they had not experienced any such incidents ($n = 152$) or that they would prefer not to answer the question ($n = 8$). The remaining respondents ($n = 879$) used the space to describe events that they have been exposed to, via work, that they had found particularly disturbing and/or had caused a significant amount of emotional stress. Whilst many participants followed the directions by briefly listing the types of pandemic-related events other than those provided in the associated quantitative scale (i.e. delivering death notifications or seeing the body of an indidual that had died of natural causes, including COVID-19, at least once over the previous 6 months (80%) and to have reported performing death notifications in similar instances (41%); whilst Custody officers were the most likely to report having been exposed to bodily fluids that were suspected of carrying the COVID-19 infection over the previous 6 months (42%; please see Table 4 below).

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### Table 3. Correlations between COVID-related incidents and wellbeing indicators.

| Over the last 6 months have you experienced any of the following in the line of duty...? | Work-related stress | SWEMWBS metric score |
|---|---|---|
| | (rs, df, P value) | (rs, df, P value) |
| Seen the body of a person who has died from natural causes (including confirmed and suspected COVID-19 cases) | 0.109, 12116, <0.000 | 0.00, 10957, 0.975 |
| Performed death notifications in instances where people have died from natural causes (including confirmed and suspected COVID-19 cases) | 0.066, 11198, <0.000 | -0.014, 10942, 0.138 |
| Been exposed to bodily fluids that are suspected of carrying the COVID-19 infection | 0.121, 11071, <0.000 | -0.061, 10820, <0.000 |
causes, including COVID-19, or being exposed to bodily fluids that are suspected of carrying the COVID-19 infection), others listed or provided additional detail about their experiences of the previously listed events; perhaps to emphasise their significance. Some officers also used the space to describe distressing events that were not explicitly COVID-related and, finally, some respondents used the space to provide a more in-depth account of their experiences and/or express specific aspects of the incident(s) that held particular meaning to them.

Overall, analysis revealed 19 subthemes and the following five interconnected global themes: Operational Duties and Events (1), Viral Exposure (2), Poor Organisational Risk Management and Support (3), Direct Experiences of COVID-19 and Personal Impact (4) and Mistreatment (5). Table 5 describes each of the emergent subthemes, grouping them together by the five global themes listed above.

Overall, officers highlighted a number of operational duties and events related to COVID-19 that had caused them significant distress and in many cases, the distress was linked to the potential for viral exposure and poor organisational risk management. Attending and managing sudden deaths and COVID weaponisation were the most common types of incidents mentioned by officers, but many officers also reported feeling maltreated and unsupported by the Police Service and/or the wider community; with a few indicating that they felt as though they were treated as expendable, and that the police, as a whole, were either neglected or in receipt of open hostility from the government, the

Table 4. Over the last 6 months, have you experienced any of the following in the line of duty?...

| % of respondents reporting a frequency of once or more | Seen the body of a person who has died from natural causes | Performed death notifications in instances where people have died from natural causes | Been exposed to bodily fluids that are suspected of carrying the COVID-19 infection |
|-------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Full sample                                           | 38%                                                     | 17%                                                                          | 17%                                                                          |
| Rank*                                                 |                                                         |                                                                              |                                                                              |
| Constable                                             | 40%                                                     | 20%                                                                          | 18%                                                                          |
| Sergeant                                              | 38%                                                     | 12%                                                                          | 19%                                                                          |
| Inspecting ranks                                      | 30%                                                     | 6%                                                                           | 9%                                                                           |
| Role*                                                 |                                                         |                                                                              |                                                                              |
| Neighbourhood                                         | 36%                                                     | 14%                                                                          | 17%                                                                          |
| Response                                              | 80%                                                     | 41%                                                                          | 32%                                                                          |
| Custody                                               | 9%                                                      | 2%                                                                           | 42%                                                                          |
| Roads                                                 | 36%                                                     | 15%                                                                          | 18%                                                                          |
| Operational support                                   | 25%                                                     | 5%                                                                           | 15%                                                                          |
| Intelligence                                          | 8%                                                      | 2%                                                                           | 6%                                                                           |
| Investigations                                        | 29%                                                     | 10%                                                                          | 10%                                                                          |
| Training                                              | 13%                                                     | 7%                                                                           | 7%                                                                           |
| Other functions                                        | 12%                                                     | 4%                                                                           | 7%                                                                           |

Asterisks denote significance at p < 0.00.
| Global themes                        | Subthemes                                      | Subtheme description                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Operational duties and events   | 1.1. Attending sudden deaths                    | Incidents relating to sudden death. This includes attending and dealing with deaths due to COVID-19 and unnatural events, such as road traffic collisions, homicide, suicide, as well as performing body recovery and handling.                                                                                                                                             |
|                                     | 1.2. Protecting the public                     | Incidents relating to keeping the public safe, including lifesaving attempts (such as CPR or negotiations), attending mental health crises or violent incidents.                                                                                                                                                                                                 |
|                                     | 1.3. Hostility and resistance from public      | Incidents that included hostility and resistance from the public, such as failure to comply with lockdown legislation, and directing aggression and/or physical assaults at officers.                                                                                                                                                                                                 |
|                                     | 1.4. Ancillary death duties                    | This refers to duties relating to sudden death that did not involve direct contact with the deceased. This includes family liaison, delivering death notifications and collating evidence or information about a death.                                                                                     |
|                                     | 1.5. Cumulative exposure and increases in event frequencies | Cumulative or increased rates of exposure to distressing events such as suicide, mental health crises, and child abuse.                                                                                                                                                                                                                               |
|                                     | 1.6. Workloads and officer numbers             | The impact of excessive workloads or increased demands driven by COVID-19.                                                                                                                                                                                                                                                                                   |
Table 5. (continued)

| Global themes                  | Subthemes                                | Subtheme description                                                                 |
|--------------------------------|------------------------------------------|---------------------------------------------------------------------------------------|
| 2. Viral exposure              | 2.1. COVID weaponisation                 | Incidents whereby members of the public purposefully used COVID-19 to threaten, intimidate or harm others. This includes deliberately coughing, spitting or breathing on others (or threatening to do so). |
|                                | 2.2. Exposure ambiguity and common risk  | Incidents where officers have come into contact with potential contagions when the risk of infection is unknown, as well as the overall anxiety associated with working in close contact with the public and the associated potential for viral contraction. |
|                                | 2.3. Contact with confirmed or suspected contagions | Incidents where officers had been in direct contact with confirmed or suspected contagions that were potentially capable of infecting them with COVID-19. |
|                                | 2.4. High-risk environments             | Incidents where officers have been exposed to environments that could be considered as being high-risk for contracting COVID-19. This includes hospital wards, nursing homes and properties where COVID-19 positive individuals were in residence. |
| 3. Poor organisational risk management and support | 3.1. Poor application of fundamental preventative strategies | Instances where the application of fundamental preventative practice had been applied poorly in their departments and/or force. This included poor access to PPE, insufficient social distancing procedures or shift management, inadequate cleaning or poor application of social isolation after potential exposure. |
|                                | 3.2. Poor communication, advice or guidance | Incidents where poor communication and guidance within the Police Service had caused anxiety, distress and/or increased exposure risk. For example, a call handlers’ failure to gather or share intelligence on the COVID status of the individuals present at an incident before an officer attends. |
|                                | 3.3. Lack of training and management support | Instances where officers felt unsupported by their line manager or force following potential exposure to COVID-19, and/or when officers were not provided with the appropriate training or support. |
|                                | 3.4 Other elements of poor risk management | Any other elements of poor risk management highlighted by officers, including unnecessary exposure (such as the continuation of officer safety training), a lack of access to COVID-19 testing, poor inter-organisational procedures and a lack of proactive risk management. |
| Global themes                      | Subthemes                                           | Subtheme description                                                                                                                                                                                                 |
|-----------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Direct experiences of COVID-19 and personal impact | 4.1. Fear and worry                                   | The experience and expression of fear, anxiety or worry about contracting COVID-19 and/or spreading the illness to others.                                                                                                    |
|                                   | 4.2. Personal experience of COVID-19                 | Experiences of suffering from COVID-19, including severe illness, and the subsequent impact on their physical and mental health.                                                                                             |
|                                   | 4.3. Colleagues and COVID-19 contraction             | Instances where personal contacts (e.g. family, friends or colleagues) had contracted COVID-19.                                                                                                                                |
| 5. Mistreatment                   | 5.1. Feeling uncared for or treated poorly           | Expressions of being treated poorly by the Police Service, and/or colleagues. For example, feeling as though their individual health and wellbeing was being neglected or that they had been let down by external organisations (such as the press, the government or the wider criminal justice system). |
|                                   | 5.2. Perceived breaches in organisational justice    | Expressions of being treated unfairly compared to colleagues, including differences in home working and a lack of consideration in regard to individual personal circumstances or domestic situations (e.g. living with vulnerable family members). |
public, or the press. Some officers also highlighted that the health crisis had caused an increase in specific types of events, such as suicides, which they had been finding cumulatively difficult to deal with.

Finally, several officers shared their experiences of suffering from COVID-19 and the physical and psychological impacts that they endured as a consequence. Each global theme will now be explored in turn, by order of magnitude, throughout the main body of this paper.

Global theme one – Operational duties and events. The first global theme comprised of operational duties and events listed by officers in response to the open-text question. Officers identified a range of duties, the vast majority of which could be grouped into the following six subthemes: Attending sudden deaths (i), Protecting the public (ii), Hostility and resistance from public (iii), Ancillary death duties (iv), Cumulative exposure and increases in event frequencies (v) and finally, Workloads and officer numbers (vi).

Attending and dealing with death in the community was the most frequently mentioned incident type listed by officers. Though many used the space to provide additional detail about attending deaths caused directly by COVID-19, many officers also used the space to discuss attending sudden deaths caused by unnatural events such as road traffic collisions, homicide and suicide. Attending incidents of suicide was commonly mentioned by officers, and in just under two thirds of these cases, officers identified that COVID-19 had, or was likely to have been, an influential factor in the individual’s death. Officers gave examples of where members of the public had tragically taken their own lives due to emotional or financial stress caused by the pandemic and/or the restrictions:

‘Yes - I was called to a fear for welfare for a male - On arrival I was single crewed and handed the key to the door by a neighbour. I walked upstairs to find a male deceased, and hanging from the attic. Diary entries suggested COVID affected his mental health/job’. Constable, 5 years’ service.

Moreover, a small number of officers also indicated that they had been affected by the sudden death of a colleague over the previous 6 months, some of which were identified as being related to COVID-19. A number of officers also highlighted that they had been troubled by the cumulative exposure to potentially traumatic events, which had increased in frequency over the course of the pandemic. Whilst the majority of these comments were in relation to suicide and death, several officers highlighted notable increases in other distressing incidents, including self-harm, mental health crises and child abuse:

‘I have seen more death and despair in the last 12 months than in the entirety of my career. Including some incidents so disturbing they have caused long term sickness due to mental health for close colleagues. Significant amount of suicides with either incredibly decomposed or damages bodies coupled with distressing death messages to pass to relatives’ Sergeant, 20 years’ service.

Ancillary death duties (i.e. duties relating to sudden death, that do not involve direct contact with the deceased) were also highlighted by a number of officers. This included
delivering notifications of death, working with the bereaved, and managing or collating evidence or information in sudden death cases:

‘Pandemic Multi Agency Response Team reporting the deaths of suspected COVID cases. Hours spent on phone to family immediately after death. Months of nothing but death when at work’. Constable, 17 years’ service.

‘To date I have recorded over 500 deaths, the circumstances and ages and this involved reading CAD’s [Computer Assisted Dispatch] and death reports by officers who attended. It is hard to do this to such an amount without being a little consumed by the sad stories people have gone through, both deceased and their families, as well as the carers and responders accounts’ Constable, 20 years’ service.

It is perhaps worth noting some officers also highlighted that they were experiencing excessive workloads or increased demands. Some indicated that the pandemic, and the associated restrictions initiated by the government, had directly exacerbated policing demand, whilst others indicated that the current circumstances had indirectly increased demand by reducing the number of available front-line officers due to COVID-related abstractions (e.g. isolation, sickness absence). Moreover, a few officers also identified an increase in demands caused by partner agencies switching to home working and leaving the Police Service to step into the breach:

‘Just exceptional workload and demands from my force leadership team. The ever-changing rules and legislation, not having the right staff to delegate to, or the time to give justice to the work I do. I feel very isolated and unsupported despite being in my workplace daily’. Chief Inspector, 29 years’ service.

‘Increase in people suffering with mental health conditions, social care issues, housing issues etc that police have been dealing with because other services are working from home’. Constable, 2 years’ service.

Global theme two – Viral exposure. The second global theme comprised of the following four subthemes that all related directly to the impact of exposure, or potential exposure, to COVID-19 on officers’ emotional wellbeing: COVID weaponisation (i), Exposure ambiguity and common risk (ii), Contact with confirmed or suspect contagions (iii) and High-risk environments (iv).

Countless officers highlighted the distressing nature of potential exposure, with COVID weaponisation being the most frequently listed event of this type. Officers provided a multitude of examples including being deliberately spat at by members of the public, being threatened with coronavirus by those claiming to be contagious, or being in circumstances where the COVID-19 status of the individual was unknown:

‘When the epidemic first broke out in April, someone tried to spit at me. Already a horrible offence, but with COVID made all the more frightening’. Constable, 17 years’ service.
‘Being spat at by a detainee who said he had COVID-19. Worried and distressed that I would pass this onto my loved ones or get seriously ill myself’. Constable, 11 years’ service.

Officers also identified incidents where they had come into contact with potential contagions, such as bodily fluids, when the risk of infection was unknown. Others indicated that merely working in close contact with the public had caused them extensive worry or anxiety due to the potential for viral exposure:

‘Performing CPR on a person where there is a considerable amount of body fluid from them and having no idea if they have COVID’ Constable, 18 years’ service.

‘At the start of COVID I was working in a different role in the major incident team where I dealt with murders. I had no PPE, no hand sanitizer, no masks for about the first 6 weeks of COVID. I was made to deal with members of the public on a daily basis going into their homes to take statements and perform suspect interviews in close proximity with offenders for long periods of time. This caused me a great deal of stress and anxiety’. Constable, 19 years’ service.

Incidents where officers had been exposed to environments that could be considered as being high-risk for contracting COVID-19 were also mentioned. This included hospital wards, nursing homes, COVID-related deaths and properties where COVID-19 positive individuals were in residence:

‘As RPU [Roads Policing Unit] officer I have been requested on a number of occasions to attend Southampton General Hospital ED [Emergency Department] in order to complete drink/drug drive blood procedures. This means that I am duty bound to enter an area which is high risk of COVID-19’. Constable, 11 years’ service.

Global theme three – Poor organisational risk management and support. The third global theme to emerge related to how officers felt the organisation managed the risks of infection, and the support provided to officers. Similar to the previous global theme, Poor Organisational Risk Management and Support comprised of four subthemes: Poor application of fundamental preventative strategies (i), Poor communication, advice or guidance (ii), Lack of training and management support (iii) and Other elements of poor risk management (iv).

A mentioned above, many officers highlighted that there had been poor application of fundamental COVID-19 prevention strategies within their departments and/or force. This included poor access to PPE, inadequate cleaning of police facilities and/or equipment, poor social distancing and shift management procedures to limit exposure risks:

‘Sent to a concern for welfare, ambulance on scene; Forced entry due to circumstances and found male deceased, Paramedics checked and found COVID medicines. I had no effective PPE (just gloves) but was instructed by my line manager to continue regardless including
searching the body and house-to-house to assist coronial process.’ Constable, 3 years’ service.

‘Members of [team redacted] tested positive for COVID. No cleaning took place, no one was told to isolate and were expected to carry on as usual’ Constable, 11 years’ service.

‘What was disturbing was the slow response to the pandemic by the force, or the time it took to filter down to officers in rural areas. Being told not to take PPE, masks and shields because it needs counting back in was dreadful. Not moving desks until 3 months into the pandemic, still in the same room as other shifts on cross over.’ Constable, 18 years’ service.

A number of officers highlighted that poor communication and guidance within the Police Service had caused them anxiety, distress or increased risk of exposure. Several officers also highlighted that they had found there to be a lack of training or support following potential exposure to COVID-19:

‘Lack of risk assessment by control re [regarding] whether or not people have COVID or symptoms. Questions not asked before officers arrive, which put us at risk, because officers go into addresses without PPE required, exposing those officers to potential COVID’. Constable, 8 years’ service.

‘Sent to carry out arrest enquiries on a male wanted on warrant when told by SMT [Senior Management Team] not to, attended and the male was symptomatic. No assistance from any supervisor or COVID command room, Custody or Courts. Spent 13 hours with the male and then told not to self-isolate afterwards. Officers were left to figure out the procedure themselves’. Constable, 4 years’ service.

‘Lack of any plan when officers are confirmed as having been exposed to a person with COVID, or the plan is carry on working if you had a facemask on’. Sergeant, 19 years’ service.

Other elements of poor risk management were also highlighted by a few officers. This included officers feeling as though they were being forced into positions where they were needlessly exposed to the virus, a lack of access to COVID-19 testing, and poor inter-organisational procedures:

‘Asked to check bodies over when they have died even from coronavirus circumstances. Putting myself, and my family, my colleagues at risk. Why couldn’t this be done at the mortuary’ Constable, 3 years’ service.

‘After attending the deaths, I had no member of management check on my welfare, or ask if I had been wearing adequate PPE. Upon attending, no management reminded us to wear PPE, nobody checked we were wearing it at the time. I had no way to chase if the subjects had tested positive, I was forgotten about and was not given support after this for emotional distress or if I had COVID. This posed a risk to myself as well as my team who I am frequently in close contact with at work’. Rank omitted, 2 years’ service.
Global theme four – Direct experiences of COVID-19 and personal impact. The fourth global theme to emerge from the data, though much smaller than the others, was nonetheless as important. This comprised of three subthemes relating to officer’s individual experiences of COVID-19, both direct and indirect, and the associated impacts on their health and wellbeing: Fear and worry (i), Personal experience of COVID-19 (ii) and Colleagues and COVID-19 contraction (iii).

Many officers described experiencing a level of fear or anxiety, not just about contracting COVID-19 but about spreading the illness to their family, some of whom had existing medical conditions or were considered to be high risk. Several officers also used the space provided to share their experience of contracting COVID-19, some of whom suffered from severe illness. Several officers also identified that their colleagues had contracted COVID-19 and, in some cases, that multiple officers were self-isolating or on sick leave due to testing positive. A small number of officers also indicated that they had friends or family that had suffered from COVID-19, or they had suffered bereavement due to COVID-19:

‘For me personally there was initial advice to self-isolate, followed by being told that PHE [Public Health England] had been consulted on a case-by-case basis and that I was good to return to work. This uncertainty bothered me greatly. I do not feel safe in work, but will conduct my duties nonetheless and do what I can to keep safe.’ Constable, 12 years’ service.

‘The lack of social distancing within our role (transporting people to custody, entering people’s houses etc). I am extremely concerned that a family member of mine (who are high risk) will catch COVID from myself’. Constable, 5 years’ service.

‘I tested positive for COVID-19 and was quite unwell, my wife also tested positive (test was inconclusive but had same symptoms and was unwell - later tested positive for antibodies). We both had to self-isolate with our two children at the same time. I have not been the same (health wise) since. I am worried about the possibility of re-infection and/or the long-term implications following the illness. I strongly believe I contracted COVID-19 from a colleague from my station who also tested positive the week before me and ended up in hospital. (We had spent several shifts working closely)’. Constable, 19 years’ service.

‘A colleague has recently died of COVID-19 and a sister team have had 8 positive cases and it appears mixed messages are being sent to different departments’. Sergeant, 15 years’ service.

Global theme five – Mistreatment. The last theme that emerged from the data comprised of the following two subthemes relating to how officers felt they have been treated by the police service, the government, and the wider community throughout the pandemic: Feeling uncared for or treated poorly (i), and Perceived breaches in organisational justice (ii). Many officers felt as though they had been treated poorly by the police service, and/or colleagues, and that their individual health and wellbeing had been neglected:
‘After shielding for a number of months, my return to work saw no changes to desks, no social distancing, no one-way-system, no increased hygiene levels, and staff sitting as close as they could possibly sit. It was awful and made me feel as a vulnerable person that my colleagues have no concern for me whatsoever’ Constable, 10 years’ service.

‘Having COVID and not being supported by DS [Detective Sergeant], DI [Detective Inspector] or DCI [Detective Chief Inspector] and being blamed and ostracized for having tested positive. Being treated that I was an inconvenience’ Constable, 10 years’ service.

‘The lack of care for front line response has been spectacular and quite frankly hurtful that we are thought so little of’ Sergeant, 15 years’ service.

Several officers also felt as though they were treated unfairly compared to their colleagues, with officers identifying differences in how home-working changes were applied to frontline officers and those working in office-based roles, how officers in differing ranks were treated and a lack of consideration in regard to individual circumstances (e.g. vulnerable family members). Finally, some officers also indicated that they felt let down, or mistreated by the government, other public organisations or the media during the pandemic:

‘[The police force] sent every rank home from Inspector upwards and left the Sergeants and Constables to get on with it! It was a disgrace; the message was clear that Inspectors upwards were too important to get ill but the rest of you do not matter!’ Sergeant, 14 years’ service.

‘Pressure from management to attend the office while the R rate is climbing. Voiced my concerns to management that I care for my Father who has respiratory issues and would rather not put myself at risk, [and subsequently] my Father. Management has ignored my concerns and ordered me in’. Constable, 18 years’ service.

‘Overall I have been most upset by the general public’s attitude towards Police and that we again are being made out to be the bad guys by either the media or the lack of Government backing and support’. Constable, 8 years’ service.

Discussion

Summary of findings and practical implications

Throughout the past year, the police in England and Wales have continued to work on the frontline and have risen to the unprecedented challenge of supporting their local communities throughout the global pandemic. Whilst it is common knowledge that the police are often exposed to physical and psychological harm (Cartwright and Roach, 2020; Elliott-Davies, 2018; Home Office, 2020a; Houdmont et al., 2012; Houdmont and Elliott-Davies, 2016; Miller et al., 2021; Syed et al., 2020; The Royal Foundation College London, 2020), little work has been done to examine the impact of the current crisis on exposure to potentially traumatic events.
This study aimed to bridge this divide by providing an initial exploration into the link between COVID-19 and exposure to potentially traumatic events within the Police Service of England and Wales, and the subsequent impact of these events on officer wellbeing.

Qualitative analysis revealed exposure to a range of distressing events related to COVID-19, including COVID weaponisation and attending and managing sudden deaths. In many cases, officers also linked their distress to poor organisational risk management or the potential for viral contraction. Quantitative analysis identified COVID weaponisation as being fairly common, with 37% of respondents indicating having suffered victimisation in this manner at least once over the previous 6 months. Moreover, 39% of officers reported seeing the body of a person who had died from natural causes, including COVID-19, over the prior 6 months; whilst 17% reported performing death notifications in similar instances, and the same proportion (17%) reported being exposed to bodily fluids suspected of carrying COVID-19. Further quantitative analysis identified the events above as significant correlates of work-related stress; whilst both COVID weaponisation and exposure to bodily fluids were related to mental wellbeing scores. In addition, Constables and those working in frontline roles, such as Custody and Response, were more likely to report experiencing the potentially traumatic events listed above.

Overall, these findings suggest that the pandemic has created an environment which exacerbates officer exposure to potentially traumatic incidents; not only by increasing the frequency with which they are subjected to distressing events, such as the number of suicides or mental health crises that they were attending, but also by engendering additional contextual factors that compound their distress, that is, the risk of COVID-19 infection and transmission.

When examining the qualitative results, the types of experiences listed by officers loosely matched those listed in the Police Traumatic Events Checklist (PTEC; Miller et al., 2021). Not only could the vast majority of experiences shared by officers be accounted for by the type of traumatic events and contextual factors listed in the PTEC, but death-related events and duties (including homicide, suicide, accidental death, body handling and ancillary death duties) were, overall, the most frequently cited types of event in both instances. Moreover, the quantitative analysis found that the more frequently officers reported seeing the body of a person that had died from natural causes (including COVID-19), or reported delivering death notifications in similar circumstances, the higher the level of work-related stress that they reported. These results support the narrative that emerged from the qualitative data indicating that attending this type of event and conducting these sorts of duties, can cause significant distress for officers. By quantitatively exploring exposure, the analysis was able to identify officers that were at higher risk of encountering these particular work-related duties and events; with those in lower ranks and those working in Response roles being the most likely to report facing these potentially traumatic experiences.

Whilst, at the time of writing, the COVID-19 crisis in the UK has fallen into a manageable decline, the war may not yet be won and our current position of strength could be compromised by emerging variants. Moreover, the potentially waning risk of transmission does not undo the psychological damage already sustained by officers on the
frontline. As such, the findings above may help forces to manage and direct valuable resources towards providing interventions, and mental health and wellbeing support, to those that might need it most. For example, forces could start to monitor potential trauma exposure levels in these high-risk roles and schedule regular ‘check ins’ with officers that suffer cumulative exposures. This would not only facilitate informal debriefing and peer support by providing a dedicated time and space, but regular one-to-ones may also help to provide additional opportunities and encouragement for officers to seek professional mental health support before they reach crisis point. It may also be advantageous for forces to increase the amount of other proactive support for officers in high-risk roles, such as providing resilience training or regular psychological support.

Viral exposure was another strong emergent theme from the qualitative data, with hundreds of officers touching upon this within their comments. Some officers discussed potential exposure to COVID-19 as a contextual factor that caused additional distress during specific type of incident (such as attending sudden deaths or performing first aid); whilst others indicated that the latent uncertainty and risk associated with asymptomatic infection was enough, in its own right, to cause significant distress.

Once again, the quantitative results supported the discourse that emerged from the qualitative data, as exposure to bodily fluids suspected of carrying COVID-19 was found to be positively associated with work-related stress and negatively associated with the mental wellbeing of officers. Or, to speak plainly, the more often officers reported being exposed to bodily fluids suspected of carrying COVID-19, the higher the level of work-related stress they reported, and the lower their overall mental wellbeing scores.

One of the most frequent types of viral exposure raised by officers was the weaponisation of COVID-19. Over two hundred officers listed COVID weaponisation within the open text responses and the quantitative findings revealed that, overall, approximately one in three officers were threatened with COVID-19 exposure by a member of the public, and one in four were actually the subject of such an attack. Many officers also used the open textbox to highlight that these impacts were exacerbated by poor organisational support, and to describe the emotional impacts that this particular type of viral exposure had on them and their families. These figures dovetail with recent statistics from the Crown Prosecution Service that indicated assaults on emergency workers were the most common COVID-related crime within the first 6 months of the financial year in 2020; with 1688 offences charged between April 1st and September 30th, many of which involved police officers being coughed at and spat on (Crown Prosecution Service, 2021).

Though COVID weaponisation is not specific to the UK and has been reported in several other countries throughout the pandemic (Ackerman and Peterson, 2020; De Camargo, 2021c; Drew and Martin, 2020; Ong and Azman, 2020; Strote et al., 2021), this is the first study to scope the size of the issue and empirically examine the link between COVID weaponisation and the psychological wellbeing of police officers in England and Wales.

Given the anti-social and potentially contagious nature of this type of offence, the impacts on officer stress and wellbeing are perhaps unsurprising. This may also, at least in part, go some way to explain why officers tend to want more access to spit guards than they currently have (Elliott-Davies, 2021b); this is despite recent claims that the most
commonly used spit guards in the UK are ineffective, and perhaps even counterproductive, in preventing the spread of COVID-19 via aerosol transmission (Amnesty International UK, 2020). Whilst aerosol transmission is, understandably, a key outcome for measuring the efficacy of using spit guards as a preventative tool, COVID-19 may also be transmitted through direct or surface contact with larger deposits of biohazardous material (such as saliva). It would likely benefit these discussions, future policy decisions, and individual officers, if independent research were conducted to determine whether spit guards limit contamination enough to warrant their use (via aerosol, contact, and surface transmission), and in which circumstances they would be most effective.

The results also indicated that officers in frontline roles with frequent contact with the public, such as Custody and Response, were more likely to report contact with bodily fluids suspected of carrying COVID-19 and being the victims of COVID-19 weaponisation. This would suggest that it might be advantageous for forces to monitor the health and wellbeing of officers working in roles where they may be at higher risk of viral contact, and to continue taking practical steps to ensure that protective measures, clear communication, and appropriate training are all readily available for those that are most likely to be exposed to contagions. For example, forces could provide mobile decontamination kits, updated information on the risks associated with different transmission pathways, and psychoeducation on healthy coping strategies to help manage any anxiety associated with potential exposure.

Qualitative analysis also indicates that particular attention should also be paid to officers that are vulnerable to COVID-19 due to pre-existing health conditions, and officers that care for, or live with, vulnerable individuals. Given that the risk of contracting COVID-19 and the resulting consequences are greater for these individuals, it is not unsurprising that the risk of exposure and poor organisational support may also carry a heavier emotional burden. As such, it may be beneficial for forces to work more closely with these officers to ensure that their needs are met, and that they are provided with appropriate adjustments and support.

However, as a final note, it is important that any practical changes made to manage the above risks should be done in consultation with those they affect; with views being taken into account prior to decision-making, in order to better preserve the relationship between the local forces and the officers they rely on to serve the public day in and day out.

**Strengths and limitations**

One of the core strengths of this study is the large and diverse sample size. Although the response rate was fairly low, with only one in ten eligible officers taking part in the survey, this equated to over 12 thousand responses and included participants from each of the 43 police forces in England and Wales. Though this sizable sample provides confidence in the sensitivity of our statistical analysis and generalisability of the findings, it is also worth bearing in mind that these results may offer an underrepresentation of potential trauma exposure due to healthy worker effects and the pressures of policing during a pandemic. More specifically, it could be that officers were less likely to complete the survey if they were experiencing high levels of demand due to the pandemic, or were on long-term sick
leave due to mental health and wellbeing difficulties. Moreover, this particular research focuses solely on potentially traumatic events, and does not capture other COVID-related experiences that may have a negative impact on wellbeing, such as home-schooling, reduced access to childcare, domestic changes, quarantine periods or being isolated from colleagues at work. It is also worth noting that only officers from the federated ranks were eligible to take part in this study (i.e. those of Constable to Chief Inspector); meaning that the experiences of those from more senior ranks and police staff are not included here, and would benefit from examination by future research.

Although the cross-sectional nature of the survey design means it is not possible to establish statistical causality between officer wellbeing and exposure to potentially traumatising COVID-related events and duties, the mixed methods approach presented an opportunity to triangulate the data and infer relational direction and, to some extent, casualty, from the shared experiences of the officers themselves. Future research may also want to expand on these findings further by using a more robust multivariate approach to analysis; this may help to tease out some of the potential complexities in these relationships and to control for any potential social or occupational covariates that may affect officer wellbeing or potential trauma exposure, such as shift-patterns or specific geographical characteristics (e.g. urban vs. rural localities).

Regardless of the above limitations, this is the first large-scale study that examines the impact of COVID-19 on potential trauma exposure within the Police Service of England and Wales, as well as the subsequent impacts on officer wellbeing. As such, this study provides novel and valuable insight into the experiences of those that have been tasked with protecting the public, and to help push back the rising tide of infection by enforcing legal restrictions.

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1. The Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS) © NHS Health Scotland, University of Warwick and University of Edinburgh, 2008), all rights reserved. For more information, please go to https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/about/
References

Ackerman G and Peterson H (2020) Terrorism and COVID-19. Perspectives on Terrorism 14(3): 59–73. Available at: https://www.jstor.org/stable/pdf/26918300.pdf (accessed 10 July 2021).

Alcadipani R, Cabral S, Fernandes A, et al. (2020) Street-level bureaucrats under COVID-19: Police officers’ responses in constrained settings. Administrative Theory & Praxis 42(3): 394–403.

Amnesty International UK (2020) UK: Police Spit Hoods May Increase Risk of COVID-19 Spread and should not be Used to Police Pandemic. Amnesty International Report. Available at: https://www.amnesty.org.uk/press-releases/uk-police-spit-hoods-may-increase-risk-covid-19-spread-and-should-not-be-used-police (accessed 13 September 2020).

BBC (2020a) Coronavirus: Specialist Teams to Handle Non-Hospital Deaths. Available at: https://www.bbc.co.uk/news/uk-england-london-52185727 (accessed 10 July 2021).

BBC (2020b) London Protests: More than 100 Arrested at Violent Protests. Available at: https://www.bbc.co.uk/newsround/53040005 (accessed 10 July 2021).

BBC (2021) COVID-19 Rise in Suspected Child Abuse Cases After Lockdown. Available at: https://www.bbc.co.uk/news/uk-55682745 (accessed 10 July 2021).

Baraniuk C (2021) Covid-19: how the UK vaccine rollout delivered success, so far. British Medical Journal 372: n421. DOI: 10.1136/bmj.n421

Brown J and Kirk-Wade E (2021) Coronavirus: A History of English Lockdown Laws. House of Commons Library Briefing Paper. Available at: https://researchbriefings.files.parliament.uk/documents/CBP-9068/CBP-9068.pdf (accessed 22 July 2022).

Braun V and Clarke V (2006). Using thematic analysis in psychology. Qualitative Research in Psychology 3: 77–101.

Cartwright A and Roach J (2020) The wellbeing of UK police: a study of recorded absences from work of UK police employees due to psychological illness and stress using freedom of information act data. Policing: A Journal of Policy and Practice 15: 1326–1338. DOI: 10.1093/police/paaa033

Crown Prosecution Service (2021) 6,500 Coronavirus-Related Prosecutions in First Six Months of Pandemic [website]. Available at: https://www.cps.gov.uk/cps/news/6500-coronavirus-related-prosecutions-first-six-months-pandemic (accessed 20 July 2021).

Davidovitz M, Cohen N and Gofen A (2021) Governmental response to crises and its implications for street-level implementation: policy ambiguity, risk, and discretion during the COVID-19 pandemic. Journal of Comparative Policy Analysis: Research and Practice 23(1): 120–130.

De Camargo C (2021a) The postcode lottery of safety: COVID-19 guidance and shortages of personal protective equipment (PPE) for UK police officers. The Police Journal: Theory, Practice and Principles: 0032258X2110187. Online First. DOI: 10.1177/0032258X211018768

De Camargo C (2021b) ‘It’s tough shit, basically, that you’re all gonna get it’: UK virus testing and police officer anxieties of contracting COVID-19. Policing and Society 32: 35–51. DOI: 10.1080/10439463.2021.1883609

De Camargo C (2021c) The weaponising of COVID-19: contamination prevention and the use of spit hoods in UK policing. The Police Journal: Theory, Practice and Principles: 0032258X2110187. Online First. DOI: 10.1177/0032258X211018787
Duran F, Woodhams J and Bishopp D (2019) An interview study of the experiences of police officers in regard to psychological contract and wellbeing. *Journal of Police and Criminal Psychology* 34(2): 184–198.

Drew JM and Martin S (2020) Mental health and well-being of police in a health pandemic: critical issues for police leaders in a post-COVID-19 environment. *Journal of Community Safety and Well-Being* 5(2): 31–36.

Elliott R, Fischer CT and Rennie DL (1999) Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology* 38: 215–228.

Elliott-Davies M (2018) PFEW Demand, Capacity and Welfare Survey 2018 Headline Statistics December 2018 [R101/2018]. Police Federation, pp. 1–29. Available at: https://www.polfed.org/media/15355/demandcapacityandwelfaresurveyheadlinestatistics2018-06-02-19-v1.pdf (accessed 15 July 2021).

Elliott-Davies, M (2020). *Mental health and well-being of police in a health pandemic: critical issues for police leaders in a post-COVID-19 environment*. *Journal of Community Safety and Well-Being* 5(2): 31–36.

Elliott-Davies M (2021a) Demand Capacity & Welfare Survey 2020 Headline Report: PRRB January 2021 [R095/2020]. Police Federation, pp. 1–24. Available at: https://www.polfed.org/media/16557/dcw_prrb-report-13-01-2021-v20.pdf (accessed 19 July 2021).

Elliott-Davies M (2021b) Demand Capacity & Welfare Survey 2020 Headline Report: The Impact of COVID-19 [R051/2021]. Police Federation, pp. 1–16. Available at: https://www.polfed.org/media/16633/dcw_covid-11-02-21-v1.pdf (accessed 21 July 2021).

Finn P, Talucci V and Wood J (2000) On-the-job-stress in policing: reducing it and preventing it. *National Institute of Justice Journal* 242: 18–24.

Frenkel MO, Giessing L, Egger-Lampl S, et al. (2021) The impact of the COVID-19 pandemic on European police officers: stress, demands, and coping resources. *Journal of Criminal Justice* 72: 101756. DOI: 10.1016/j.jcrimjus.2020.101756

Graham L, Plater M, Brown N, et al (2021) *National Policing Wellbeing Survey 2020 Summary of Evidence and Insights*. Durham University. Available at: https://oscarkilo.org.uk/app/uploads/2021/07/National-Wellbeing-Survey-2020-Report.pdf (accessed 22 July 2021).

Hockaday J (2021) *Police Officers Pelted with Bottles as Anti-Lockdown Protest Turns Violent*. The METRO. Available at: https://metro.co.uk/2021/04/24/police-officers-pelted-with-bottles-as-anti-lockdown-protest-turns-violent-14467623/ (accessed 12 July 2021).

Home Office (2015) The Strategic Policing Requirement. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/417116/The_Strategic_Policing_Requirement.pdf (accessed 15 July 2021).

Home Office (2020a) Statistics on the number of police officers assaulted in 2019 to 2020, England and Wales. Available at: https://www.gov.uk/government/statistics/police-workforce-england-and-wales-31-march-2020 (accessed 16 July 2021).

Home Office (2020b) Police Workforce, England and Wales: Data Tables [Dataset]. Available at: https://www.gov.uk/government/statistics/police-workforce-england-and-wales-31-march-2020 (accessed 22 July 2021).

Houdmont J and Elliott-Davies M (2016) *Police Federation of England and Wales 2016 Officer Demand, Capacity and Welfare Survey Initial Report–Descriptive Results*. London: Police Federation of England and Wales.
Federation of England and Wales. Available at: https://www.polfed.org/media/14061/welfare-survey-2016-pfew-descriptive-results-report-v30.pdf (accessed 22 July 2021).

Houdmont J, Kerr R and Randall R (2012) Organisational psychosocial hazard exposures in UK policing: management standards indicator tool reference values. Policing: An International Journal of Police Strategies & Management 35(1): 182–197. DOI: 10.1108/13639511211215522

Kyprianides A, Bradford B, Beale M, et al. (2021) Policing the COVID-19 pandemic: police officer well-being and commitment to democratic modes of policing. Policing and Society 32: 1–18.

Langton S, Dixon A and Farrell G (2021) Six months in: pandemic crime trends in England and Wales. Crime Science 10(1): 1–16.

Laufs J and Waseem Z (2020) Policing in pandemics: a systematic review and best practices for police response to COVID-19. International Journal of Disaster Risk Reduction 51: 101812.

Miller JK, Brewin CR, Sofía M, et al. (2021) The development of a UK police traumatic events checklist. The Police Journal: Theory, Practice and Principles 95: 223. DOI: 10.1177/0032258X211002597

Miller JK, Sofía M, Burchell BJ, et al (2020) Policing: the job & the life survey 2018 summary report. Available at: https://www.policecare.org.uk/wp-content/uploads/PoliceCareUK_TJTL-Report-.pdf (accessed 22 July 2021).

Mohler G, Bertozzi AL, Carter J, et al. (2020) Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Journal of Criminal Justice 68: 101692. DOI: 10.1016/j.jcrimjus.2020.101692

Maercker A, Brewin CR, Bryant RA, et al. (2013) Diagnosis and classification of disorders specifically associated with stress: proposals for ICD-11. World Psychiatry 12(3): 198–206.

Ong K and Azman NA (2020) Distinguishing between the extreme farright and Islamic State’s (IS) calls to exploit COVID-19. Counter Terrorist Trends and Analyses 12(3): 18–21.

Police Care UK (2016) Supporting the Service Police Injury on Duty Research Results 2016. Available at: https://www.policecare.org.uk/wp-content/uploads/DIGITAL_PoliceCareUK_InjuryOnDuty.pdf (accessed 10 July 2021).

Refuge (2020) 25% increase in calls to National domestic abuse helpline since lockdown measures began. Available at: https://www.refuge.org.uk/25-increase-in-calls-to-national-domestic-abuse-helpline-since-lockdown-measures-began/?edit (accessed 10 May 2021).

Strote J, Warner J, Scales RM, et al. (2021) Prevalence and correlates of spitting on police officers: new risks in the COVID era. Forensic Science International 322: 110747. DOI: 10.1016/j.forsciint.2021.110747.

Syed S, Ashwick R, Schlosser M, et al. (2020) Global prevalence and risk factors for mental health problems in police personnel: a systematic review and meta-analysis. Occupational and Environmental Medicine 77(11): 737–747.

The Royal Foundation College London, King’s Open UniversityOpen University and Kings College (2020) Assessing the Mental Health and Wellbeing of the Emergency Responder Community in the UK. London. Available at: https://kcmhr.org/erreport2020-mentalhealth-wellbeing/ (accessed 12 July 2021).

Winsor TP (2016) State of policing: The Annual Assessment of Policing in England and Wales. Her Majesty’s Inspectorate of Constabulary. Available at: https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/state-of-policing-2016.pdf (accessed 10 July 2021).
Winsor TP (2020) State of Policing: The Annual Assessment of Policing in England and Wales 2019. Her Majesties Inspectorate of Constabulary and Fire Services. Available at: https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/state-of-policing-2019.pdf (accessed 16 July 2021).

Winsor TP (2021) Policing in the pandemic. The police response to the coronavirus pandemic during 2020. Her Majesties Inspectorate of Constabulary and Fire Services. Available at: https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/policing-in-the-pandemic-police-response-to-coronavirus-pandemic-during-2020.pdf (accessed 22 July 2021).