COVID-19 IN CUSTODY: RESPONDING TO PANDEMICS IN PRISONS IN ENGLAND AND WALES
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Abstract
COVID-19 was first detected in the prison estate in England and Wales in March 2020 and spread rapidly amongst prisoners and staff. Several policy initiatives were introduced in an attempt to improve the ability to carry out social distancing within the prison estate, reduce the transmission of the disease within prisons and manage cases as they arose. Policies which involved the temporary release of prisoners, increasing accommodation levels within the estate and the cohorting of prisoners presenting with symptoms were all introduced in an attempt to mitigate the impact of the disease. These policies were neither effective nor implemented in a timely manner, and the delay risked increasing the spread of the disease throughout the prison estate. Drawing upon evidence from both public health and social policy research, the following commentary discusses the impact of COVID-19 within the prison estate, and the effects of a policy approach that lacked timeliness and action, on the effective management of pandemics in prison.

Keywords
COVID-19; custody; early release; pandemic; prisons; public health

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Introduction

On 31 December 2019, an outbreak of an unknown respiratory disease later named coronavirus disease 19 (COVID-19), which was caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was reported in Wuhan, China (WHO, 2020a). The disease rapidly spread through China and, eventually, the rest of the world, resulting in the World Health Organization (WHO, 2020b) characterising COVID-19 as a pandemic on 11 March 2020. At the time of writing, roughly five months after the initial cases of COVID-19 were reported in Wuhan, just over 4.6 million cases of the disease, and nearly 315,000 deaths, have been reported worldwide (ECDC, 2020).²

The disease appears to be transmitted through ‘droplets and fomites during close unprotected contact’ between infected and uninfected individuals (WHO, 2020c:8). Research has identified that the severity of symptoms can be quite broad among COVID-19 patients, ‘encompassing asymptomatic infection, mild upper respiratory tract illness, and severe viral pneumonia with respiratory failure’, which can prove fatal (Zhou et al., 2020:1054). Research has shown that the severe form of the disease was dependent upon such things as the presence of pre-existing health conditions (Guan et al., 2020), patient age (Corker, 2020), location, and the intensity of transmission (WHO, 2020c:12).

The first cases of COVID-19 in the UK were reported on 29 January 2020. At the time of writing there have been roughly 243,000 confirmed cases (PHE, 2020). In response to the threat posed by COVID-19, a range of measures were introduced by the UK government in March 2020, which aimed to reduce incidents of community transmission. Central to these recommendations were the implementation of stringent social distancing measures (involving the closure of schools, recommendations to avoid non-essential travel and the suspension of all public events), along with recommendations for anyone with at least one of two common symptoms of COVID-19 (a persistent cough or a fever) to self-isolate for a minimum of seven days. Self-isolation was also recommended for those most at risk of developing severe disease. These measures have been put in place to reduce the spread of disease across the general population, but it is important to remember that there are certain social institutions where the implementation of non-pharmaceutical interventions, such as social distancing, are not as feasible as they are elsewhere. The prison estate is one such example. The risk of exposure to SARS-CoV-2, and the onset of symptoms, severe disease and even death from COVID-19, is far greater amongst the prison population than it is outside the prison walls, as discussed in the following section.

The impact of COVID-19 in custody

Since the first cases of COVID-19 in the prison estate were confirmed in HMP Manchester on 18 March 2020 (Jarvis, 2020), the rate of transmission has grown exponentially. Recent figures show that roughly one month after the identification of the first cases, there were over 500 confirmed cases (287 prisoners, 217 prison staff and 8 Prison Escorting and Custody Services staff) spread across 67 prisons in England and Wales (PRT, 2020) and this number continues to rise. There are numerous reasons why the rate of infection within the

² These numbers, however, are largely restricted by testing capacity.
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prison estate is rapidly increasing. Firstly, the evidence suggests that COVID-19 is highly contagious, with research highlighting transmission of the disease (in both symptomatic and asymptomatic cases) occurring through prolonged close contact (Li et al., 2020). The potential for infection is even greater in an enclosed environment. Nishiura et al. (2020:2) noted that ‘the odds that a primary case transmitted COVID-19 in a closed environment was 18.7 times greater compared to an open-air environment’.

In order to understand how contagious a disease is, it is given a basic reproduction value, or R0 (R-naught) (WHO, 2020c). This refers to how many people one infected individual will transmit the disease to within a population: an R0 of 1, for instance, suggests that a sick person will infect one other person, who will then infect one other, and so on. The initial R0 for COVID-19 in England and Wales was between 2 and 2.5, meaning that each individual with the disease could infect another 2–2.5 people on average. Such a figure is important, as it highlights the need for stringent social distancing measures in order to reduce this basic reproduction value. Indeed, research has shown that ‘social distancing measures reduce the value of the effective reproduction number R’ (Anderson et al., 2020). Effective distancing, however, is simply not possible in the current prison environment.

Prisons in England and Wales are experiencing significant levels of overcrowding, with some prisons housing upwards of 160% of their operational capacity (Howard League for Penal Reform, 2020b). Not only this, but before the confirmed introduction of COVID-19, the movement of potentially asymptomatic or incubating prisoners within a single prison was common, with prisoners moving between blocks in order to undertake work, attend the gym or education provisions, eat and so on. Movement between prisons is also common for a variety of reasons, including the changing of a prisoner’s security category (from medium to high risk, for example), moving high risk prisoners for security reasons, and supporting reintegration upon release. Finally, the turnover of prisoners throughout the estate is of significance here; in 2018 alone, nearly 60,000 people were sent to prison and nearly 70,000 were released (Prison Reform Trust [PRT], 2019). Add to this the levels of visitors regularly entering prisons from the community and it becomes evident that the prison environment is constantly in a state of flux.

The movement of prisoners throughout and between prisons had the potential to significantly impact upon the levels of transmission between prisoners, to a much greater extent than the potential for transmission in the community. Research has highlighted the impact of reducing social mixing on the transmission of COVID-19 between individuals (Prem et al., 2020). Whilst it appears that measures are being put in place to limit the potential for social mixing within the prison estate, there is a limit to how effectively this can be undertaken with the current level of overcrowding.

Secondly, the need to reduce the levels of transmission within the prison estate is perhaps even greater given that the profiles of individuals recorded as contracting severe disease are strikingly similar to the profiles of a large proportion of prisoners. For instance, it would

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3 The reproduction value (R0), however, is based on transmission in the general population and is likely to be much higher in the prison estate.
seem that incidences of severe disease and death are higher amongst men than amongst women, with case fatality rates (CFRs) of 4.7% and 2.8%, respectively (WHO, 2020c). The current prison population is made up of 95% male prisoners and 5% female prisoners. Also, the available research suggests that the likelihood of contracting serious disease increases with the age of the patient. Data from the Office of National Statistics (ONS, 2020) shows that the majority of deaths involving COVID-19 have been among people aged 65 years and over, with nearly 40% of these occurring in the over-85 age group. Similarly, a study by Zhou et al. (2020:1059) found that ‘increased age was associated with death in patients with COVID-19’. Whilst environmental factors are also associated with an increased CFR (see below), the available international evidence suggests that those over the age of 60 present a higher risk of contracting severe disease than those under 60. This is of significance, as the number of prisoners over the age of 60 in England and Wales is growing. People aged 60 or over are the fastest-growing age group in the prison estate, with 13,620 prisoners over the age of 50, 3,311 aged 60 or older, and 1,747 aged 70 or older being recorded in 2018 alone (PRT, 2019:7).

Finally, the available evidence would suggest that those with underlying health conditions are more likely to contract severe disease once infected with COVID-19. Research has suggested that patients with comorbidities (or underlying health conditions) tend to have a higher CFR than those without (WHO, 2020c). Again, this is of particular significance in the context of the current prison population. It has been noted recently that ‘the physical health of the prison population, across a broad range of conditions, is much poorer than the general population’ (Beard, 2020:1), with 15% of prisoners reporting respiratory conditions in 2018 compared with just 8% of the general population. Prisoners also have a higher prevalence of immunosuppression (due to HIV infection) than the general population (Department of Health, 2011). Such health conditions are compounded by the fact that levels of sanitation across the prison estate are reportedly poor, with the Chair of the Justice Committee arguing that prisons are ‘a potential hotbed for viral transmission’ (Neil 2020:1).

Indeed, Corker (2020:15) argues that ‘overcrowding, unsanitary conditions, poor ventilation in a prison will likely increase the speed at which an epidemic unfolded even if the numbers of cases cumulatively remained unchanged’.

The introduction of COVID-19 into the prison estate represented a significant threat to the safety and security of prisoners and prison staff, which needed to be appropriately managed. In an attempt to do so, several policies were introduced with the aim of reducing the potential for introduction and transmission by limiting interaction between individuals, increasing the amount of space within the prison estate through the temporary release of prisoners, and appropriately managing prisoners who were presenting with symptoms.

**Plugging the ‘epidemiological pump’**

The potential for infectious disease transmission within the prison estate is significant; a recent report by the Department of Health (2011:153) noted that ‘prisons run the risk of significant and potentially more serious outbreaks’ of communicable disease than in the community, owing to not only the architecture of the prison system but also the demographic of its population. This is so much the case that prisons have widely been considered to be ‘epidemiological pumps’ for a range of communicable diseases (Farmer et
Whilst there is considerable international evidence documenting the spread of infectious disease within prisons (Baillargeon et al., 2004; Dolan et al., 2007; Department of Health, 2011), the epidemiological profile of COVID-19, combined with the realities of incarceration in England and Wales (as discussed previously), make the disease a particular cause for concern in relation to both risk of exposure and the potential for serious disease and death.

On 24 March 2020, policies were introduced in order to avoid the spread of COVID-19 within the prison estate and the surrounding communities. All prison visits were temporarily suspended, along with all unnecessary work and gym access for prisoners (Beard, 2020). The need to suspend prison visits, whilst in line with the nationally implemented lockdown measures, is also supported by the available evidence in relation to reducing the potential for the transmission of the disease within the prison estate. As highlighted above, the influx of people throughout prisons in England and Wales drastically increased the potential for the introduction of COVID-19. Indeed, Corker (2020:15) argues that ‘as the incidence of infection climbs in the wider community, so too this risk to inmates of being exposed to COVID-19 in prisons increases’. Reducing the number of people entering prisons served to reduce this ‘churn’ or turnover of people who could subsequently increase levels transmission throughout the estate.

It was also decided that, in order to reduce the risk of transmission to pregnant prisoners, all pregnant women and those with children in mother-and-baby units would be temporarily released, pending appropriate risk assessments. The early release scheme was extended to include the male prison estate on 4 April, with the Ministry of Justice proposing measures that would result in the early release of up to an estimated 4,000 prisoners who were within two months of their automatic release date, and who would be monitored with an electronic tag (Beard, 2020). Such measures were to be phased in over a period of weeks.

The idea behind these policy initiatives was that the move to single-cell occupancy would significantly reduce the potential for transmission of the disease between prisoners and prison staff. These policies brought England and Wales in line with Scotland and Ireland, which had already begun to implement temporary release schemes, as had international jurisdictions in Italy, France, Turkey and the US. Shortly after its introduction, however, the policy was criticised for both its slow implementation and its significant underestimation of the number of releases required to reduce transmission. The plan to temporarily release an estimated 70 pregnant women was announced on 31 March 2020, yet by 7 April only six women had been released (Howard League for Penal Reform, 2020a). By 14 April, it was noted that only 18 prisoners, male or female, had been released (Howard League for Penal Reform, 2020a). It should also be noted that the numbers proposed as part of the temporary release scheme were significantly lower than were required to provide single-cell occupancy across the estate. Evidence from members of the Prison Governors Association (PGA, 2020) indicated that, in order to provide single-cell occupancy across prisons in England and Wales, roughly 15,000 prisoners would need to be released. The scheme, however, was fraught with complications and errors. It was temporarily suspended, pending the development of further guidance, on 17 April 2020 after six category D prisoners were wrongly released and needed to be recalled (Grierson, 2020). It was relaunched, with new
guidance, on 24 April 2020 before being withdrawn completely on 10 May 2020 after it was deemed ‘no longer necessary’, with prison numbers falling as a result of automatic release and a fall in the number of people being sentenced. A total of 33 prisoners were released during this period (BBC, 2020).

The available evidence suggests that reducing the prison population to allow for increased social distancing is perhaps the most appropriate way to reduce the transmission of COVID-19 across the prison estate. The early release policy was implemented too slowly (before its eventual suspension) and significantly underestimated the scale of the implementation required for it to be effective. This delay, along with the suggestion that such implementation would be phased in gradually, represents a significant misunderstanding of the epidemiological evidence and a failure to protect those under the supervision of the criminal justice system. However, a range of other policies introduced at the same time aimed to combat the spread of the disease by focusing on how symptomatic prisoners were managed within the estate. The use of temporary prison accommodation, and cohorting groups of prisoners presenting with symptoms together, were employed throughout the prison estate. Unfortunately, the evidence base here in relation to effectiveness is less convincing.

‘Cohorting’ and creating space
Alongside the early release scheme discussed in the previous section, two distinct but related policy initiatives were introduced to try to combat the spread of COVID-19 within the prison estate. A range of ‘temporary prison accommodation’ was due to be introduced in certain prisons in order to increase single-cell capacity, and preparations were made for ‘cohorting’ prisoners, or ‘gathering potentially infected cases in a designated area’ (MoJ, 2020b) should multiple prisoners begin to present with symptoms.

In April 2020, alongside the temporary release policies discussed above, further options were sought for increasing capacity within the prison estate. This was undertaken in two ways: the introduction of temporary prison accommodation in existing sites, and the reopening of former permanent sites of incarceration. On 9 April 2020, the Ministry of Justice announced the installation of 500 temporary, single occupancy cells in seven prisons in England and Wales. The cells were to be utilised by category C and D prisoners pending a full risk assessment (MoJ, 2020c). Whilst the need to increase capacity across the prison estate has been evidenced above, criticisms have been levied at the introduction of temporary accommodation within the estate itself. As Garside (2020:online) notes, ‘behind the euphemisms lies a stark reality. The “temporary, single occupancy cells” are adapted shipping containers’. The use of repurposed shipping containers as makeshift prison cells is not a new phenomenon. Indeed, Grant (2013:36) notes that ‘a number of countries have also used shipping containers as “quick fix” solutions for prison accommodation’, but concerns remain. Firstly, whilst the information published by the Ministry of Justice has noted that this ‘temporary accommodation’ will be used to house category C and D prisoners pending a full risk assessment, it does not state whether or not they will be tested for COVID-19 before being moved. Given that prisoners will be moved to this accommodation from across each host prison, the potential for transmission will increase simply through the process of ‘churning’ prisoners from one block to another (Corker,
2020). Secondly, the available research on the use of repurposed shipping containers within prisons has suggested that the design, along with the increased capacity that results in reduced levels of interaction between prisoners and staff, can increase the potential for prison violence (Wright & Goodstein, 1991; Grant, 2013). Finally, the composition of shipping containers can cause considerable environmental issues, such as interstitial and surface condensation (Smith, 2005), along with issues of sound reverberation and noise disruption (Grant, 2013). As such, the use of temporary accommodation, whilst improving the potential for single-cell occupancy within the prison estate, is problematic at best.

Another attempt to increase capacity within the prison estate came on 30 April, when it was announced that the former secure training centre (STC) in Medway would be reopened as an annex to HMP Rochester, temporarily housing up to 70 category D prisoners (MoJ, 2020a). As with the introduction of ‘temporary accommodation’ on existing sites, there are some considerable concerns which need to be taken into account. Firstly, and linked to the above discussion, there is no evidence to suggest that prisoners will be tested for COVID-19 before being moved to the former STC. Given the potential for asymptomatic cases and the two-week incubation period, it is entirely possible that the movement of prisoners between sites without testing could exacerbate transmission as opposed to reducing it (Corker, 2020; Prem et al., 2020). Secondly, it is important to remember that whilst there has been a drive to increase accommodation across the prison estate, staffing levels have not increased accordingly; in fact, quite the opposite. It has recently been suggested that roughly one-quarter of all prison staff are off sick or self-isolating as a result of COVID-19 (Beard, 2020), with 373 prison staff currently testing positive for the disease. This reduction in staffing will have a considerable impact on the ability of the prison system to function appropriately. Finally, caution should be taken when considering the role of temporary accommodation in the prison estate, as previous attempts to close ‘temporary’ prison accommodation have seldom been forthcoming. HMP Weare, a temporary prison introduced to relieve pressure on the prison system in 1997, remained open for eight years before it was finally closed in 2005 (see Garside, 2020).

Complementary to policies attempting to create space throughout the prison system, policies to implement ‘cohorting’, which was used to reduce the impact of influenza on the prison sector in 2010, have been introduced. If groups of prisoners began to present with symptoms, they were to be grouped together and kept separate from the rest of the prison population (Department of Health, 2011). The evidence base to support the process of cohorting in this instance, however, is not as strong as one would hope, for a number of reasons. Firstly, the policy approach which promotes the use of cohorting prisoners refers to prisoners who are ‘suspected confirmed cases’, ‘potentially infected cases’ or ‘displaying symptoms’ (MoJ, 2020b). It is important to remember at this point that research suggests that the incubation period for COVID-19 is, on average, 5–6 days but can vary from 2 to 14 days (Corker, 2020:8), during which time patients can be contagious, and that asymptomatic cases of the disease are also possible (Li et al., 2020; Rothe et al., 2020). As such, those presenting with symptoms could represent only a fraction of the number of cases in any given prison. Secondly, it is also important to note that the diverse spectrum of symptoms

\[\text{\footnotesize Owing to an increased number of cells but the same number of prison officers.}\]
associated with COVID-19 makes it difficult to say, without sufficient testing, whether patients presenting with symptoms are symptomatic of COVID-19, seasonal influenza or a range of other respiratory diseases. As such, utilising cohorting measures solely on the basis of prisoners presenting with symptoms is insufficient.

Finally, it has been noted in the available evidence that cohorting groups of infected individuals has the potential to exacerbate both the CFR and the basic reproduction value within that group. For instance, we have seen the disease spread rapidly through confined spaces such as the Diamond Princess cruise ship (Mizumoto and Chowell, 2020). Rocklöv et al. (2020:4) found that the initial basic reproduction value (R0) aboard the ship was four times higher (14.8) than in the epicentre of Wuhan (3.7), suggesting that ‘the cruise ship conditions clearly amplified an already highly transmittable disease’. In fact, the evidence base supporting the use of cohorting to combat the spread of COVID-19 within the prison estate is so questionable that Corker (2020:17) argued that the use of such measures is ‘likely to be of almost no benefit in controlling outbreaks in prisons’. Given the wide clinical spectrum of COVID-19, along with the length of time the disease has been present within the prison estate, attempts at cohorting are unlikely to be effective in controlling the spread.

**Conclusion**

COVID-19 poses a real and present threat to the lives of all those involved with the prison system – staff and prisoners alike. The policies attempting to mitigate the spread of the disease throughout the prison estate have been both untimely and ill-informed. The delay in implementing the early release scheme, along with its eventual suspension, represents a failure of criminal justice policy to protect those under its care, particularly when the numbers of confirmed cases in custody continue to rise. The solution to this threat lies in improving social distancing measures within prisons. Reducing the prison population and promoting single-cell occupancy are effective and appropriate ways to do so. The window for implementing such policies, however, is brief. As Corker (2020:15) suggests, ‘hours matter if transmission is to be stopped’, and the slow speed at which these policy initiatives have been introduced has done little to reduce the potential spread of COVID-19 in prisons. Given the architecture of the prison estate, along with the demographic of the prison population, the delays in implementation have put lives at risk.\(^5\) The incubation period, the potential for asymptomatic cases and the many different routes of transmission make the identification of cases considerably more difficult and further compound the problems which are now being faced by an understaffed, under-resourced prison service. On top of this, it is important to remember that there is a broader public health responsibility to reduce the levels of COVID-19 transmission across all social institutions (Corker, 2020). If prisons serve as epidemiological pumps to the communities within which they are located, reducing the potential for transmission within the prison system itself is of utmost importance.

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\(^5\) At the time of writing, there have been 18 confirmed deaths in the prison estate.
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