# Pubs and COVID-19: Flawed claims and faulty reasoning

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## **Summary**

- Most COVID-19 infections appear to take place in private households. Less than five per cent of
  infected individuals contacted by NHS Test and Trace say that they have had close contact with
  another person in a hospitality venue.
- Enforced pub closures in Bolton and Leicester have not been associated with a decline in transmission of COVID-19, nor has the 10pm 'curfew' led to a decline in new infections nationwide.
- It is likely that a shutdown of the pub sector will lead to a further increase in unregulated private
  gatherings where transmission of the virus is easier. The strengthening and effective enforcement
  of proven preventive measures should be used to help stem the spread of COVID-19, not new
  lockdowns and restrictions.

#### Introduction

The COVID-19 pandemic requires governments to balance health risks against social and economic wellbeing. The hospitality industry is Britain's third biggest employer and has an annual turnover of £130 billion. It was effectively shut down for over three months during the lockdown from March 2020 at great expense to the industry and to HM Treasury. This briefing discusses the arguments for a further shutdown and the likely unintended consequences.

### 1. Flawed claims about infections in the hospitality sector

Scotland's Chief Medical Officer justified closing pubs in many areas on the basis of data from NHS Test and Protect showing that 20-25% of infected individuals report having been in a hospitality venue (pub, restaurant, cafe, etc.) in the past week (Scottish Government 2020). However, he admits that this is not evidence that the individual was infected in a hospitality venue, nor that they infected others in the venue. Without knowing how many non-infected people visit pubs and restaurants each week, we cannot know whether visiting these venues makes it more or less likely that a person will catch the virus.

The most recent COVID-19 surveillance report for England found that the most common activity of people contacted by NHS Test and Trace in the week ending 27 September was 'shopping' (13.3%) followed by 'eating out' (13%) (Public Health England 2020). A smaller number of infected individuals reported engaging in an 'activity event' which includes 'hospitality' but also includes 'arts entertainment or recreation', 'community and charity activities', 'public events and mass gatherings', 'teaching and education', 'transport' and much more. The way the figures are presented makes it impossible to tell how many infected individuals visited pubs, but even if we assume that most of the 'eating out' and 'hospitality' took place in pubs, the number is likely to be below 20 per cent. Again, we do not know how this compares to the general population. It may be that pubgoers are less likely to be infected.

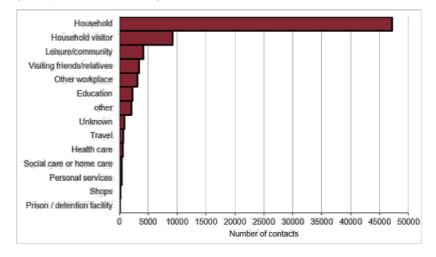
According to the *Telegraph*, Chris Whitty has been lobbying MPs for pub closures on the basis that a larger proportion of infected people under the age of 30 report going to the pub as compared with older people

(Rayner et al. 2020). This only shows that young people are more likely to go to the pub in the current circumstances and is not evidence of widespread transmission in the hospitality sector.

More usefully, NHS Test and Trace has figures showing where infected people have had 'close, recent contact [with other people] and places they have visited'. As the table below shows, the most common exposure, by far, is in the home. The hospitality

sector is classified as 'leisure/community', a broad category

Figure 22: Contacts by exposure/activity setting in week 39, England (Data source: NHS Test and Trace)



that also includes 'eating out, attending events and celebrations, exercising, worship, arts, entertainment or recreation, community activities and attending play groups or organised trips'. Despite the wide range of activities included in 'leisure/community', only around five per cent of individuals with the virus report having had close contact with other people in those settings. The amount of close contact in pubs must be even smaller.

## 2. Local restrictions on pubs have failed to reduce the infection rate

Analysis by the Labour Party shows that local 'lockdowns' have failed to reduce the spread of infection

(lacobucci 2020). The partial exception is Leicester where the infection rate fell initially but has since risen again (see table below from the *British Medical Journal*).

Leicester and Bolton are of particular interest since they were both forced to close their pubs. Pubs reopened in Leicester on 3 August when there were 27 new cases per day. The infection rate then fell steadily to 13 cases per day in late August, but then began rising sharply in September and is currently at over 80 per day. The rise in cases does not correlate with the opening of the hospitality sector.

In Bolton, pubs were closed from 8 September when there were 88 new cases per day. Shutting down the hospitality sector has not reduced the infection rate which now stands at 109 cases per day.

Nationally, there was no surge in infections after pubs reopened on 4 July. The number of new cases reported remained below 1,000 a day in England throughout July and most of August and only began rising significantly in September. In Liverpool,

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Area under restriction	Date restrictions imposed	Infection rate when imposed (per 100 000)	Infection rate now (per 100 000)	Increase (n)	Increase (%)
Leicester*	29 Jun	118	133	15	13
Oadby and Wigston	30 Jun	37	128	91	246
Bradford	30 Jul	54	258	205	381
Calderdale	30 Jul	40	141	101	250
Kirklees	30 Jul	29	169	141	492
Bolton	30 Jul	20	255	235	1179
Bury	30 Jul	20	266	246	1203
Oldham	30 Jul	61	253	192	316
Rochdale	30 Jul	31	298	267	873
Stockport	30 Jul	28	193	165	583
Tameside	30 Jul	26	219	193	739
Trafford	30 Jul	35	223	188	537
Wigan	30 Jul	6	225	219	3653
Manchester	30 Jul	36	552	516	1429
Salford	30 Jul	26	286	261	1023
Blackburn with Darwen	30 Jul	79	218	139	176
Burnley	30 Jul	21	434	413	1938
Hyndburn	30 Jul	19	275	257	1388
Pendle	30 Jul	46	307	262	574
Rossendale	30 Jul	10	229	220	2241
Preston	7 Aug	41	312	271	662

<sup>\*</sup> Although Leicester has seen an increase in its infection rate, its rate initially fell to 26 cases per 100 000 in the week ending 28 August. The week before the restrictions were announced it also reported higher figures of 157 cases per 100 000, which is higher than the current rate.

<sup>1.</sup>All daily case figures refer to the seven day average https://coronavirus.data.gov.uk

Manchester and Newcastle, cases did not begin to spike until the second half of September, corresponding with the start of the new university year.

# 3. The 10pm 'curfew' failed to reduce the infection rate and may have made it worse

The new closing time of 10pm for the hospitality sector has been accompanied by a further rise in the number infections, from an average of around 6,000 in England on the day it was introduced (24 September) to over 11,000 today.

The 'curfew' has led to impromptu mass gatherings in town centres and unnecessary crowding on public transport (see photo - taken at 10.10pm on 2 October on the London Underground). There is substantial anecdotal evidence that it has led to legal and illegal house parties as drinkers look for alternative venues to socialise. Informal gatherings of this kind lack the social distancing and other protections provided by the hospitality sector. It is likely that the 'curfew' has undermined respect for the law and led to increased transmission of the virus.



# 4. The answer may lie in proper enforcement of existing control and mitigation measures in the hospitality sector

When pubs reopened in early July, they were required to put in place comprehensive protocols around social distancing and other protective measures. Rather than fall back on lockdowns and other stringent restrictions, it may be time to revisit these measures, strengthen them based on lessons learnt, and ensure consistent enforcement.

Interventions that can stem the spread of COVID-19 in public venues are now better understood and have been tested. Face masks and shields, designated areas and physical distancing of tables, limits on the number of patrons and party sizes, and proper procedures for cleanliness and service have all proven their effectiveness. Heated outdoor areas can extend the season of open-air entertainment, and continued contact tracing can further mitigate potential infection. As noted by the Scotland's Chief Medical Officer, 'high compliance with all restrictions adopted and mitigating measures put in place will give us our best chance of suppressing the virus without having to implement the most stringent restrictions.'

## Conclusion

There is very little evidence to suggest that pubs have been a significant factor in the recent rise in COVID-19 cases in the UK. Changes in the infection rate do not correlate with the reopening of pubs in early July, nor do they correlate with local pub closures in Leicester and Bolton. The 10pm closing time seems to have had no positive impact and has likely made the situation worse.

The hospitality sector already has to comply with increasingly rigid regulations, including social distancing, contact tracing and mandatory table service. Indeed, 85 per cent of pubgoers think their local is complying with, or exceeding, government guidelines (Stone 2020). There is no reason to believe that they will not continue to do so.

A substantial majority of new infections appear to be taking place in private households. It is likely that further restrictions on the pub sector will lead to a further increase in illegal and unregulated private gatherings in the home where transmission of the virus is easier.

# Pubs and COVID-19: Evidence update

30 November 2020



On 27 November 2020, the government published a brief policy paper justifying its focus on the hospitality sector in the new post-lockdown tier system (Cabinet Office 2020). It pointed to four types of evidence.

## 1. 'Mechanistic and wider data/evidence on risk factors'.

'Transmission risk is a combination of environmental and behavioural factors: higher risk contacts are those that are close, prolonged, indoors, face-to-face, in poorly ventilated and/or crowded spaces, or involve "loud" activities. These are all prevalent in the hospitality sector (but not unique to it). The disinhibitory effects of alcohol are likely to exacerbate difficulties with social distancing.'

These factors may have been prevalent in the hospitality sector when COVID-19 first emerged, but regulations and counter-measures introduced when venues reopened in July have addressed them. For example, customers must be seated while drinking and must wear masks when standing or walking. Tables are spaced out to avoid crowding, and 'loud activities', such as live music, background music and football commentary, are no longer allowed.

The government's description of 'close, prolonged, indoors, face-to-face' contact 'in poorly ventilated and/or crowded spaces' bears no resemblance to the British pub sector today.

## 2. 'Analysis of the impact of tiers and national-level restrictions'.

'The general picture in the UK (and overseas) is that it has only been possible to get R consistently below 1 in places where there have been substantial restrictions on hospitality.'

'Substantial restrictions' have been in place for months. The SAGE document strongly implies that only Tier 3 restrictions are sufficient to reduce the infection rate, but many places, including former hotspots in Nottingham, Manchester, Liverpool and Newcastle, saw a significant decline in cases in October under the previous, less draconian Tier 2 (see Table 1). Liverpool went into Tier 3 on 14 October, Manchester on 23 October and Nottingham on 30 October. Newcastle remained in Tier 2 throughout. In each case, the fall in infections began while pubs were open and operating under the Tier 2 regulations. SAGE is reluctant to admit that the tiered system was working, but it was.

### Cases in Manchester -



Cases in Liverpool ▼

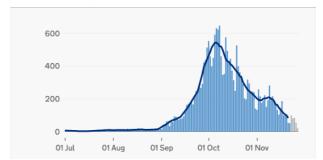
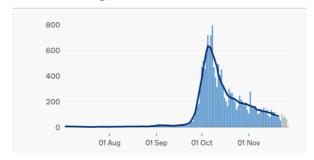


Table 1: Positive COVID-19 tests by specimen date

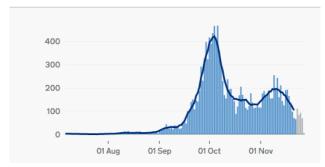
- 3. 'Data from epidemiological analysis of outbreaks'
- 4. 'Case-control and other association studies'

The government cites a SAGE document dated 22 October which summarises the epidemiological evidence and includes a section on hospitality. The document notes that poor ventilation, crowding and 'activities that produce more aerosols (e.g. singing, aerobic activity)' are risk factors for COVID-19 transmission (SAGE 2020: 1). These factors are not unique to hospitality and, as mentioned above, have not been characteristic of hospitality venues in the UK since they reopened in July. The document also acknowledges that the 'largest outbreaks from across the world have been reported in long term care facilities such as nursing homes.

Cases in Nottingham -



Cases in Newcastle upon Tyne ▼



homeless shelters, prisons, and workplaces including meat-packing plants and factories' (ibid.: 9).

The document cites nine studies which SAGE believes are relevant to pubs (ibid.: 8-9).

Reference [22] is a review looking at where SARS-CoV-2 clusters take place. Of the 201 clusters identified, only 12 (6%) involved bars, clubs, pubs and small live music venues. Households were associated with the greatest number of clusters, with hospitals, care homes, worker dormitories, food processing plants, prisons, schools, shops and ships associated with the greatest number of cases per cluster.

Reference [23] is a study of SARS-CoV-2 infections in Hong Kong. It includes a case study in which musicians transmitted the virus in four bars in the early stages of the pandemic (between 7th and 20th March). Restrictions in bars, such as limiting customers to four people per table, were not introduced in Hong Kong until 28 March. The study has no relevance to British hospitality venues today.

Reference [24] is a study of SARS-CoV-2 clusters in Japan between 15 January and 4 April. It found that 'hospitals, and care facilities, such as nursing homes, were the primary sources of clusters'. It identified ten

clusters associated with restaurants or bars (16%) and five associated with gyms (8%). There were no controls on hospitality venues for most of the period in question.

Reference [25] is a study of SARS-CoV-2 transmission in nightclubs in Seoul. Since no one is seriously calling for nightclubs to be reopened in Britain yet, it is of no relevance.

Reference [26] is a study of super-spreader events in Indonesia. It mentions traditional markets, religious gatherings and wedding parties as possible locations for such transmission but does not mention pubs or bars at all.

Reference [27] is a study of a super-spreading event in Vietnam resulting from an infected person partying until 2.30am in a crowded bar in Ho Chi Minh City on St Patrick's Day (17 March). It has no relevance to Britain's hospitality sector as it currently operates.

Reference [28] looks at an outbreak of SARS-CoV-2 in a restaurant in China in the very early stages of the pandemic (24 January). The authors recommend 'increasing the distance between tables, and improving ventilation'. The British hospitality sector has acted on such recommendations.

Reference [29] comes to the unsurprising conclusion that people who have had close contact with somebody with SARS-Cov-2 are more likely to catch the virus than people who haven't. The study found that going to a restaurant, coffee shop or bar was associated with an increased likelihood of catching the virus, 'but only when the analysis was restricted to participants without close contact with persons with known COVID-19.' Only 13 of the 154 SARS-Cov-2 cases identified had been in a bar or coffee shop in the previous two weeks.

Reference [33] is a study of eleven SARS-CoV-2 clusters in Japan. They occurred in 'gyms, a restaurant boat on a river, hospitals, and a snow festival where there were eating spaces in tents with minimal ventilation rate'. The authors conclude that transmission is much more common indoors than outdoors, but do not mention pubs or bars at all.

## Ventilation

Several of the studies cited by SAGE stress the importance of indoor ventilation, a conclusion supported by SAGE in a recently-released document (SAGE 2020b). This lends itself to regulation if necessary, as ventilation can be easily monitored using CO2 measurements. It also suggests, once again, that outdoor hospitality is safe and that the use of beer gardens and pavement areas by pubs and restaurants should be permitted and encouraged.

## Conclusion

The evidence produced by SAGE to justify closing the hospitality sector in Tier 3 and severely restricting it in Tier 2 is tenuous and has little relevance to pubs in Britain today. Since July, the hospitality sector has introduced a number of measures to create social distancing, limit mixing between households, reduce noise and increase ventilation. Conclusions derived from Asian bars and nightclubs in the early stages of the pandemic tell us nothing about the safety of British bars and restaurants in November 2020.

Since the government intends to keep gyms, churches and hairdressers open in Tier 3, the treatment of the pub sector in Tier 2 and Tier 3 seems particularly harsh and discriminatory.

None of the evidence cited by SAGE supports, or even addresses, the idea of requiring a 'substantial meal' to be served with drinks in Tier 2 pubs. This policy seems wholly arbitrary and will lead to the unnecessary closure of thousands of 'wet pubs' and other licensed venues, such as snooker halls and casinos. Businesses which could be operating safely will be forced to furlough their workforce and accept government grants to stand idle.

### References

Cabinet Office (2020) Transmission risk in the hospitality sector. 27 November: <a href="https://www.gov.uk/government/publications/transmission-risk-in-the-hospitality-sector/transmission-risk-in-the-hospitality-sector">https://www.gov.uk/government/publications/transmission-risk-in-the-hospitality-sector/transmission-risk-in-the-hospitality-sector</a>

lacobucci, G. (2020) Covid-19: Infection rates have risen in hotspot areas despite local lockdowns, analysis shows. *British Medical Journal* 371: m3912

Public Health England (2020) Weekly Coronavirus Disease 2019 (COVID-19) surveillance report: Week 40.

Rayner, G., Knapton, S. and Yorke, H. (2020) Ministers accused of justifying pub closures with 'cobbled together' statistics. 8 October: <a href="https://www.telegraph.co.uk/politics/2020/10/08/ministers-accused-justifying-pub-closures-cobbled-together-statistics/">https://www.telegraph.co.uk/politics/2020/10/08/ministers-accused-justifying-pub-closures-cobbled-together-statistics/</a>

SAGE (2020) SARS-CoV-2 Transmission Routes and Environments. 22 October: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/933225/S">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/933225/S</a> 0824 SARS-CoV-2 Transmission routes and environments.pdf

SAGE (2020) Role of Ventilation in Controlling SARS-CoV-2 Transmission SAGE-EMG. <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/928720/S">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/928720/S</a> 0789 EMG Role of Ventilation in Controlling SARS-CoV-2 Transmission.pdf

Scottish Government (2020) COVID-19: Note by the Chief Medical Officer, Chief Nursing Officer and National Clinical Director

Stone, S. (2020) 85% of Brits feel pubs are meeting or exceeding Covid-secure expectations. 18 August: <a href="https://www.morningadvertiser.co.uk/Article/2020/08/18/Are-pubs-complying-with-Covid-19-guidance">https://www.morningadvertiser.co.uk/Article/2020/08/18/Are-pubs-complying-with-Covid-19-guidance</a>