There have been misleading claims from Government sources about what data and information has been provided to us in Leicester and when.

We must clarify what data we need and what will constitute success in 'defeating the virus' in Leicester.

In this paper I intend to set out what we have had and what data we need.

What data has been provided and when

For many weeks we have been measuring and mapping in Leicester from the two sources of data that were available to us – the death rate and the hospital admission rates. This has enabled us to monitor the impact of Covid 19 on those severely affected and, from them, to draw inferences about the impact on particular communities and neighbourhoods.

We have used Lower Super Output Areas (LSOA) - mostly areas below 2,000 people – to get an understanding of what is happening at neighbourhood level in the City. Hospital admissions, which helpfully include ethnicity, have fallen from over 100 per week in mid-April to 15 per week by 3rd July.

What we have not had is any useful data from testing in the community.

Since the launch of the test and trace system at the **beginning May 2020** our Director of Public Health (DPH) repeatedly asked Public Health England (PHE) to allow us access to results data, preferably at postcode or LSOA level, so that we could monitor our local picture. This data was not forthcoming to us or other councils. The reason given for this was that it wasn't in a fit state to publish because it hadn't been cleaned. This was the data feed from the Test and Trace system that the PM had launched as 'world beating'.

On **1st June** the DPH was given access to the number of positive tests in the City (Pillar 2) data which only gave numbers for those testing positive across the whole of the city. On the test and trace call later that week the DPH asked for clarification as to whether the figures were a cause for concern and was told it was probably 'a small numbers issue' and may well go down again in the following week's data release. On **9th June** the DPH remained concerned that these overall numbers appeared to show

an increased number of positive results compared with other areas of the country. He raised this with PHE and continued to ask for more detailed data. The DPH was given access to the test and trace dashboard from **12th June** as part of the national roll-out of data, but this contained the same information. Meanwhile the Pillar 1 data was showing that we were below the England rate for new infections, so this was not triggering concerns.

On **14th June** our DPH noticed that the weekly national PHE Covid surveillance report, published on **11th June**, contained a map which showed LA level Pillar 1 and 2 data combined and that it highlighted Leicester, along with a number of other areas, as having among the highest rates in the country. This only gave us a range of RAG rated rates without specific detail for the city.

On **15th June** a response was provided from regional PHE East Midlands which finally confirmed that the numerator data being reported was not primarily an artefact of increased testing or data recording issues. They gave the following response -

'together these data suggest an increase in cases reported through Pillar 2 and possibly an increase in Pillar 1. The underlying drivers for this are unclear and it may be a mixed picture of increased access to pillar 2 testing as well as a genuine rise in cases in early June. We have not identified an obvious geographical hotspot that explains all cases nor an outbreak to date.'

On the evening of **17th June** my DPH met with PHE Track and Trace leads who provided additional data that confirmed this was a real issue for Leicester.

We immediately stepped up an LLR Covid-19 Health Protection Board meeting which became the Incident Management Team. This met on **18th June** and we established work streams on epidemiology, communications, testing, community engagement, business engagement and support for vulnerable people. That same evening, the city council issued a press release in response to the Secretary of State's announcement, sharing the data from PHE that showed the surge in positive results in Leicester and urging people to stay at home as much as possible and continue with hand hygiene and 2m social distancing measures. This message aimed to raise alertness across the whole city.

As mentioned above, on that day, **18th June**, the Secretary of State, announced at the Downing Street News Conference that there was an 'outbreak' in Leicester. Describing the Leicester figures in that way had never been used by PHE in discussion with us. Indeed it was just 3 days earlier that they written, *"we have not identified … an outbreak to date"*

At this point there was only 1 testing station in Leicester. There were 2 others beyond the city boundary. All were drive through only and a long way from the areas subsequently identified as being of concern. After the Secretary of State's announcement, a further walk through testing centre was made available on Saturday **20th June,** at my suggestion, in Spinney Hill Park. Those organising it said they were only there for the day and the DPH had to spend much time over the following week persuading them not to pull out of Leicester.

A data sharing agreement between PHE and the Council was sent to us from PHE on **22nd June**. This was signed and sent back to PHE **23rd June**. A second form was sent to us on the **24th June** which we returned the same date.

Finally, after weeks of requests, the link to the postcode Pillar 2 data was sent to us on **25th June** - a full 11 days after the SoS's statement at the News Conference of an 'outbreak'. I will discuss what this data does and does not tell us later.

On **25th June** the Midlands and Lancashire NHS reassured us that for Leicester Hospitals –

"… actual admissions and discharges for COVID19 are generally lower than predicted throughout April, May and into June, and are very low"

There were no specific Government or PHE interventions in Leicester at any time or advice given that was not acted upon. Leicester does have very significant resources and expertise to intervene, but in the absence of local data has been hampered in knowing where to use it.

In brief –

1. We had asked for detail of Pillar 2 testing from early May but were told that it 'wasn't in a fit state'. Some of this data arrived on 25 June but still required cleansing by our local team.
2. That there might be issues with Leicester figures was raised by us some weeks before Government or PHE action was taken. We

continued to receive assurances from PHE and NHS that there was no cause for concern.
3. The level of testing in Leicester remained low even after the alert was sounded.
4. There was a long delay between their announcement of an 'outbreak' and Government intervention.

What data we have now and what we can tell from it

Over the weekend of **27/28th June** without warning it was briefed at a national level, including by the Home Secretary, that Leicester was to be subjected to a further 'lock-down'. This had not been discussed with us.

On the evening of **Sunday 28th June,** we were sent a summary of a report from PHE which said,

"It is considered likely that a large contribution to the apparent change may be associated with increasing testing - a steadily increasing proportion of infections (symptomatic and asymptomatic) are being identified rather than a true increase in the number of new infections occurring"

In view of its inconclusive data, instead of recommending a lock-down (as the Home Secretary had been announcing) PHE actually recommended,

"Delaying July 4, 2020 relaxation actions in Leicester and enhancement of enforcement or monitoring of social distancing guidelines for at least two weeks to allow the impact of the above measures to be assessed"

This recommendation and the description of the effect of more testing have now been omitted from the published version of this report. It is reasonable to assume that this is because it is at odds with the decision to 'lock-down' Leicester.

PHE do however still conclude their published report very differently from the Government with -

"Evidence for the scale of the outbreak is limited and may, in part, be artefactually related to growth in availability of testing."

There are several difficulties with the data and its display by PHE that make it very problematic.

The difficulty of making sense of what data was subsequently sent overnight was that it is based on electoral ward boundaries – areas containing many neighbourhoods within a population of over 20,000 and that have no purpose other than to define that electoral area.

For our own analysis we have used ONS definitions of Medium Super Output areas (MSOA) and Lower Super Output areas (LSOA) that have modes of 1,500 to 2,000 and give some possibility of seeing what is happening at a true neighbourhood area. Post code data enables LSOAs to be used but PHE have not been prepared to use these and therefore they are looking at far too large an area to give a real understanding of what is happening.

The 'occupation' field of test subjects is also of little value. It is frequently blank, contains extraneous information and it appears that where several people in the same household are tested the occupation of the person completing the form has been assigned to the whole household – hence, for example, we have an 8-year-old front line healthcare worker listed.

The ethnicity data is incomplete. Currently only around half of the tests have completed ethnicity data. There is data for hospital cases but as ethnicity is not a compulsory field on the application for pillar 2 testing it is not always recorded. Robust analysis of the data on the basis of ethnicity is thus not possible.

In the absence of analysis at street or LSOA level and without place of work or ethnicity the data gives no clue as to whether the speculation about workplace, schools or ethnicity may have any part in the prevalence of the virus. It has been convenient to blame these factors – but the truth is that none of us - the Government, PHE or the Council - know because they haven't got the data.

Although the numbers being tested is now increasing, there is an even more significant limitation in the usefulness of the data. We are not provided with the <u>total</u> number of tests undertaken for each LSOA. We only receive positive results. Any calculations of rates can therefore only be made using the whole Leicester population number. That provides the number of positive tests per 100,000 population. To be useful we need the proportion of tests that are positive in every particular area – the LSOA positivity rate.

Thus, with more testing now being done we will of course get more positives. As PHE pointed out themselves an –

"*apparent change may be associated with increasing testing … rather than a true increase in the number of new infections occurring"*

The data is also difficult to clean up for use. It relates to the number of tests not to individual people. In some cases, individuals will have several swabs taken and each swab processed counts as a separate test. There is therefore, inevitably, a level of double counting. PHE have now advised this will be changed to provide lists of the first positive case for individuals.

Finally, the test dates do not appear to correspond to the specimen date. This makes trend analysis very problematic.

In brief -

1. The data is missing vital information to enable us to pinpoint if and where the virus is spreading
2. We need post code, ethnicity and workplace
3. We need negative test results if we are to have any context for the positive results.
4. The use of electoral wards is far too large and irrelevant an area to focus analysis on neighbourhoods

What we need now

1. Testing still needs to be stepped up. We require post codes to give LSOA figures, ethnicity and, where appropriate, workplace.

2. We must have negative results with the same information to identify local 'positivity rates'.

3. The only way we can really know the rate in the community is by random sampling. Then we can understand the level of infection and not just the figures for those who, for whatever reason, present themselves for testing.

4. Household level contact tracing data is essential to enable our local teams to support those required to self-isolate (and to ensure they

are doing it), if they have been in close proximity to someone who has tested positive.

5. If this period of enforced lock-down is to be anything more than a gesture to warn the rest of the Country, PHE needs to state definitively what level of results constitute an acceptable level of infection. We need to know how this will be measured, otherwise we could end up in a protracted lock down - or end up leaving our isolation on the same wholly inadequate basis used to take us into it.

Peter Soulsby
Mayor of Leicester

7th July 2020