

## **Surrey Covid-19 Geographical Impact Assessment Report**

This report summarises the findings of the first iteration of the Geographical Impact Assessment. The aim of the analysis is to identify specific places within Surrey that have been disproportionately impacted by Covid-19 as of June 2020. The analysis will be updated as recovery continues and more data becomes available.

We have analysed three different types of impact from Covid-19 (health impacts, economic impacts and vulnerable population group impacts) and have shown how these impacts vary across Surrey and how they relate to each other. To gain a deeper understanding of these impacts the next step is to conduct the place based ethnographic research by undertaking primary research in some of the areas highlighted by this analysis.

### **Findings**

The analysis has identified the following key findings:

- There is no single type of impact that can summarise which areas have been most affected during the pandemic. Often areas that are more impacted along one dimension are less impacted along other dimensions.
- There does not appear to be a relationship between those places that have been impacted in terms of health and those places that have been impacted economically.
- There is some relationship between places with a high prevalence of vulnerable or impacted population groups with places that have been impacted in terms of both health and the economy.
- Most of the areas that show high combined impacts are found in the North, South East and South West of the county, with the highest numbers in Spelthorne, Waverley, Mole Valley and Tandridge.
- Typical measures of deprivation do not necessarily correlate to the areas that have been most impacted, especially in terms of health impacts, though further analysis is required to validate this.

The implication is that recovery efforts should be guided by a nuanced understanding of the local impacts on any given place and we should not assume that the usual areas of deprivation are the right places to target.

## Dimensions of Impact

We have analysed three dimensions of impact from Covid-19. For each dimension, we have collected data at the Middle Super Output Area (MSOA) level and constructed a Surrey wide index which combines several indicators to produce an overall dimension score.

**Health impacts:** This dimension looks at where there have been direct health impacts as a result of Covid-19, including where there have been deaths directly attributed to the virus and outbreaks within care homes.

**Economic impacts:** This dimension looks at where there have been direct economic impacts as a result of lockdown, including where there have been increases in unemployment and where employees have been furloughed.

**Population groups:** This dimension considers where there is *likely* to have been disproportionate impact based on the prevalence of groups with pre-existing vulnerabilities, for example people with disabilities, people with mental health conditions, older people who live alone and carers. It also considers people who have been impacted by lockdown in another way, for example people shielding and friends and families who have been bereaved from non-Covid deaths.

### Indicators used to calculate dimension scores

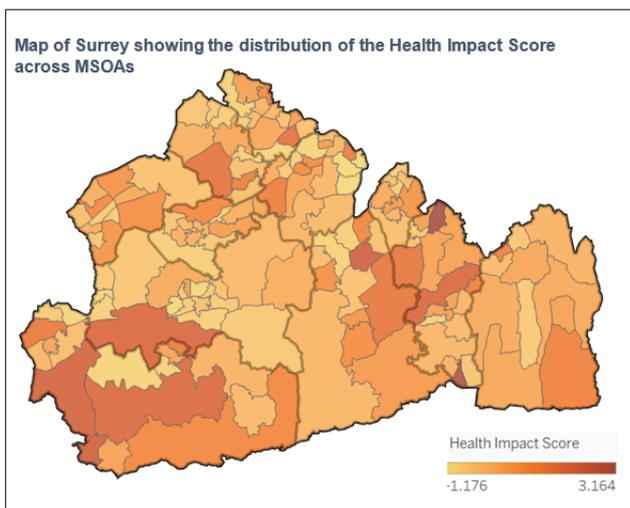
The table below summarises the indicators used within each dimension. The index creates a weighted average of the different indicators to create the dimension score.

Impact Dimension	Description	Indicators
Health	Variables that show a direct health impact of Covid-19	<ul style="list-style-type: none"> <li>Covid deaths per 10,000 population</li> <li>Number of care home outbreaks</li> </ul>
Economic	Variables that show a direct economic impact of lockdown	<ul style="list-style-type: none"> <li>% point change in claimant count between Mar – Apr 2020</li> <li>% of people furloughed</li> </ul>
Population groups	Variables that highlight groups who are more likely to have been negatively impacted by lockdown	<ul style="list-style-type: none"> <li>Non-covid deaths per 10,000 population (proxy for bereaved families and friends)</li> <li>Shielded people per 10,000 population</li> <li>Proportion of people receiving disability benefits</li> <li>Prevalence of mental ill health</li> <li>Pensioners who live alone</li> <li>Carers who provide 50 hours of unpaid care per week</li> </ul>

### Geographic variation in health impact

Health impact considers the numbers of deaths attributable to Covid-19 per 10,000 population and the number of care home outbreaks in each MSOA.

The map shows that the health impacts have been greater in some communities including parts of Waverley, Mole Valley and Reigate & Banstead. This is likely due to the high number of over 80s and care homes in these areas.



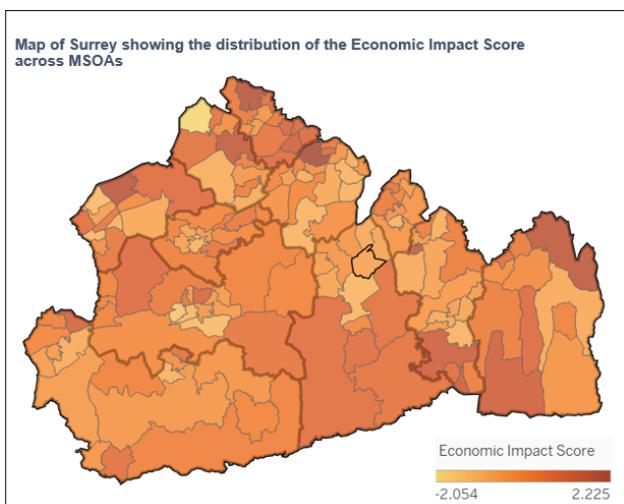
The top 5 most impacted MSOAs in the health dimension are:

- Banstead (Reigate & Banstead)
- Horley Central (Reigate & Banstead)
- Leatherhead South & Ashted South (Mole Valley)
- Haslemere West (Waverley)
- Hindhead, Beacon Hill & Frensham (Waverley)

### Geographic variation in economic impact

Economic impact considers the percentage point change in claimant count between March 2020 and April 2020, and the % of employees furloughed in each MSOA.

The map shows that the economic impacts are spread across the county. However, there appear to be hotspots in the North and South East of the county. This may be due to the proximity of these areas to Heathrow and Gatwick, and the high number of people working in the aviation sector.



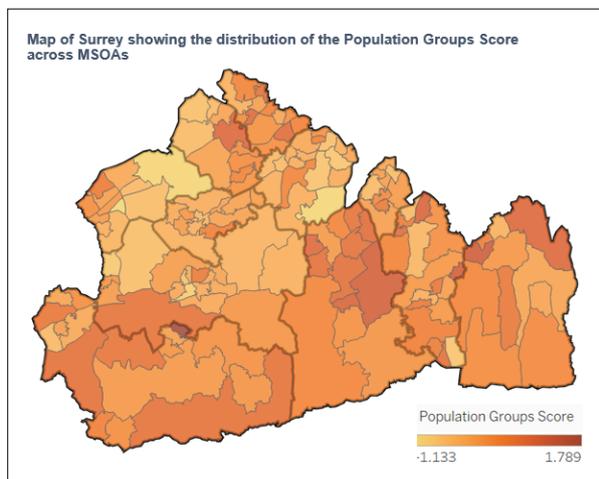
The top 5 most impacted MSOAs in the economic dimension are:

- Walton North & Molesey Heath (Elmbridge)
- Stanwell North & Stanwell Moor (Spelthorne)
- Bagshot (Surrey Heath)
- Warlingham East & Tatsfield (Tandridge)
- Tattenham South (Reigate & Banstead)



### Geographic variation in vulnerable population groups

This dimension considers the prevalence of population groups with pre-existing vulnerabilities and/or who are more likely to have been impacted during lockdown, including bereaved families and friends, those who are shielding, people with disabilities, people with a mental health diagnosis, older people living alone and carers.



The map shows that the groups are spread across the county, with slightly higher prevalence in the South and East.

The top 5 most impacted MSOAs in the population groups dimension are:

- Farncombe (Waverley)
- Caterham West (Tandridge)
- Merstham (Reigate & Banstead)
- Box Hill & Brockham (Mole Valley)
- Dorking South (Mole Valley)

### How do the dimensions of impact relate to each other?

To fully understand the impact of the Covid-19 crisis in Surrey we need to consider how the three dimensions relate to one another. If the areas that are most impacted in one way are also most impacted in others, it would make sense to focus our recovery efforts on these places.

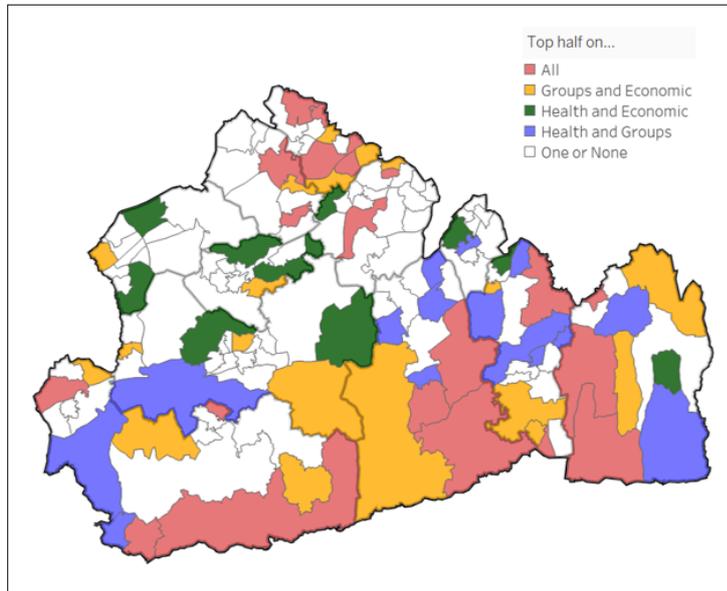
The analysis shows a mixed picture. There is no relationship between the Economic and Health dimensions, though both show a weak relationship with the Population Groups dimension. This illustrates that different parts of Surrey have been impacted by the crisis in different ways.



### Geographic variation in combined impact

Some areas have been impacted in multiple ways. To show these cases of impact across multiple dimensions, we have identified MSOAs that are ranked in the top half (more impacted than average) along each dimension. We have then categorised areas by the number of dimensions on which they are more impacted than average.

The map shows that the combined impacts are spread across the county, but areas in the North, South West and South East have most commonly been impacted across the board.



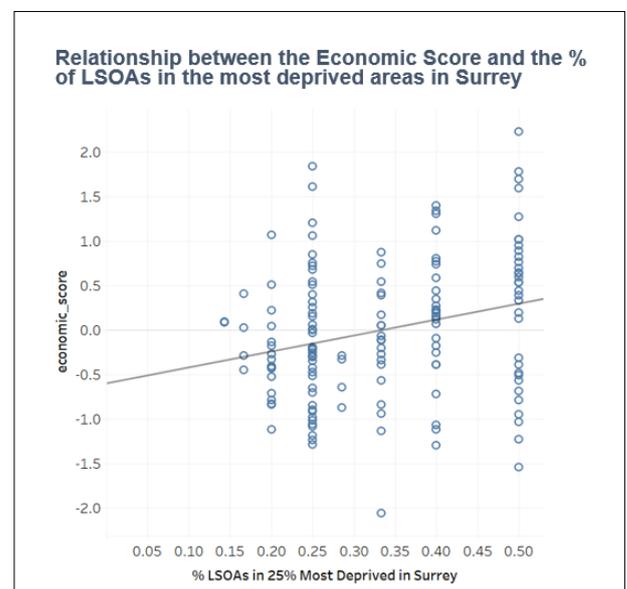
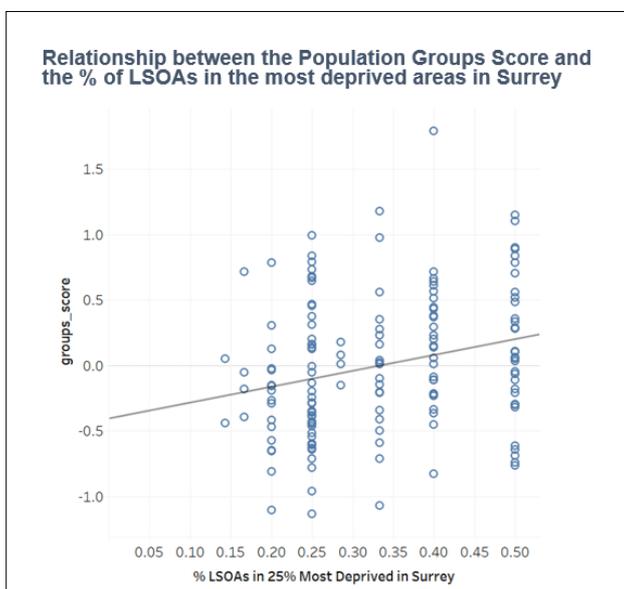
In total there are 21 MSOAs that fall into the top half across all three dimensions. These are in:

Spelthorne – 5  
 Waverley – 4  
 Mole Valley – 3  
 Tandridge – 3  
 Runnymede – 2  
 Reigate & Banstead – 2  
 Elmbridge - 2

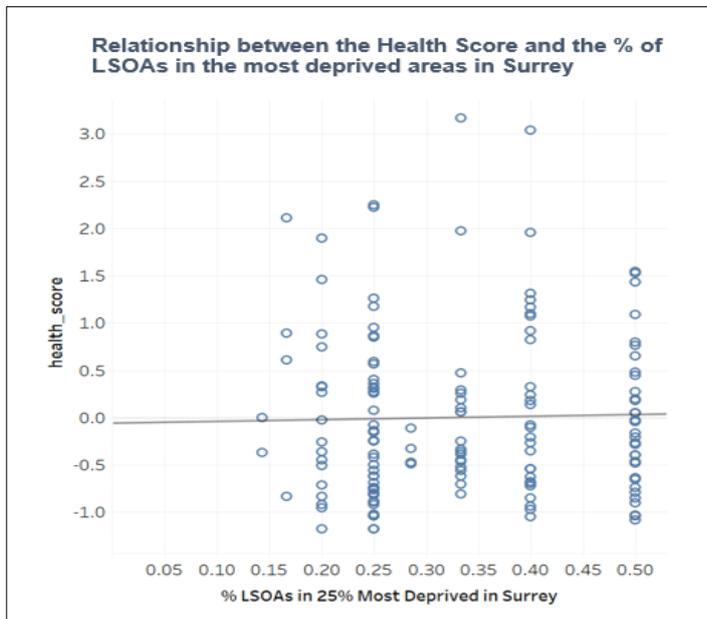
### How do the dimensions of impact relate to deprivation?

One consideration is how the three dimensions of impact relate to other indices, for example the Index of Multiple Deprivation (IMD).

The graphs below compare the Population Group and Economic dimension scores with a measure based on the 2019 IMD which captures the proportion of LSOAs within each MSOA that are in the 25% most deprived in Surrey. They show that there is only a weak relationship between the dimension scores and the IMD measure of deprivation. This suggests that the areas that have been most impacted are not necessarily the most deprived.



Similarly, we can look at the relationship between the Health dimension score and the same IMD measure:



The graph suggests that there is no relationship between these two variables, implying that those areas which are more susceptible to Covid-19 on health grounds are not generally the most deprived areas. This is different to what Public Health England have found at a national level.

It should be noted that these findings are limited to the specific indicators that are used to construct the indices. Moreover, analysis at the MSOA level might obscure very real relationships at lower levels.

Further analysis is required to understand what *has* driven health impacts in Surrey and to explore the strengths of areas that have been less impacted than others, which will validate and refine these findings and help us to understand differences between Surrey and the national context.

## Next Steps

Using the findings from this analysis, the next step is to select a handful of places within Surrey and carry out further research to gain a more detailed and contextual understanding of the impacts. We have chosen places using the data presented in this analysis, soft intelligence from colleagues working in communities, and by thinking about different types of places within Surrey. Seven places will be investigated, which are:

Type of Place	Suggested Place(s)
High increase in unemployment due to Covid (JSA and UC) / High proportion of people working in affected sectors	Stanwell North & Stanwell Moor (Spelthorne) Horley Central (R&B)
Lower socioeconomic / relatively deprived area	Sheerwater (Woking)
Commuter town	Guildford Town Centre (Guildford)
Rural area	Smallfield & Felbridge (Tandridge) Hindhead, Beacon Hill & Frensham (Waverley)
Area with lower economic impact (as a comparison)	Ashtead West (Mole Valley)