Covid-19 Deaths 'where you live' are here. Be careful what you look for?

By John Clancy, Visiting Professor, Centre for Brexit Studies

On May 1st the local online newspapers up and down the land got a bit of a shock. They were given information. Information which brought them up short a bit, because for the first time the ONS supplied them with online interactive maps into which readers could put their postcode and find out how many Covid-19 deaths there had sadly been 'round their way'. And very local information that was too.

Brought them up short a bit, because these new local figures?..they seemed a bit different. A bit low? Surely too few? Not what the readers would expect.

The problem was that they (and the national titles) had been reporting the pandemic in such a way as to chime with the national mood. The wide sense of grave danger and fear was abroad in the nation, whether city and town, or rural and coastal. All sensed the danger and fear similarly. We really were all in this together.

How different, indeed, was this to what came immediately before.

The Brexit referendum process and the Brexit actual exit process (remember all that?) seemed, prior to the pandemic, to have emphasised significant fundamental differences between our towns and cities on the one hand, and our rural and coastal areas on the other. Perceptions of the U.K. and life as it is lived in those different places appeared stark. Two separate nations side by side, though crossing the U.K.'s actual nations.

The pandemic changed all this. The U.K. united as a kingdom in a way very few had experienced before in their lifetimes, especially on Thursday evenings at 8:00 p.m.

The problem was, though, that when the granular, very local data eventually emerged, it started to show for the first time that we ***were***

actually experiencing this in significantly different ways depending on where we lived.

The government's approach (understandably) was to emphasise the national emergency, because if that sense of national emergency had not been sensed, there was a clear and present danger that the NHS would simply not have been able to handle the inevitable and sudden wave of deaths. The government knew these would occur most especially in our towns and cities. By mid-March, the practicalities of isolating and locking down towns and cities where the disease was already deeply embedded was no longer open to the government.

The government knew that the waves of tragic deaths would start to happen and it literally needed to be managed. The only way forward was ***national lockdown*** in all four countries of the kingdom.

The most important feature of this lockdown was the daily national death toll. It was also publicly and inevitably to mark very grim indeed milestones as the peak of deaths approached. The media also had little choice in the face of such news to focus on the big daily numbers of deaths, and the cumulative tolling of deaths, as well as the inevitable personal stories of grief, loss and pain.

The government needed this style of news management for the general and common good. It was probably wise.

What they did not choose to do (understandably) was focus on the actual figures as they were occurring around the country. The numbers of deaths around "where you live" were actually available in terms of local council areas, if you looked hard for them. They were rarely widely presented. The daily national press conferences would, for example, show a graph of deaths in the regions, but little else.

The problem was (as is always the case with powerful, dramatic, big numbers) that when spread across a U.K. of over 66 million people in approaching 400 council areas, the number of deaths where you live was simply not as frightening as the big national number. Obviously, these local deaths were personally deeply tragic for those families affected. I certainly would not wish in any way to lighten them.

If you look at the ***local*** figures for Covid19-related deaths reported daily by the NHS or weekly by the ONS, they show the occurrence of death from Covid-19 to be much less dramatic 'where you live' than the national death toll would suggest. And if you live in a rural or coastal community the differences are (mainly) stark.

If you had put your postcode into the local online newspaper last week, or the week before at peak, it would not have been helpful to the national effort at all, because the likelihood was very high, for most logging in their postcode, of discovering that deaths 'where you live' were in very small single digits or zero. Indeed, the ONS have re-distributed some deaths from surrounding areas so as to avoid possible identification of the sadly deceased.

The problem is that there are well over a million postcode areas which the ONS has data for, because the death certificates relate to individuals in postcodes. Above that there are over 7,000 Middle Layer Super Output Areas (MLSOAs) with Covid-19 data in England and Wales, so deaths are broadly being related to deaths per 8,500, which will be very low single digits – but individual people. In fact over 1,000 of those MLSOAs report zero Covid19-related deaths, a further 1,500 report one death.

Analysis of Covid19-related deaths from today's data [1](deaths registered upto 2nd May 2020, Week 17) from the ONS confirms this. Obviously the biggest hospitals, the biggest towns and cities report the highest raw number of deaths. Meaningful though those deaths fundamentally are, they are meaningless for most wanting a sense of how dangerous this disease is, was, or will be.

The reporting of deaths needs to be proportionate – literally. You need to know how many people around you could die from/of/with Covid-19. So it has to be how many deaths out of ***a number that means something***.

I would propose that two numbers mean something and don't involve complex maths: the number of deaths per 10,000 people around you; and the number of deaths per 100,000 around you.

I say this because we break our country into parliamentary constituencies of about 100,000 people (mainly), so it's a good measure

of local. And 10,000 is fairly analogous to a council ward population (as opposed to voters), and it is a MLSOA.

So from the cumulative figures from the 3 statistics organisations in the U.K. available by today of Covid19-related deaths registered in hospitals, care homes, private residences and elsewhere in the community (as opposed to NHS daily figures which come from hospitals and care homes), the very worst result for a council area (in Hertsmere, a council district bordering London, adjacent to Brent) is a total of 12 Covid-related deaths per 10,000 people since the pandemic began. Scotland will update further tomorrow.

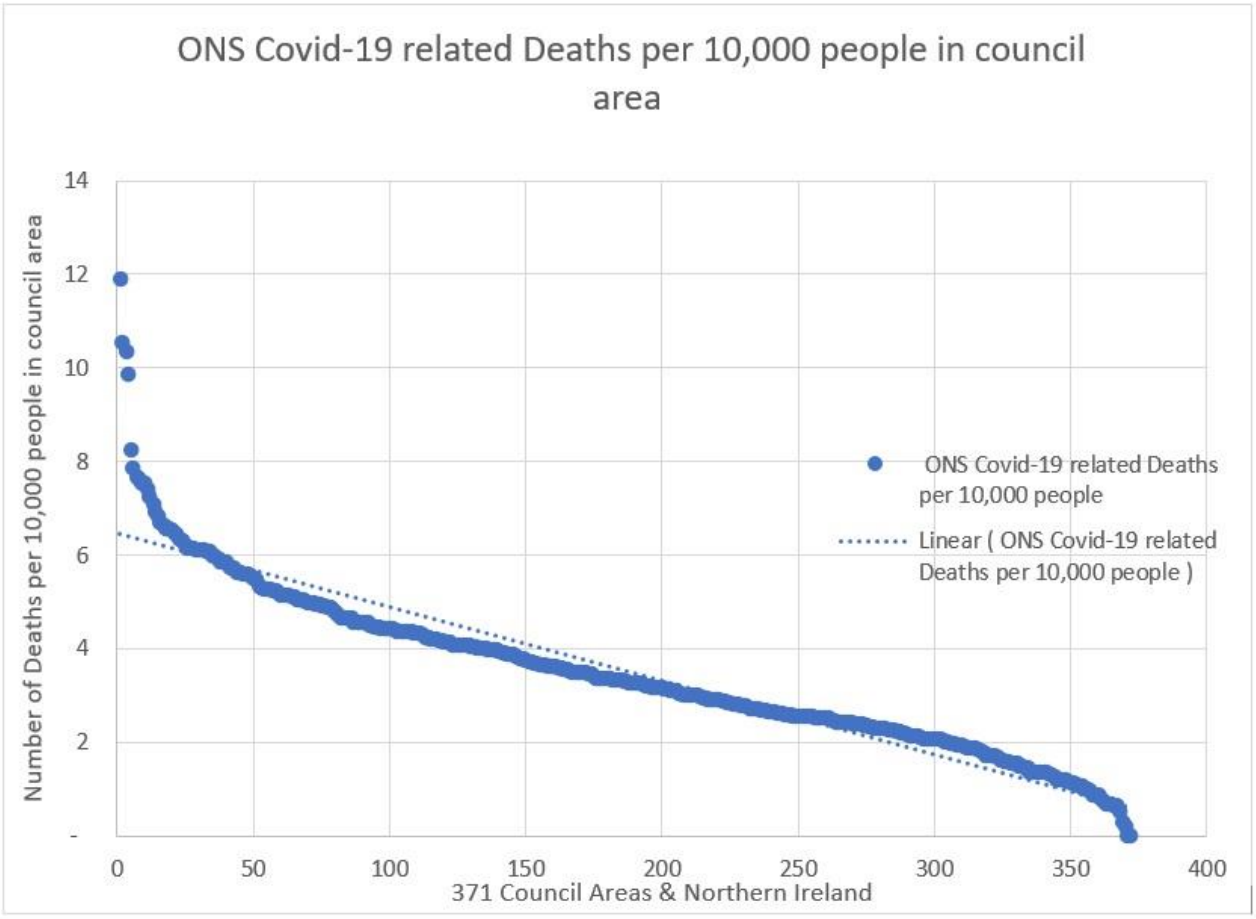
I have compiled the following two tables and chart for highest 20 council districts for Covid-19 related deaths per 10,000 people from all the data available today from various data sources.

	Council Area name	Covid-19 related Deaths - All	Estimated Population mid-2018	ONS Covid-19 related deaths - % of area population	Area (sq mile)	2018 people per sq. mile	ONS Covid-19 related Deaths per 10,000 people	ONS Covid-19 related Deaths per 100,000 people	ONS Covid-19 related Deaths per 10 Sq Miles	% of area population 75 &over	% of area population 65 &over	% of area population 18 &under	Median age of area population	Hospital and Home Deaths per 10,000 people
1	Hertsmere	137	104,205	0.131%	39	2,668	13	131	35	9%	18%	25%	40.7	9.7
2	Harrow	306	250,149	0.122%	19	12,839	12	122	159	7%	16%	24%	38.0	10.9
3	Inverclyde	93	78,150	0.119%	62	1,261	12	119	15	9%	21%	19%	46.0	8.4
4	Brent	385	330,795	0.116%	17	19,819	12	116	232	6%	12%	25%	35.3	10.5
5	Epping Forest	141	131,137	0.108%	131	1,002	11	108	11	9%	20%	22%	42.7	8.2
6	South Lakeland	106	104,532	0.101%	592	176	10	101	2	13%	28%	18%	50.9	6.6
7	Enfield	317	333,869	0.095%	31	10,697	9	95	101	6%	13%	27%	36.1	7.5
8	Ealing	323	341,982	0.094%	22	15,947	9	94	149	6%	13%	25%	36.7	6.8
9	Barnet	368	392,140	0.094%	34	11,707	9	94	110	7%	14%	25%	37.0	7.8
10	Croydon	348	385,346	0.090%	33	11,538	9	90	105	6%	14%	26%	37.4	7.4
11	Middlesbrough	125	140,545	0.089%	21	6,755	9	89	60	7%	16%	24%	36.2	6.5
12	Salford	220	254,408	0.086%	37	6,778	9	86	59	6%	14%	23%	35.0	5.5
13	Watford	83	96,767	0.086%	8	11,694	9	86	102	6%	13%	26%	36.7	6.2
14	Barrow-in-Furness	57	67,137	0.085%	30	2,230	8	85	19	10%	22%	21%	44.9	6.6
15	Reigate and Banstead	125	147,757	0.085%	50	2,963	8	85	25	9%	18%	24%	41.4	5.3
16	Liverpool	416	494,814	0.084%	43	11,458	8	84	96	7%	15%	20%	34.7	6.2
17	Havering	215	257,810	0.083%	43	5,944	8	83	50	9%	18%	23%	39.2	7.3
18	Hillingdon	252	304,824	0.083%	45	6,825	8	83	56	6%	13%	25%	35.9	6.4
19	Walsall	234	283,378	0.083%	40	7,058	8	83	58	8%	18%	25%	38.2	7.0
20	Sunderland	229	277,417	0.083%	53	5,227	8	83	43	9%	19%	21%	42.2	6.2

Leaving aside the Scilly Isles and Na h-Eileanan Siar (the Western Isles in Scotland) where no deaths have been recorded at all so far, Ynys Mon (Anglesey) and Norwich have recorded less than one death per 10,000. The city of Norwich is recorded as having 6 Covid19-related deaths in total. The ONS goes on to report today that 28 council areas of the UK have had about 1 death per 10,000 since the start of the pandemic.

	Area name	Covid-19 related Deaths - All	Estimated Population mid-2018	ONS Covid-19 related deaths - % of area population	Area (sq mile)	2018 people per sq. mile	ONS Covid-19 related Deaths per 10,000 people	ONS Covid-19 related Deaths per 100,000 people	ONS Covid-19 related Deaths per 10 Sq Miles	% of area population 75 &over	% of area population 65 &over	% of area population 18 &under	Median age of area population	Hospital and Home Deaths per 10,000 people	Hospital and Home Deaths per 100,000 people
1	Isles of Scilly	0	2,242	0.000%	6	355	-	-	-	12%	26%	17%	48.0	0.0	0
2	Na h-Eileanan Siar	0	26,830	0.000%	1,181	23	-	-	-	12%	25%	19%	49.0	0.0	0
3	Norwich	6	141,137	0.004%	15	9,368	0	4	4	7%	15%	20%	33.3	0.4	4
4	Isle of Anglesey	3	69,961	0.004%	275	254	0	4	0	11%	26%	20%	47.9	0.4	4
5	Moray	6	95,520	0.006%	864	111	1	6	0	10%	21%	20%	45.2	0.6	6
6	Hastings	7	92,855	0.008%	12	8,091	1	8	6	9%	20%	22%	43.0	0.6	6
7	Ceredigion	6	72,992	0.008%	690	106	1	8	0	11%	25%	18%	46.1	0.7	7
8	Orkney Islands	2	22,190	0.009%	382	57	1	9	0	11%	24%	19%	47.8	0.9	9
9	South Hams	9	86,221	0.010%	342	251	1	10	0	12%	28%	19%	51.2	1.0	10
10	Lincoln	12	99,039	0.012%	14	7,187	1	12	9	7%	15%	20%	33.5	1.1	11
11	Mendip	14	114,881	0.012%	285	401	1	12	0	10%	23%	22%	46.6	0.8	8
12	West Lindsey	12	94,869	0.013%	446	212	1	13	0	10%	24%	20%	47.9	1.1	11
13	Highland	30	235,540	0.013%	9,906	23	1	13	0	10%	22%	20%	46.4	1.1	11
14	Mid Devon	11	81,695	0.013%	353	231	1	13	0	10%	23%	22%	46.5	1.2	12
15	East Devon	20	144,317	0.014%	314	458	1	14	1	15%	30%	19%	50.9	0.8	8
16	Somerset West and Taunton	22	153,866	0.014%	459	337	1	14	0	12%	25%	20%	47.5	0.8	8
17	Rutland	6	39,697	0.015%	147	269	2	15	0	11%	25%	21%	47.0	1.3	13
18	West Suffolk	28	178,881	0.016%	400	448	2	16	1	10%	21%	22%	41.1	1.3	13
19	South Norfolk	22	138,017	0.016%	351	394	2	16	1	11%	24%	21%	46.2	1.0	10
20	Pembrokeshire	20	125,055	0.016%	625	199	2	16	0	12%	26%	20%	48.0	1.5	15

Outside of the 50 council areas with the highest rate of Covid-19 related deaths per 10,000 (between 6 and 12 deaths) the remaining 322 council areas are recorded as having 5 or fewer deaths per 10,000. Of those, 110 council areas had fewer than 2 deaths per 10,000 residents.



Of course, it is clear why these numbers are as they are: the average number of deaths per 10,000 persons across the U.K. is 4. This includes deaths in care homes.

In the average constituency in the U.K. (of about 100,000 people) the number of Covid19-related deaths recorded is 38, including care home deaths. The higher numbers in places often highlighted, like Brent and Harrow in London, work out at approximately 100 deaths per 100,000.

Consequently the postcode (super output area) granular detail finally coming to light from the ONS has been signally unhelpful for the vast majority of folk keying in their postcodes. For 142,000 postcodes inputted will report ‘zero deaths’. Approaching 600,000 of the million or so U.K. postcodes will report 2 or fewer Covid-19 related deaths.

So reporting the MLSOAs with the lowest numbers of Covid19-related deaths is difficult in a chart as there are thousands with no deaths. The 20 MLOAs with the highest number I have compiled as follows:

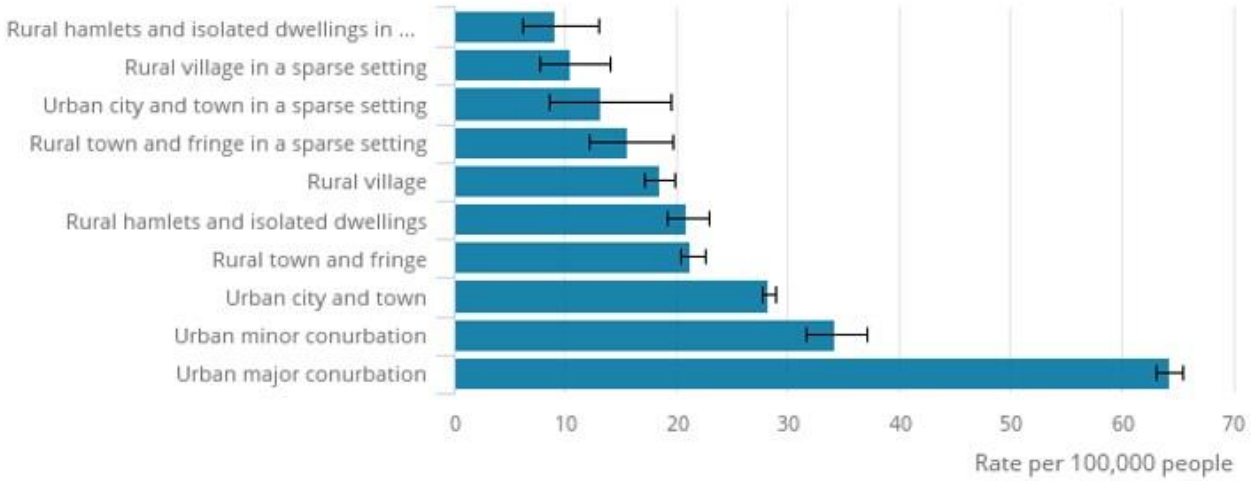
	MSOA code	MSOA name	All causes	COVID-19	COVID-19 deaths as a percentage of all causes (%)
1	E02000117	Brent 025	41	28	68
2	E02000715	Newham 002	31	22	71
3	E02004974	Watford 007	45	22	49
4	E02000247	Ealing 010	39	21	54
5	E02000433	Harrow 001	42	21	50
6	E02000038	Barnet 015	46	20	43
7	E02000098	Brent 006	36	20	56
8	E02001402	Liverpool 056	29	20	69
9	E02000079	Bexley 015	36	19	53
10	E02002608	Warrington 019	35	19	54
11	E02000296	Enfield 020	43	18	42
12	E02000379	Hammersmith and Fulham 008	27	18	67
13	E02000434	Harrow 002	26	18	69
14	E02000573	Islington 020	27	18	67
15	E02001630	Sheffield 020	35	18	51
16	E02004301	County Durham 008	39	18	46
17	E02000896	Waltham Forest 002	26	17	65
18	E02001844	Birmingham 018	45	17	38
19	E02002825	Derby 030	32	17	53
20	E02004908	Hertsmere 013	53	17	32

So the pendulum has actually swung the other way and we are getting too ***little*** a sense of the threat of the disease 'where we live'. It is also counter-intuitive and leaves local newspapers reporting to their readers a sense of 'what was it all for round here, then?' Which, to be frank, doesn't read well in these times of solidarity across the nations. And also, many may simply not believe the figures because it simply doesn't make sense in the context of all that's been said and done to get us here.

But the reality is that if you live in the rural and coastal U.K., your community is vastly less likely to have been hit by the Covid-19 virus the way that the urban U.K. has been.

Figure 6: Urban major conurbation had a significantly higher age-standardised mortality rate than any other Rural Urban Classification

Age-standardised mortality rate of deaths involving the coronavirus (COVID-19), Urban Rural Classification, deaths occurring between 1 March and 17 April 2019



Of course, well after the pandemic (or at least the first wave as we are encouraged now to call it) history will record the death figures as much, much higher, as is the case for all such pandemics. But the pattern is likely to be much the same.

That in itself, obviously, presents its own danger. Antibodies present in the urban U.K. are not there in the same level in rural and coastal Britain. They could be seen as much more susceptible to further outbreaks or second waves.

But fundamentally the real difference now and for the future lies in the always in-built, ever-present social distancing aspect of the spread of population across our vast U.K. geography, especially outside our big cities and towns.

For example, in three unitary authorities across the U.K. we have socially-distanced populations built in. There are 166 people per square mile in Northumberland in England. Powys in Wales has 67 people in every square mile, and Aberdeenshire in Scotland has 106 people per square mile. They are obviously represented in the lowest 15 councils out of 372 for the rate of Covid19-related deaths.

From as few as 67 people per square mile in Powys we can set against the most population-dense London council areas. Brent has 19,819 people in just one square mile. Haringey has 23,680 people in the same size area that Powys has just 67 people in. Tower Hamlets and Islington (the two most densely populated councils in the U.K.) have just over 41,000 people per square mile. For the imperially-challenged, that's over 16,000 people per square kilometre, where Powys has 26 people per square kilometre.

6 of the 10 councils with the highest Covid-19 death rates in the U.K. per 100,000 residents are London Boroughs.

Non-met councils appearing here are likely explained by unusually higher prevalence of Care Home deaths there. And there will be outliers in the statistics both from Shire-type places appearing higher up than their equivalents and some even densely populated urban areas faring better than their council peers.

But the ONS is clear that their analysis shows clear correlation between areas of super-dense populations (and the equally correlating social deprivation there) and the higher risk of Covid-19 related deaths.

Much has been said recently about having "Adult" conversations about the pandemic and especially coming out of the lockdown and how it is done. Perhaps now is the time to accept the need for a realistic view of how the pandemic hit the U.K. differently and the extent of the risk of death from the disease.

In mid-March the strategy of national lockdown and showing the nation that deaths were about to soar and possibly collapse the NHS, causing even more deaths, was probably right. And getting an entire nation to hold together to behave such as to cherish and nurture each other through protecting the NHS was also probably right – then.

Now, however, we need to take the wider view. And bearing in mind that rural and coastal economies (recreational and agricultural) have been badly hit by the lockdown, even before we have the full effect of Brexit on them, their economies need support. So do their local NHS infrastructures.

If coastal and rural towns need tourists back, then there needs to be direct extra support to their local hospitals and GPs so they are not overwhelmed by any spike in any 'second wave'. And perhaps this needs to be a permanent, better feature of rural and coastal tourist economies in any event. Local residents should not need to compete for NHS care and resources with the tourists who visit: proper, balanced funding should be in place.

A neutral, rather than dispassionate, view of the statistics will show routes out of lockdown that still leave an NHS able to cope with a full range of services. It might help people out of lockdown now to encourage them to look at the local figures where they live.

A view of the 'R' rate of infectivity in rural and coastal areas might need to be looked at differently. Is it different? Is it likely that rural and coastal economies and communities will be better able to emerge from lockdown sooner and more confidently by dint of their built-in social distancing? It may be that urban areas need to behave more like rural and coastal areas in the everyday weight of social contact and consequent levels of possible viral loads.

The nation went into lockdown together and for each other – wherever we lived and whatever the threat. The lockdown legacy needs to be the continuity of that respect. We need to plan for an opening up from lockdown to the special needs of us all – wherever we live.

[1] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/datasets/deathregistrationsandoccurrencesbylocalauthorityandhealthboard

No Covid-19 Deaths or Cases; the safest neighbourhoods in England - what makes them so special?In "Brexit"

Can a Hard Rain Be Avoided?In "Brexit"

The Covid19 deserts - where the virus didn't hitIn "Brexit"