Vaccine is positive news – but a return to "normal" life is some way off

By David Hearne, Researcher, Centre for Brexit Studies

It has been a tumultuous week, both here in the UK and around the globe. The United States of America has elected a new President. Joe Biden will, for better or worse, be one of the most powerful people on the planet for the next 4 years.

Perhaps of more direct relevance to most of us living outside the USA, the first of several vaccine candidates in stage 3 testing has reported very positive results. The prospect of emerging from our Covid nightmare is tantalising, although premature.

Not least because of the enormous manufacturing, logistical and administrative challenges associated with rolling out a vaccine – especially one requiring cold storage – on a vast scale in a compressed timeframe. How quickly can this particular vaccine candidate (or indeed any other) be manufactured?

What about distribution? If it needs to be stored at minus 70 degrees Celsius, do we have enough transport equipment capable of maintaining that temperature? After all, we will also need to ensure that the vitals of life – including other medicines – continue to be distributed more-or-less as normal.

For those of us living in the UK, will any potential transport disruption when we leave the EU's Single Market and Customs Union affect distribution – if not of a vaccine then of other medicines? How much storage do we have? How many trained people capable of administering vaccines are there?

There are also huge gaps in our knowledge. At present, there are lots of unanswered questions about relative effectiveness across different age groups. Our immune systems weaken as we age. Regulators will also want to keep a beady eye on data for some time given the rapidity of development.

Moreover, this is unlikely to be the only successful vaccine candidate. Others will, I'm sure, emerge in the coming weeks and months. I am not a medical expert, but it seems to me that whilst we celebrate this unambiguously good news, we need to be cautious: a return to "normal" life is some way off.

In the UK, vaccination will apparently be undertaken largely on the basis of age. Even a very rapid roll-out will miss many individuals at relatively high risk for some time. Moreover, we know that whilst most people who are infected are fine a significant minority experience some kind of longer-term damage from Covid.

As such, we will be living with restrictions for a good while yet. However, the devastation wrought by this disease varies across countries and regions. It is tempting to ascribe this to differences in policy. We can assert with confidence that East Asia and Oceania have had good crises. Covid is effectively suppressed across much of East Asia and has been virtually eliminated in New Zealand (parts of Australia are close to this benchmark too).

Good policy is behind this. However, managerial competence at the heart of government and strong states also appear to be key. This appears to engender good (but not universal) compliance since people can see that measures are working.

For those of us in Europe and the Americas, the degree of day-to-day freedom and comparative (but not complete) normality enjoyed by people in regions that have effectively suppressed the disease is hard to get one's head around. Moreover, the economics are brutal: uncontrolled transmission will lead to voluntary changes in behaviour (notably in consumption) that are highly deleterious to economic activity.

However, I contend that policy differences are unable to fully explain differences in disease prevalence and mortality within Europe. The key to understanding this is to look at subnational statistics.

Whilst in some cases it is obvious that there are explosive outbreaks in particular locations – for example Madrid or, earlier in the pandemic, Lombardy (especially Bergamo) – elsewhere things are not clear cut.

The UK is an interesting case. Like many countries, the UK has substantial subnational variation in mortality due to Covid-19. The nations that make up the UK and the regions of England are all roughly the size of small European countries.

Also like many countries, the UK failed to test sufficiently during the earlier phase of the pandemic. As a result, the measure of mortality most frequently cited – deaths within 28 days of a positive test result – typically (substantially) undercounts the overall number of deaths. This difference in testing does not appear uniform across nations and regions.

More reliable are data that rely on death certificates. Using this measure, mortality differences between the nations of Great Britain[1] are dwarfed by those within England. The South West thus far has mortality rates under half of the North West.

Indeed, the South West's death rate (from Covid-19) of 53.7 per 100,000 even compares favourably with that of Scotland (85.1 per 100,000). This is hard to fathom in light of the fact that Scotland has consistently imposed significantly greater restrictions than southern regions of England[2]. Whilst the South West is rural by the standards of England, the city of Bristol has death rates roughly comparable to that of the region as a whole suggesting that rurality cannot fully account for the differences we see.

This is not a comment on the relative performance or policies of different governments. It is merely to point out that the element of randomness in disease prevalence has been dramatically underplayed by most of the media (and politicians) who solely focus attention on differences in policy.

Could it be that the vast gulf in death rates between Germany and France is as much due to luck as anything else. Perhaps the fact that Spain has suffered more than Sweden shouldn't be taken as a comment on their respective policies so much as a combination of geography and chance.

Of course, this is not to allow governments "off the hook" for poor policy. There is no question that had the UK government[3] acted sooner (even by a week), tens of thousands of lives might have been

saved, whilst lockdown would have been substantially shorter. Throughout Europe, we are reaping the grim rewards of policy failure relative to East Asia and Oceania.

[1] Northern Ireland is an exception to this but is conveniently separated from Great Britain by the Irish Sea, which complicates any comparisons.

[2] Wales is an even more extreme example of this phenomenon.

[3] I use the term advisedly since ultimately anything other than an extremely short (1-2 weeks) lockdown would have been impossible for any devolved government without the support of the UK treasury.