

# Covid-19 vaccine development is a great success for science – the rollout less so

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The world heaved a great sigh of relief in January, with the emergence of several vaccines for the Covid-19 virus. Such vaccines play a crucial role in combatting infectious diseases and it seemed there was finally a light at the end of the tunnel of unprecedented restrictions on commerce, travel and social interactions worldwide.

However, three months later, the Covid-19 virus remains stubbornly persistent and many nations are experiencing yet another wave of infections.

One reason for this is that the deployment of the vaccines across the world has been far from smooth or efficient. Indeed, where the vaccine rollout might have proceeded as an international effort coordinated by the UN or the [World Health Organisation](#), it instead progressed as a chaotic scramble by individual nations to acquire vaccines for their respective populations.

Faced with an unprecedented threat that respects no borders, most nations acted in traditional fashion, ie by putting the interests of their own country first.

It should be acknowledged that the [European Union](#) was something of an exception in this regard. Rather than have each member state negotiate its own supply of vaccines, agreements were brokered with the vaccine suppliers on behalf of all member states by the [European Commission](#).

Overall, this strategy worked reasonably well, although efforts were hampered when one supplier – [AstraZeneca](#) – proved unable to deliver the doses promised.

Indeed, the shortage of AstraZeneca vaccines soon became the focus of a bad-tempered row between the EU and the UK. The UK enjoyed a much more rapid and efficient distribution of vaccines than the EU and many UK politicians and journalists lost little time in trumpeting this as an example of the benefits of being liberated from the cumbersome bureaucracy of [Brussels](#). However, it soon transpired that the successful UK rollout benefited from several million vaccines exported from the EU; a situation that did nothing for relations between the two blocs.

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A second issue concerning the AstraZeneca vaccine also emerged, namely the possibility of rare but serious side effects. The rollout of this vaccine was paused in several countries due to a suspected higher incidence of blood clots. These pauses were instigated in good faith, for the best of precautionary reasons.

However, most scientists found the pauses quite puzzling and ill-advised, because the number of incidences of blood clots was extremely small. Indeed, the occasional random clustering of such incidences is a common phenomenon, notoriously difficult to attribute to a single cause.

## Pauses

At the time of writing, it appears that the pauses in the deployment of the AstraZeneca vaccine were initiated mainly to provide extra reassurance to the public. If so, this was a poor strategy as it had the opposite effect on the public perception of the safety of vaccines.

A third issue has proved to be the order in which vaccines are distributed to the population. In [Ireland](#), as in most countries, the vaccine was first dispensed to medical and nursing staff on the frontline in hospitals and nursing homes. While the original plan was to then give the vaccine to members of other professions with close contact with the public, the Government belatedly decided to proceed instead on the basis of age.

This decision was not unreasonable, as the risk of death or serious illness from Covid-19 is a great deal higher in older age groups. However, it was a very unpopular decision with those who found themselves unexpectedly bumped down the queue. For example, one can have sympathy for teachers, many of whom had expected to be vaccinated before returning to the classroom after the Easter break.

In summary, the development of several vaccines for the Covid-19 virus is a great success for science and constitutes a vital tool in combating the pandemic. The only snag is that it takes time to vaccinate the world's population and during this time new, more infectious strains of the virus can develop.

Another problem is the manner in which individual nations seek to safeguard their own populations first. This competition overlooks a key fact about any contagious virus – due to the prevalence of international travel, no-one is safe until everyone is safe. For these reasons, I suspect the Covid-19 virus will be a significant presence for at least another year, although most of us will have returned to the workplace by September.

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