Vax and the city

Dense urban living may have incubated Covid-19, but cities as hotbeds of innovation have come into their own with vaccines to counter it

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For The Straits Times

While the Covid-19 pandemic has spread across the world, cities have found themselves more severely affected. In India, a second wave of Covid-19 infections has devastated major cities such as Delhi, Mumbai, Lucknow and Pune, with smaller cities increasingly affected as well. In the United Kingdom, a vast majority of cases involving the highly infectious B117 variant was reported in the capital. London. Even before the emergence of the B117 variant, the impact of Covid-19 was more severe in major cities. For instance, New York City became the Covid-19 epicentre of the United States, with more than 200,000 confirmed cases reported during March-May last year.

The origins of the Covid-19 virus itself have been most commonly traced to Wuhan, a bustling second-tier Chinese city. The world makes cities so vulnerable to an infectious disease outbreak? And what future for cities in the post-Covid world?

TWO VULNERABLE AREAS

Compared to their rural counterparts, cities possess two distinct areas of vulnerability: connectivity and density. These aspects, ironically, have also been sources of strength for many cities prior to the Covid-19 outbreak. First, connectivity. In almost all cities across the world, Covid-19 first entered the resident population through global travel. This was the case for Singapore, not only during the Covid-19 pandemic, but during the 2003 Sars crisis as well. More recently, the B117 variant entered Singapore through air travel and ignited an infection cluster at the Albert Centre.

Cities have long thrived on the economic and financial flows that came from their deep connectivity to the rest of the world. Yet as Covid-19 has shown, viruses can just as easily pass through the often-porous borders of cities. Once it enters a city, a virus can spread quickly across its densely-populated urban confines. This highlights the second major vulnerability of cities: urban density.

This has served as a catalyst for economic collaboration and innovation. Urban thinkers such as Professor Saskia Sassen have long highlighted the ways in which the “clustered” offices and commercial activities allow cities to flourish and have been key to their financial growth. This is certainly the case for major global financial centers such as Singapore and Hong Kong. Yet the clustering of financial activity and talent can often give rise to virus infections. For instance, a major Covid-19 cluster emerged in a gym close to Hong Kong’s financial center.

The problem with global pandemics is major cities across the world are starting to see their natural advantages of high urban density and global openness transform into sources of deep risk and vulnerability.

To address this, city planners and policy-makers have relied on two key tools: social distancing and border controls. For instance, the recent surge in infections has prompted Singapore to impose stricter restrictions on social interactions through its phases two (Heightened Alert) measures. Covid-19 restrictions have similarly been raised in Taipei.

Both Singapore and Taiwan have imposed strict entry restrictions for their benefit travelers. Such restrictions have been the status quo for many cities and countries. As Prime Minister Lee Hsien Loong recently noted in an interview, the world is still a long way off from allowing greater freedom to travel.

WHAT LIES AHEAD?

Can cities exist in their current form in a post-Covid world? In other words, are urban density and global connectivity still feasible propositions?

While it is too early for answers, causes for hope are emerging. New York has recently begun lifting restrictions on businesses and reopening its economy. This is due to declining rates of Covid-related deaths and hospitalisations, as well as the city’s relatively low rates of vaccination. The city is also the leader in Tel Aviv, which has reopened its economy on the back of a national-level vaccination drive.

The success of these vaccination campaigns reflects a greater propensity for urban dwellers to receive vaccines, as well as higher capacity among city government for administering services. Indeed, there are emerging reports of a “real urban divide” in vaccination rates across the US, with rural areas reporting lower levels of vaccination among seniors than urban counterparts.

Behind the vaccination roll-outs lies another success story, that of vaccine production. Just a stone’s throw from the Massachusetts Institute of Technology and two subway stops from Harvard University sits the global headquarters of Moderna, producer of one of the major Covid-19 vaccines. Like many other global cities across the world, Boston is home to top scientists and researchers.

Meanwhile, the headquarters of Pfizer, another major Covid-19 producer, in New York City.

Earlier this month, NUS vaccine announced that it would establish its new regional headquarters in Singapore and produce messenger RNA (mRNA)-based vaccines in the city-state. Both the Moderna and Pfizer Covid-19 vaccines are mRNA based. The vaccine has been described as a “game-changer” in the search for a Covid-19 vaccine.

People wearing face masks walking past tables with red and white tapes at the Albert Centre food centre on Monday. In almost all cities across the world, Covid-19 first entered the resident population via travel, as in the case of Singapore. More recently, the B117 variant entered through travel and ignited an airport infection cluster.

PHOTO: LIM HENG STUAN

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The world continues to grapple with Covid-19 and cities embark on the start-stop process of reopening their economies, policymakers will need to seek out the “Goldilocks solution” of having just enough density and openness, while minimising the risk of another outbreak.