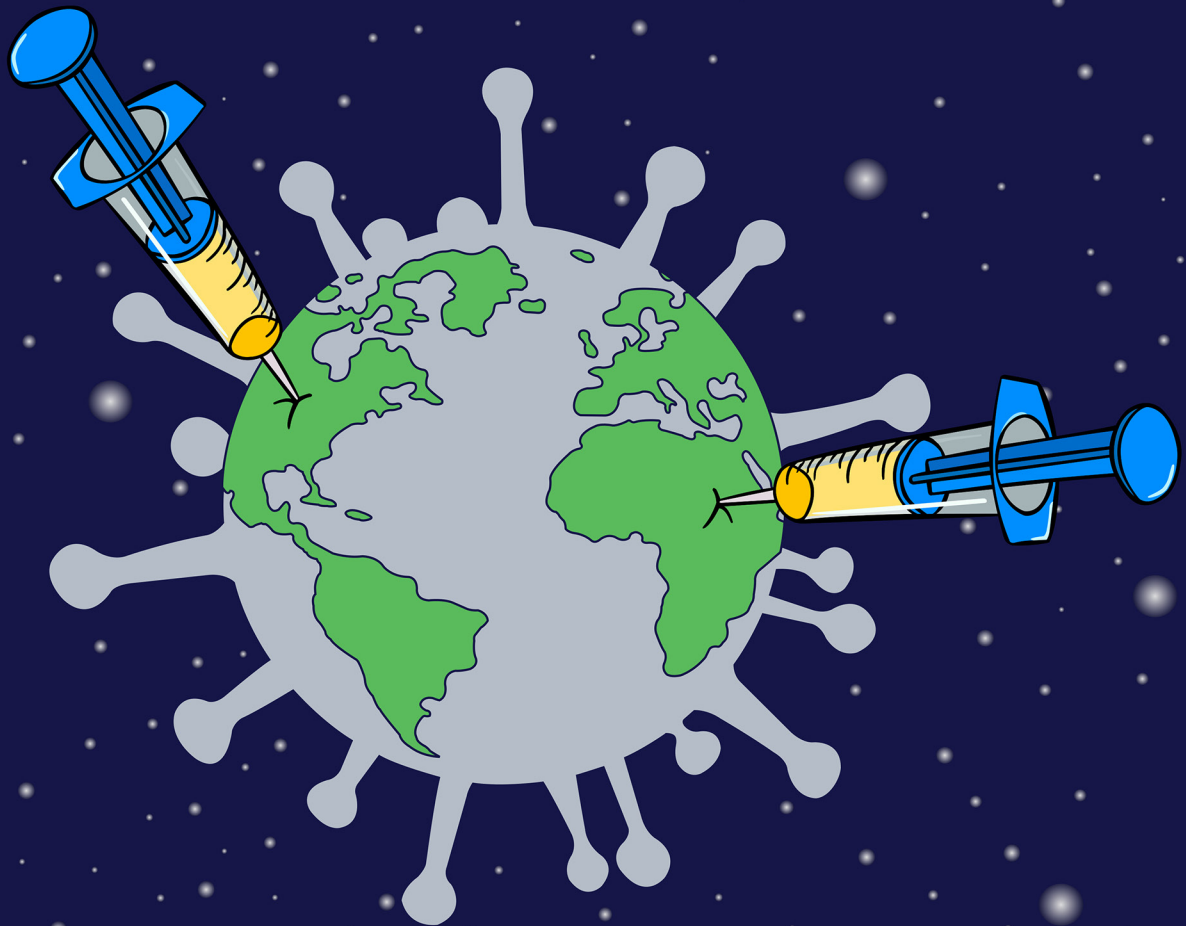


Coronavirus vaccines: expect delays

Q1 global forecast 2021

A report by The Economist Intelligence Unit



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Coronavirus vaccines: expect delays

Covid-19 immunisation programmes have begun in many countries, but there is a mismatch between supply and demand.

The rollout of vaccines against the coronavirus (Covid-19) has started in developed countries, but mass immunisation will take time. Production represents the main hurdle, as many countries have pre-ordered more doses than they need. The costs associated with mass immunisation programmes will be significant, especially for less-developed countries that have limited fiscal resources. Vaccine diplomacy will play a big role in determining which developing countries get access to a vaccine in the coming months, with Russia and China using the rollout of their own coronavirus shots to advance their interests. The Economist Intelligence Unit believes that the bulk of the adult population in advanced economies will have been vaccinated by mid-2022. For middle-income countries, this timeline will stretch to late 2022 or early 2023. For poorer economies, mass immunisation will take until 2024, if it happens at all.

In 2020 governments relied on lockdowns and social distancing to control the Covid-19 pandemic, in some cases—notably in Asian economies such as China, Taiwan, Singapore and South Korea—quite successfully. In 2021 many countries will be looking to immunisation programmes to deliver a permanent solution to the global pandemic. Just over one month after the first vaccines were granted emergency authorisation, countries are racing to inoculate their populations. Israel, Bahrain and the UAE are already far ahead (partly as a result of their smaller populations and ability to take advantage of high levels of urbanisation and digitalisation of their healthcare management systems), followed by the UK, the US and the EU. Many other countries, including some advanced economies, are yet to begin the process. Japan, for instance, plans to start administering vaccines only in late February.

Controversies ahead

Countries are already bickering about the rollout. First came the accusations that certain countries—notably the UK—were too hasty in giving emergency authorisation for the vaccines. This was followed by a debate over the UK's plan to give only a single dose of the jabs (instead of two in the regulator-approved, clinically-tested plans) or to extend the timeline between the two shots (from three to four weeks originally to up to 12) in order to make supplies stretch further. The World Health Organisation (WHO) initially rejected that plan before conceding that a delay of up to six weeks in giving the second dose may be warranted given the scope of the pandemic in the UK. However, recent data from Israel cast further doubt on the effectiveness of this strategy. Indonesia, meanwhile, has sparked a debate by prioritising the vaccination of its working-age population, rather than the elderly.

Demand far outstrips supply

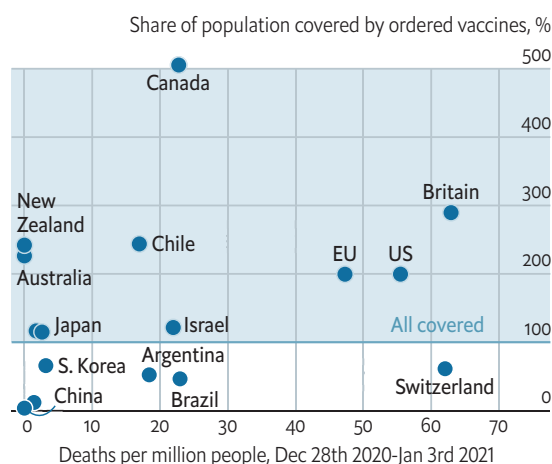
Beyond this bickering, governments worldwide are aware that even as companies ramp up production and plan shipments, demand for the vaccine will far outstrip supply for at least several months this year. Of the 12.5bn doses that the main vaccine producers have so far pledged to produce in 2021, 6.4bn have already been pre-ordered, most of them by wealthy countries. Canada, for instance, has secured supplies equivalent to five times its population. Israel is reported to have paid far more than other

countries to secure doses of the Pfizer vaccine.

This is simply not an option for poorer countries.

Surplus and deficit

(Covid-19 vaccine coverage)



Sources: Duke Global Health Innovation Centre; JHU

Mass immunisation programmes will not be cheap

The costs associated with vaccine rollouts are more than just the price of the product itself, and many developing countries will struggle to finance the additional expenditures (such as transport and distribution costs, and salaries for healthcare workers who will administer the vaccine), especially given that the coronavirus-induced recession has already depleted fiscal resources and led to ballooning budget deficits. In addition, there are concerns that the current vaccines may not be effective against future mutations of

the coronavirus, such as the one that has recently emerged in South Africa; the Pfizer and Moderna vaccines are easy to modify, but in such a case, immunisation campaigns would have to be repeated regularly, possibly through joint flu and coronavirus yearly vaccination programmes.

Most vaccine candidates appear to be viable, and vaccine diplomacy is the next big thing

Amid this seemingly bleak outlook, the good news is that the world now has several viable vaccines to choose from, including (based on the limited data that are available) those produced in China and Russia. In early 2021 three vaccines, from Pfizer (US)-BioNTech (Germany), Moderna (US) and AstraZeneca-Oxford University (UK), will be rolled out on a massive scale in developed countries. Meanwhile, Chinese and Russian vaccines are being rolled out both domestically and to emerging countries such as Egypt, via diplomatic bilateral deals. This will foster so-called vaccine diplomacy—with Russia and China trying to bolster their global status via the delivery of vaccines—this year and beyond. Both countries will also seek to adopt a transactional approach to the delivery of vaccines, using coronavirus shots as a bargaining chip to advance their national interests.

Hope in a vial

Covid-19 vaccines, to January 6th 2021 Approved by: ● Stringent regulators ● Other regulators

Producer	Name	Type	Price per dose, \$*	Doses delivered in 2020 and promised for 2021*	Approved in
● AstraZeneca-Oxford University	AZD1222†	Viral vector	1.50-4	3.0bn in total	Britain, India and 3 others
Novavax	NVX-CoV2373	Protein subunit	16	2.1bn	–
● Pfizer-BioNTech	tozinameran	mRNA	19.50	1.4bn	Britain, EU, US and 21 others
● Sinopharm	BBIBP-CorV	Inactivated	<77	1.3bn	Bahrain, China, Egypt, UAE
● Gamaleya Centre	Sputnik V	Viral vector	<10	1.0bn	Argentina, Belarus, Russia
Johnson & Johnson	JNJ-78436735	Viral vector	10	1.0bn	–
● Sinovac Biotech	CoronaVac	Inactivated	14	900m	China
● Moderna	mRNA-1273	mRNA	32-37	770m	Canada, EU, Israel, US
● Bharat Biotech-ICMR	Covaxin	Inactivated	1	720m	India
CureVac	CVnCoV	mRNA	12.30	300m	–

Sources: Regulatory Affairs Professionals Society; The Economist Intelligence Unit; Morgan Stanley; press reports; government websites; company websites.

*Estimate †Covishield in India

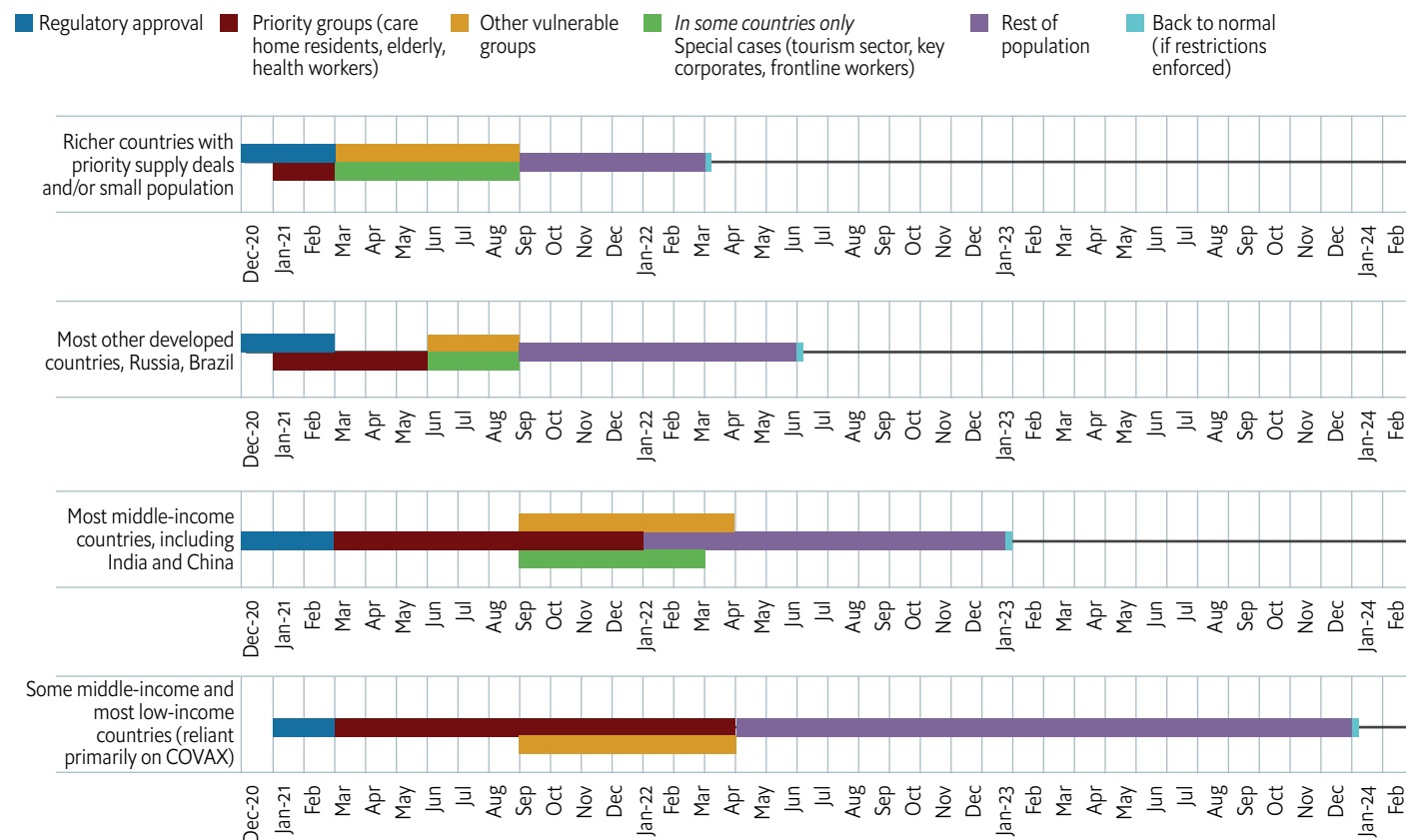
Rich countries will be the first to vaccinate their population

Countries at the front of the queue—including the UK, the US and most countries in the EU—are expected to have immunised their priority groups (including the elderly, people with underlying health conditions and healthcare workers) by end-March, with other wealthy countries catching up by end-June. We therefore expect that global economic prospects will brighten from mid-2021, with the global economic rebound gaining speed in the third and fourth quarters. However, life will not be back to normal even by then, as immunisation programmes for the bulk of the population in advanced economies will continue until mid-2022. Meanwhile, local outbreaks of Covid-19 are likely, which may lead to the reimposition of local or national lockdowns.

The timeline for most middle-income countries will stretch for longer

Russia, which has developed its own vaccines, could be on a similar schedule to developed countries, with mass immunisation completed by mid-2022. Other countries, including Mexico and Brazil, have been promised supplies in return for running clinical trials or housing production factories. This should give them early access to doses for priority groups, although their ability to achieve mass vaccination will depend on other factors including fiscal space, population size, number of healthcare workers, infrastructure and political will. China and India represent special cases; both countries have developed their own shots and are pressing ahead with rollout plans, but the sheer size of their population means that mass immunisation programmes will stretch until late 2022, in line with the expected timeline for most middle-income countries.

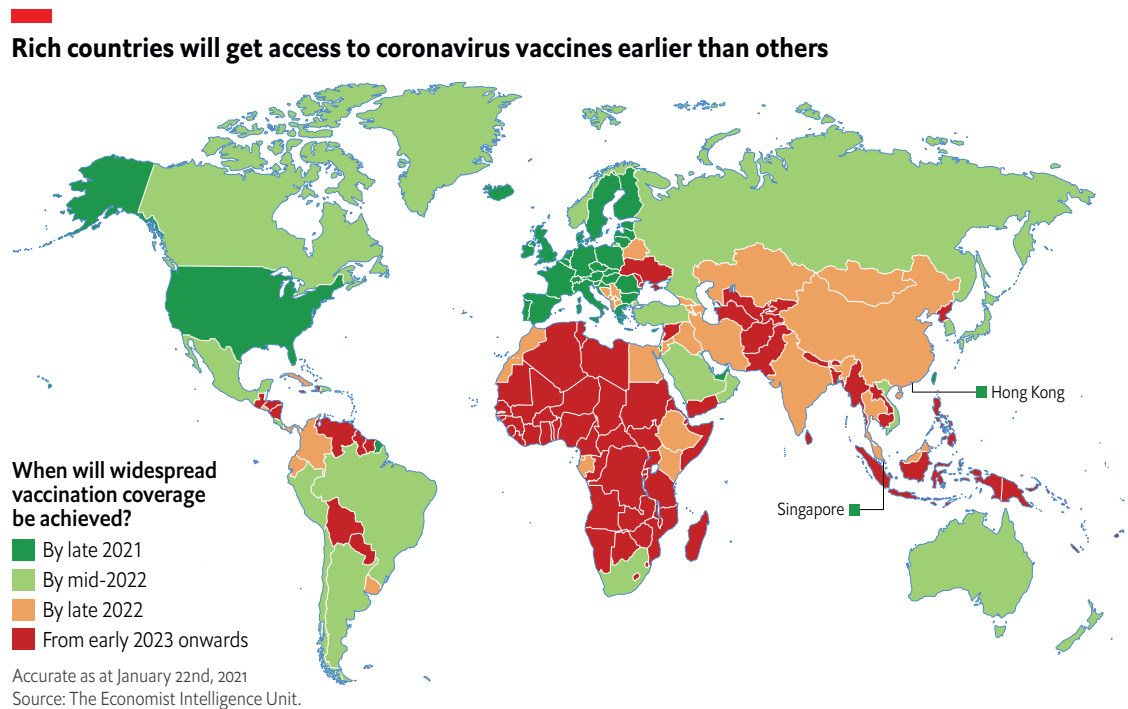
Coronavirus vaccines rollout



Accurate as at January 22nd, 2021
Source: The Economist Intelligence Unit.

Bleak prospects for the developing world

Finally, some middle-income countries and most low-income countries will be relying on COVAX, an initiative led by the WHO that aims to secure 6bn doses of vaccine for poorer countries around the world. The first 2bn of these will be given in 2021, mainly to healthcare workers (COVAX doses will cover only up to 20% of the population of each country). However, COVAX supplies may be slow to arrive, especially if delays in the production for and delivery to richer countries push back delivery dates for poorer nations. Given that unexpected hiccups in procuring supplies have already occurred in most developed countries, it is likely that developing countries with poor infrastructure, few healthcare workers and inadequate refrigeration will find the rollout even harder. This means that for many poor nations, the rollout of vaccines will not get underway until early 2023, if it happens at all.



Not everyone around the world will get the vaccine

Vaccine hesitancy could have a significant impact on the rollout of vaccines in some developed countries. In France and Japan, recent polling data show that around half the population does not wish to get the vaccine, although this may change if the rollout proceeds without significant issues. Meanwhile, some of the world's poorest countries, such as war-torn Syria, have more urgent priorities to tackle, while other developing states, such as the Kyrgyz Republic, do not have the infrastructure in place to receive and store the shots.

This suggests that once the priority groups are vaccinated, some countries—particularly poorer ones with a young demographic profile—may well lose the motivation to distribute vaccines, especially if the disease has spread widely (so that a large share of the population is already immune to it) or if the associated costs prove too high. Vaccines against many diseases, such as polio or tuberculosis, have been available for decades. However, many people in poorer countries remain unable to get access to them, or may not see this as a priority given their otherwise poor living conditions. What was termed a “novel coronavirus” only one year ago will be with us for the long term, alongside the many other diseases that have shaped life over the centuries.

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