

Countries urge drug companies to share vaccine know-how

March 1 2021, by Maria Cheng and Lori Hinnant



Production personnel perform a visual inspection of filled vaccine vials inside the Incepta plant on the outskirts of Dhaka in Bangladesh Saturday Feb. 13, 2021. In an industrial neighborhood on the outskirts of Bangladesh's largest city lies a factory with gleaming new equipment imported from Germany, its immaculate hallways lined with hermetically sealed rooms. Yet the factory is operating at just a quarter of its capacity. It is one of three factories that The Associated Press found on three continents whose owners say they could start

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It is one of three factories that The Associated Press found on three continents whose owners say they could start producing hundreds of millions of COVID-19 vaccines on short notice if only they had the blueprints and technical know-how. But that knowledge belongs to the large pharmaceutical companies who have produced the first three vaccines authorized by countries including Britain, the European Union and the U.S.—Pfizer, Moderna and AstraZeneca. The factories are all still awaiting responses.

Across Africa and Southeast Asia, governments and aid groups, as well as the World Health Organization, are calling on pharmaceutical companies to share their patent information more broadly to meet a [yawning global shortfall](#) in a pandemic that already has claimed over 2.5 million lives. Pharmaceutical companies that took taxpayer money from the U.S. or Europe to develop inoculations at unprecedented speed say they are negotiating contracts and exclusive licensing deals with producers on a case-by-case basis because they need to protect their intellectual property and ensure safety.

Critics say this piecemeal approach is too slow at a time of urgent need to stop the virus before it mutates into even deadlier forms. WHO called for vaccine manufacturers to share their know-how to "dramatically increase the global supply."

"If that can be done, then immediately overnight every continent will have dozens of companies who would be able to produce these vaccines," said Abdul Muktedir, whose Incepta plant in Bangladesh already makes vaccines against hepatitis, flu, meningitis, rabies, tetanus and measles.

All over the world, the supply of coronavirus vaccines is falling far short of demand, and the [limited amount available](#) is going to rich countries. Nearly 80% of the vaccines so far have been administered in just 10 countries, according to WHO. More than 210 countries and territories with 2.5 billion people hadn't received a single shot as of last week.



Production personnel observe the filling operation inside the Incepta plant on the outskirts of Dhaka in Bangladesh Saturday Feb. 13, 2021. It is one of three

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The deal-by-deal approach also means that [some poorer countries end up paying more](#) for the same vaccine than richer countries. South Africa, Mexico, Brazil and Uganda all pay different amounts per dose for the AstraZeneca vaccine—and more than governments in the European Union, according to studies and publicly available documents. AstraZeneca said the price of the vaccine will differ depending on local production costs and how much countries order.

"What we see today is a stampede, a survival of the fittest approach, where those with the deepest pockets, with the sharpest elbows are grabbing what is there and leaving others to die," said Winnie Byanyima, executive director of UNAIDS.

In South Africa, home to the world's most worrisome COVID-19 variant, the Biovac factory has said for weeks that it's in negotiations with an unnamed manufacturer with no contract to show for it. And in Denmark, the Bavarian Nordic factory has capacity to spare and the ability to make more than 200 million doses but is also waiting for word from the producer of a licensed coronavirus vaccine.

Governments and health experts offer two potential solutions to the vaccine shortage: One, supported by WHO, is a patent pool modeled after a platform set up for HIV, tuberculosis and hepatitis treatments for voluntary sharing of technology, intellectual property and data. But no company has offered to share its data.

The other, a proposal to suspend intellectual property rights during the pandemic, has been blocked in the World Trade Organization by the United States and Europe, home to the companies responsible for creating coronavirus vaccines. That drive has the support of at least 119 countries and the African Union but is adamantly opposed by vaccine makers.

Pharmaceutical companies say instead of lifting IP restrictions, rich countries should simply give more vaccines to poorer countries through [COVAX](#), the public-private initiative WHO helped create for more equitable vaccine distribution. The organization and its partners delivered its first doses last week in very limited quantities.



A member of production personnel walks in a corridor past a room containing a

Disposable 50L Bioreactor (STR50) System with peristaltic pumps and an Inverted Microscope inside the Incepta plant on the outskirts of Dhaka in Bangladesh Saturday Feb. 13, 2021. (AP Photo/Al-emrun Garjon)

But rich countries are not willing to give up what they have. Ursula Von der Leyen, head of the European Commission, has used the phrase "global common good" to describe the vaccines but the European Union imposed export controls on vaccines, giving countries the power to stop shots from leaving.

On her first day as director-general of the WTO, Nigeria's Ngozi Okonjo-Iweala said the time had come to shift attention to the vaccination needs of the world's poor.

"We must focus on working with companies to open up and license more viable manufacturing sites now in emerging markets and developing countries," she told the organization's members. "This should happen soon so we can save lives."

The long-held model in the pharmaceutical industry is that companies pour in huge amounts of money and research in return for the right to reap profits from their drugs and vaccines. Last May, Pfizer's CEO Albert Bourla described the idea of sharing IP rights widely as "nonsense" and even "dangerous."

Thomas Cueni, director general of the International Federation of Pharmaceutical Manufacturers, called the idea of lifting patent protections "a very bad signal to the future. You signal that if you have a pandemic, your patents are not worth anything."

Advocates of sharing vaccine blueprints argue that, unlike with most

drugs, taxpayers paid billions to develop vaccines that could help end the world's biggest public health emergency in living memory.



A member of production checks cell growth and viability of a bioreactor sample under an inverted microscope inside the Incepta plant on the outskirts of Dhaka in Bangladesh Saturday Feb. 13, 2021. (AP Photo/Al-emrun Garjon)

"People are literally dying because we cannot agree on intellectual property rights," said Mustaqeem De Gama, a South African diplomat involved in the WTO discussions.

Paul Fehlner, the chief legal officer for biotech company Axcella and a supporter of the WHO patent pool board, said governments that poured billions of dollars into developing vaccines and treatments should have demanded more from the companies they were financing from the beginning.

"A condition of taking taxpayer money is not treating them as dupes," he said.

Last month, Dr. Anthony Fauci, the leading pandemic expert in the United States, said all options need to be on the table, including improving production capacity in the developing world and working with pharmaceuticals to relax their patents.

"Rich countries, ourselves included, have a moral responsibility when you have a global outbreak like this," Fauci said. "We've got to get the entire world vaccinated, not just our own country."

It's hard to know exactly [how much more vaccine](#) could be made worldwide if intellectual property restrictions were lifted. But Suhaib Siddiqi, former director of chemistry at Moderna, said with the blueprint and technical advice, a modern factory should be able to get vaccine production going in at most three to four months.



Production personnel perform the labeling operation of inspected vaccine vials inside the Incepta plant on the outskirts of Dhaka in Bangladesh Saturday Feb. 13, 2021. (AP Photo/Al-emrun Garjon)

"In my opinion, the vaccine belongs to the public," said Siddiqi. "Any company which has experience synthesizing molecules should be able to do it."

Back in Bangladesh, the Incepta factory tried to get what it needed to make more vaccines in two ways, by offering its production lines to Moderna and by reaching out to a WHO partner. Moderna did not

respond to requests for comment about the Bangladesh plant, but its CEO, Stéphane Bancel, told European lawmakers the company's engineers were fully occupied on expanding production in Europe.

"Doing more tech transfer right now could actually put the production and the increased output for the months to come at great risk," he said. "We are very open to do it in the future once our current sites are running."

Muktadir said he fully appreciates the extraordinary scientific achievement involved in the creation of vaccines this year, wants the rest of the world to be able to share in it, and is willing to pay a fair price.

"Nobody should give their property just for nothing," he said. "A vaccine could be made accessible to people—high quality, effective vaccines."

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