

# The process and timeline of the vaccine for COVID-19-explained

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With the world entering its fifth month of the coronavirus pandemic, one question has been crossing everyone’s mind: when will we have a vaccine ready? The answer is not so simple. And we try to explain why.

**The race for the vaccine**  
As we write this article, 35 pharmaceutical companies and academic institutions around the world are in a race to discover the vaccine for COVID-19. Four of them have already completed their trials on animals with one entering the first phase of human trials.

**THE STRUCTURE OF THE VIRUS**  
Luckily, the nCoV-19 is a positive stranded RNA virus, a structure with which scientists are familiar with. The nCoV-19 also shares almost 80% similarity with the virus responsible

for the 2002-SARS outbreak. All of these makes the path of coming up with a vaccine easy for scientists and researchers. But things start to get complicated from here on.

## THE PROCESS

The process of coming up with a new vaccine is tricky and lengthy. It often takes months, if not years, for a new vaccine to be perfected completely. Most of the vaccines we rely upon today took at least five to fifteen years to be perfected. The tedious amount of time is due to steps which need to be followed to discover a vaccine.

After a prototype is discovered in the lab, which may take anywhere from a few days to a few months, the vaccine is put on animal trials to be tested on rats, guinea pigs and apes. Most prototypes fail at this stage. If the vaccine shows no adverse effect in the animals, it’s then passed on for step two: human trials. The human trials are done in three phases. In the first phase, the vaccine is tested on a few dozen healthy adult candidates. In the second phase it is tested on a few hundred in the affected areas and in the third, the vaccine is tested on a few thousand candidates in the affected areas. Each of

these phases can last up to six to eight months. If the vaccine shows no adverse effect and successfully creates the right immune responses in a large sample of human bodies, it’s then passed on for approval by the WHO and the FDA. Even with the approval process going on, the vaccine is constantly studied and tested by regulators for flaws and corrections.

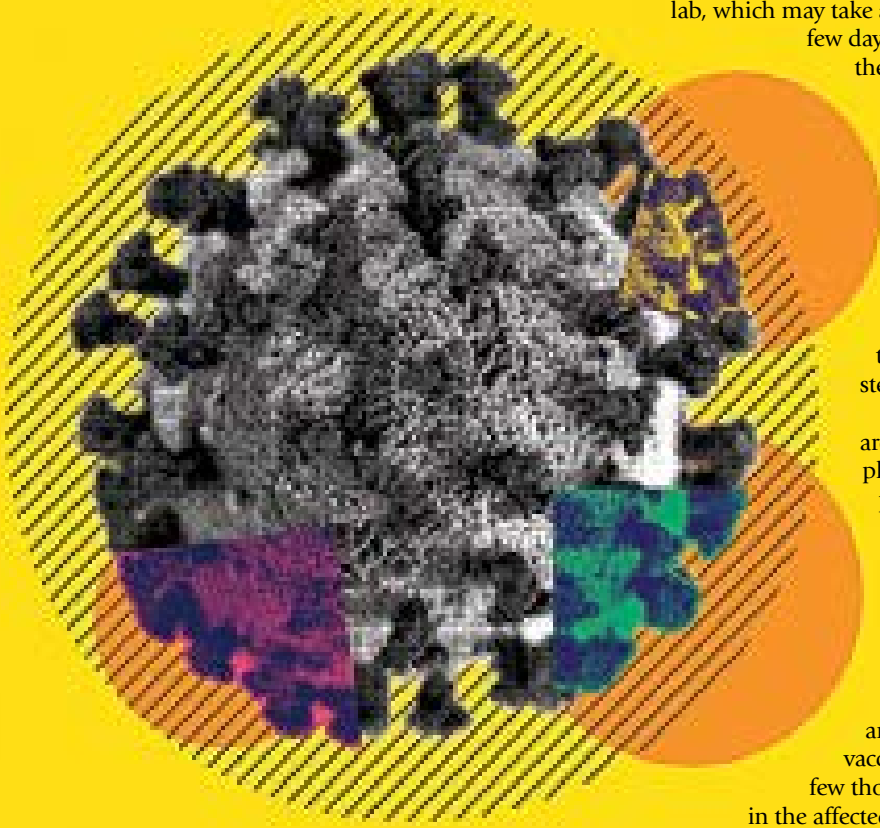
Once approved by the authorities, the vaccine will now be sent for mass commercial production, which requires large amount of funding among other necessities. Commercial production of vaccine is hardly the end of the story. Before it reaches to the doorsteps of every country in the world where coronavirus has spread, which stands at 201, as of 31st March, 2020, a year or two may pass easily.

## THE GOOD NEWS

Despite everything, there’s a glimmering ray of hope as the FDA has given many pharmaceuticals the go for conducting animal and human trials simultaneously to speed up the process. Many organizations have stepped up to fund the research. Norway-based CEPI, the Coalition for Epidemic Preparedness Innovations, has announced \$2 billion of new funding for organizations researching the vaccine. Pharmaceuticals like Inovio, GlaxoSmithKline and Moderna, who have completed the first human trial, have already received CEPI’s fundings.

After all the testing, a new vaccine may be available to us in 18 months, a figure provided by Annelies Wilder-Smith, professor of emerging infectious diseases at the London School of Hygiene and Tropical Medicine to the Guardian last month.

Like it or not, the coronavirus is here to stay for a while.



## New cars this week



**Ferrari Roma**  
Ferrari’s new grand tourer created a lot of confusion among petrolheads, namely for looking like an Aston Martin and stretching the definition of a GT car. Its 3.9 liter twin-turbo V8 produces an ungodly 611 HP, and the transmission comes standard with a Race mode. Moreover, the car has Ferrari’s latest Side Slip Control system, meaning

this car is as capable of going on a long drive and as it is at shredding lap times. Does this mean the owners of this Italian Stallion will take it to the track? Unlikely, as Ferrari’s own advertisement openly admits the Roma will spend most of its life being looked at on exotic locations and will likely never see a track in its entire life. We can hope otherwise.



**Audi A3 Sportback**  
The most budget-friendly Audi just entered its fourth generation and it looks sporty. The new A3 is slightly bigger than its previous generation, with a new aggressive exterior featuring a large front grille and large bumper intakes. On the interior, the car is now much more driver-focused, with the car’s shiny new 10.1-inch infotainment screen being

canted toward the driver to prove the point. For all the visual sportiness, the car’s powerplant remains the same, with that base model three-cylinder putting out a pedestrian 110 Hp. Still, it has more than enough for the streets of Dhaka, and with its amazing weight distribution and suspension, it would run circles around any fielders that dares to challenge it.

## How to manage your team while social distancing

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We have our masks ready and soap supply tight. We are not going out. But we still have our jobs to do and managing a team remotely has become a new trick to be mastered for many. Difficulties are amplified and the chaos is dialled up to 10. It does not have to be this difficult.

### BE MORE FLEXIBLE

As a manager, you must accept the fact that working from home will not be the same as everyone working together at the same place and time. The employees have been used to working together under the same operating conditions with the same work schedule. They will need time to get accustomed to the self-paced work and personalization. You should allow them the flexibility to work on their terms. Time to reset your expectations for how work gets done and let go of when and how the job is carried out.

### STAY CONNECTED

It’s easy to feel disconnected from the people you work with when you are working remotely. Managers have to make sure the teams are not losing morale. Checking in with every employee, either through messages or calls, can build a sense of social connection both within team members and between you and your team. Managers should ask for regular updates from the team to avoid any information vacuum within.

### ENCOURAGE TEAM CULTURE

Working alone at home can be quite tedious and demoralizing. The “Buddy system” has been proven to

be an effective strategy to boost team esprit de corps. You should divide the team into pairs so that they can get the appropriate mutual support. This would also decrease your workload as attending to each individual’s needs would drain your managerial vitality. Another way to promote leadership would be to assign a leader in each pair so that they can check in regularly and evaluate the overall engagement and well-being.

### RESPECT THE QUIET

No communication can also be a form of communication. Being available on instant calls and messages does not necessarily show whether a person is working or not. As a manager, you should trust your team and allow them a “Do not Disturb” period during the day. The constant stream of messages may be overwhelming for someone who prefers to work in silence. Make sure to keep a balance between the blocks of interrupted time and check-ins.

### STIMULATE OPTIMISM

Laughter and optimism are contagious. As a manager, you must display hopefulness and confidence so that the team stays motivated in these stressful days. Social distancing can block out initiative and creativity in the team. One way to promote creative spirit would be to assign a fixed time of the day when the entire team can video call and share new ideas as a stimulus. It is also essential that you create a supportive environment and exercise empathy both towards yourself and your team.

