

The race to produce a vaccine for the latest coronavirus

Most recent vaccines have taken years to develop. But technological innovations and a more streamlined development process could dramatically shrink the time it takes to produce a vaccine against a new **pathogen** that has the potential to cause an epidemic.

pathogen 病原体

The new coronavirus that emerged in the Chinese city of Wuhan in December presents vaccine-makers with an urgent test. Scientists in China published the coronavirus's genetic sequence on January 12th. By late January, several groups around the world had started work on a vaccine using these genetic data. The first clinical tests on humans, for safety, could begin as early as April. With luck, a vaccine could be ready within a year.

Next week the World Health Organisation will **convene** a global meeting to set a research agenda. It will agree on rules, or protocols, for trials and work out which medical advances should be priorities.

convene 召集; 集合

Even if a vaccine were ready within a year, it would be too late to **stem** the current epidemic in China. But it could help other countries. It is too soon to tell how deadly the coronavirus is. But if it is at least as bad as seasonal flu, a vaccine for those most at risk will be vital.

stem 阻止

The rush to develop a vaccine against the coronavirus has been led by the Coalition for Epidemic Preparedness Innovation (CEPI), a group set up in 2017 in the wake of the west African Ebola outbreak. CEPI's purpose is to **forearm** the world against future outbreaks of disease, without knowing what those diseases will be.

forearm 准备; 预先武装