COVID-19 remains a global disaster. Worse, it was a preventable disaster. That is why the recommendations of the Independent Panel for Pandemic Preparedness and Response are urgent and vital. The world needs a new international system for pandemic preparedness and response, and it needs one fast, to stop future infectious disease outbreaks from becoming catastrophic pandemics.

The Independent Panel has found weak links at every point in the chain of preparedness and response. Preparation was inconsistent and underfunded. The alert system was too slow — and too meek. The World Health Organization was under-powered. The response has exacerbated inequalities. Global political leadership was absent.

Now, a priority is to end illness and deaths from COVID-19. Current national waves of transmission are causing the same human traumas as those witnessed last year — especially tragic when we know that public health measures could prevent them. Vaccine distribution is blatantly unjust and not strategic. Vaccine variants are emerging as SARS-CoV-2 spreads, and ever new ones are possible. The burden on people and nations is intolerable. That is why the Panel calls for essential short-term measures.

But the world cannot afford to focus only on COVID-19. It must learn from this crisis, and plan for the next one. Otherwise, precious time and momentum will be lost. That is why our recommendations focus on the future. COVID-19 has been a terrible wake-up call. So now the world needs to wake up, and commit to clear targets, additional resources, new measures and strong leadership to prepare for the future.

We have been warned.
The initial outbreak became a pandemic as a result of gaps and failings at every critical juncture of preparedness for, and response to, COVID-19:

- Years of warnings of an inevitable pandemic threat were not acted on and there was inadequate funding and stress testing of preparedness, despite the increasing rate at which zoonotic diseases are emerging.

- Clinicians in Wuhan, China, were quick to spot unusual clusters of pneumonia of unknown origin in late December 2019. The formal notification and emergency declaration procedures under the International Health Regulations, however, were much too slow to generate the rapid and precautionary response required to counter a fast-moving new respiratory pathogen. Valuable time was lost.

- Then, for the month following the declaration of the Public Health Emergency of International Concern (PHEIC) on 30 January 2020, too many countries took a ‘wait and see’ approach rather than enacting an aggressive containment strategy that could have forestalled the global pandemic. As COVID-19 spread into more countries, neither national nor international systems managed to meet the initial and urgent demands for supplies. Countries with delayed responses were also characterized by a lack of coordination, inconsistent or non-existent strategies, and the devaluing of science in guiding decision-making.

- Coordinated, global leadership was absent. Global tensions undermined multilateral institutions and cooperative action.

- Preparedness was under-funded and response funding was too slow. Dedicated financing at the scale required was not available to supply medical equipment, kick-start the search for diagnostics and therapeutics, or ensure vaccines would be available to all. International financing was too little, too late.

- WHO staff worked extremely hard to provide advice and guidance, and support to countries, but Member States had underpowered the agency to do the job demanded of it.

- The lack of planning and gaps in social protection have resulted in the pandemic widening inequalities with a disproportionate socio-economic impact on women and vulnerable and marginalized populations, including migrants and workers in the informal sector. Health impacts have been compounded for people with underlying health conditions. Education for millions of the most disadvantaged children has been terminated early by the pandemic.
The Panel also highlights strengths upon which to build:

- **Health workers have been stalwart in their efforts.** Doctors, nurses, midwives, long-term caregivers, community health workers, and other frontline workers, including at borders, are still working tirelessly to protect people and save lives. The fact that at least 17,000 health workers died of COVID-19 in the first year of the pandemic underlines the need for countries to do much more to support and protect them.

- **Successful national responses** built on lessons from previous outbreaks and/or had response plans which they could adapt. They listened to the science, changed course where necessary, engaged communities, and communicated transparently and consistently.

- **Country wealth was not a predictor of success.** A number of low- and middle-income countries successfully implemented public health measures which kept illness and death to a minimum. A number of high-income countries did not.

- **Vaccines were developed at unprecedented speed.** Within days of confirmation that a new coronavirus caused the outbreak, vaccine development was underway, resulting in a number of approved vaccines in record time. Now they must be distributed much more equitably and strategically to curtail COVID-19.

- **Open data and open science collaboration were central** to alert and response. For example, sharing of the genome sequence of the novel coronavirus on an open platform quickly led to the most rapid creation of diagnostic tests in history.
The Panel’s recommendations in summary

The recommendations are in two sets. There are immediate recommendations which are aimed at curbing COVID-19 transmission; and there are recommendations which if adopted as a package will transform the international system for pandemic preparedness and response and enable it to prevent a future infectious disease outbreak from becoming a pandemic.

The Panel calls for these immediate actions to end the COVID-19 pandemic:

• High income countries with a vaccine pipeline for adequate coverage should, alongside their own scale up, commit to provide to the 92 low- and middle-income countries of the COVAX Gavi Advance Market Commitment at least one billion vaccine doses no later than 1 September 2021 and more than two billion doses by mid-2022.

• The World Trade Organization (WTO) and WHO should convene major vaccine-producing countries and manufacturers to agree to voluntary licensing and technology transfer for COVID-19 vaccines. If actions do not occur within three months, a waiver of intellectual property rights under the Agreement on Trade-Related Aspects of Intellectual Property Rights should come into force immediately.

• G7 countries should immediately commit to provide 60% of the US$19 billion required for ACT-A in 2021 for vaccines, diagnostics, therapeutics, and strengthening of health systems, with the remainder being mobilised by others in the G20 and other high-income countries, and a formula based on ability to pay should be adopted to fund such global public goods on an ongoing basis.

• Every country should apply non-pharmaceutical public health measures systematically and rigorously at the scale the epidemiological situation requires, with an explicit evidence-based strategy agreed at the highest level of government to curb COVID-19 transmission.

• WHO to immediately develop a roadmap with clear goals, targets, and milestones to guide and monitor the implementation of country and global efforts towards ending the pandemic.
On the basis of its diagnosis of what went wrong at each stage of the COVID-19 response, the Panel makes the following seven recommendations directed to ensuring that a future outbreak does not become a pandemic. Each recommendation is linked directly back to evidence of what has gone wrong. To be successful they must be implemented in their entirety.

1. Elevate pandemic preparedness and response to the highest level of political leadership
   - Establish a high-level Global Health Threats Council led by Heads of State and Government.
   - Heads of State and Government adopt a political declaration at a Special Session of the United Nations General Assembly in September 2021, and commit to transform pandemic preparedness and response.
   - Adopt a Pandemic Framework Convention, within the next 6 months.

2. Strengthen the independence, authority and financing of WHO
   - Establish the financial independence of WHO based on fully unearmarked resources, and on an increase in Member States’ fees to two-thirds of the WHO base programme budget.
   - Strengthen the authority and independence of the Director-General, including by having a single term of office of seven years with no option for re-election. The same rule should be adopted for Regional Directors.
   - Focus WHO’s mandate on normative, policy, and technical guidance; empower WHO to take a leading, convening, and coordinating role in operational aspects of an emergency response to a pandemic, without, in most circumstances, taking on responsibility for procurement and supplies.
   - Resource and equip WHO Country Offices sufficiently to respond to technical requests from national governments to support pandemic preparedness and response, including support to build resilient equitable and accessible health systems, universal health coverage, and healthier populations.
   - Prioritize the quality and performance of staff at each WHO level, and de-politicize recruitment (especially at senior levels) by adhering to criteria of merit and relevant competencies.

3. Invest in preparedness now to prevent the next crisis
   - All national governments to update their national preparedness plans against targets and benchmarks to be set by WHO within six months, ensuring that there are appropriate and relevant skills, logistics and funding available to cope with future health crises.
   - WHO to formalize universal periodic peer reviews as a means of accountability and learning between countries.
   - The IMF should routinely include a pandemic preparedness assessment, including an evaluation of economic policy response plans, as part of the Article IV consultation with member countries.
4. A new agile and rapid surveillance information and alert system

- WHO to establish a new global system for surveillance, based on full transparency by all parties, using state-of-the-art digital tools.
- The World Health Assembly to give WHO both the explicit authority to publish information about outbreaks with pandemic potential immediately without requiring the prior approval of national governments, and the power to investigate pathogens with pandemic potential with short-notice access to relevant sites, provision of samples, and standing multi-entry visas for international epidemic experts to outbreak locations.
- Future declarations of a public health emergency of international concern should be based on the precautionary principle where warranted, as in the case of respiratory pathogens, and on clear, objective, and published criteria.

5. Establish a pre-negotiated platform for tools and supplies

- Transform the current ACT-A into a truly global end-to-end platform to deliver the global public goods of vaccines, therapeutics, diagnostics, and essential supplies.
- Secure technology transfer and commitment to voluntary licensing in all agreements where public funding has been invested in research and development.
- Establish stronger regional capacities for manufacturing, regulation, and procurement of needed tools for equitable and effective access to vaccines, therapeutics, diagnostics, and essential supplies, as well as for clinical trials.

6. Raise new international financing for pandemic preparedness and response

- Create an International Pandemic Financing Facility to raise additional reliable funding for pandemic preparedness and for rapid surge financing for response in the event of a pandemic with the capacity to mobilize long term (10-15 year) contributions of approximately US$5-10 billion per annum to finance preparedness, with the ability to disburse up to US$50-100 billion at short notice in the event of a crisis.
- There should be an ability-to-pay formula adopted whereby larger and wealthier economies will pay the most, preferably from non-ODA budget lines and additional to established ODA budget levels.
- The Global Health Threats Council will have the task of allocating and monitoring funding from this instrument to existing regional and global institutions, which can support development of pandemic preparedness and response capacities.

7. National Pandemic coordinators have a direct line to Head of State or Government

- Heads of State and Government to appoint national pandemic coordinators who are accountable to them, and who have a mandate to drive whole-of-government coordination for pandemic preparedness and response.
- National pandemic preparedness and response needs to be strengthened through increased multi-disciplinary capacity in public health institutions, annual simulation exercises, increased social protections and support to health workers, including community health workers, investment in risk communication, planning with communities and in particular those who are marginalized.
About the Panel

Seized by the gravity of the COVID-19 crisis, the World Health Assembly in May 2020 requested the Director-General to review lessons learned from the WHO-coordinated international health response to COVID-19. The Director-General asked Her Excellency, Ellen Johnson Sirleaf and the Right Honorable Helen Clark to convene an Independent Panel for this purpose. They in turn invited 11 highly experienced, skilled and diverse people to form the Panel. These include other former heads of government, senior ministers, health care experts and members of civil society.

The Independent Panel for Pandemic Preparedness and Response has spent the last eight months reviewing evidence of the spread, actions and responses to the COVID-19 pandemic. It has produced a definitive account of what happened and why it happened and analysed how a pandemic can be prevented from happening again.

The members of the Independent Panel are:
Co-Chair HE Ellen Johnson Sirleaf, Co-Chair the Rt Hon. Helen Clark, Mauricio Cárdenas, Aya Chebbi, Mark Dybul, Michel Kazatchkine, Joanne Liu, Precious Matsoso, David Miliband, Thoraya Obaid, Preeti Sudan, Zhong Nanshan and Ernesto Zedillo.