



<https://doi.org/10.47811/bhj.148>

## Handling future pandemic, lessons from the past

Ugyen Tshering<sup>1,4</sup>, Karma Tenzin<sup>2</sup>, Chencho Gem<sup>3</sup>, Anna Kathrina De Jesus<sup>4</sup>, Tshokey<sup>5</sup>

<sup>1</sup>Ministry of Health, Royal Government of Bhutan, Thimphu, Bhutan

<sup>2</sup>Faculty of Postgraduate Medicine, Khesar Gyalpo University of Medical Sciences, Thimphu, Bhutan

<sup>3</sup>Central Regional Referral Hospital, Gelephu, Bhutan

<sup>4</sup>Royal Tropical Institute, Vrije University, Amsterdam, Netherlands

<sup>5</sup>Jigme Dorji Wangchuck National Referral Hospital, Thimphu, Bhutan

The COVID-19 pandemic has been a wake-up call for the world, underscoring the critical importance of preparedness and resilience in the face of global health crises. This pandemic has also served as a stark reminder that our health systems were ill-prepared for such a widespread and devastating event. Initial responses were marred by delays, inconsistency, and a lack of concrete national, regional and global preparedness and response plans. However, it is through these challenges that we are presented with a unique opportunity to learn, adapt, and pave the way for a better future. The World Health Organization (WHO) has recently declared an end to COVID-19 as a global public health emergency<sup>1</sup>, marking a significant milestone. As we emerge from this crisis, it is imperative to draw upon the hard-won lessons of COVID-19 to build a more resilient and prepared global health system.

In the last three years, COVID-19 has not only disrupted livelihoods but has also exacerbated pre-existing health inequalities across all countries. Globally the virus has already infected 672 million people and claimed the lives of 6.8 million people as of May 12, 2023<sup>2</sup>. COVID-19 has led to widespread business closures and job losses around the world. The International Labour Organization (ILO) has estimated 255 million job losses globally in 2020<sup>3</sup>. It has also disrupted global supply chains affecting the production and distribution of goods and services including medical supplies. Additionally, international trade and tourism were significantly reduced, further impacting global economic growth since 2020. The World Bank reported that we have witnessed one of the worst economic recessions after World War II and the 2009 Global recession<sup>4</sup>. This clearly reflects that the pandemic has been far more than a health crisis.

---

### Corresponding author:

Ugyen Tshering

[utshering@health.gov.bt](mailto:utshering@health.gov.bt)

COVID-19 certainly won't be the last pandemic. We are more likely to experience an extreme pandemic like COVID-19<sup>5</sup> due to various inducing factors such as changes in the climate, population dynamics, food supply chains and encroachment on biodiversity. To better prepare for future pandemic threats, we should build on the experience gained and lessons learned from COVID-19. We are now better equipped than ever to handle any future pandemic. However, pandemic preparedness requires ongoing efforts to strengthen health systems, address social and economic factors, and global collaboration to ensure early detection, enhanced preparedness, and effective response. While we have seen progress, there is still much work to be done to ensure that we are ready for the next pandemic.

The development of vaccines within a short span of time was a remarkable feat. Today, 67.9% of the world population has received at least one dose of a COVID-19 vaccine<sup>6</sup>. However, despite the successes of vaccine research and development, there are persistent inequities in its production and distribution. To address this issue, global initiatives like COVAX and capacity development of low-income regions may address this issue. While advances have been made in the areas of diagnostics and therapeutics, the pandemic has highlighted the importance of global collaboration and coordination to facilitate the sharing of data, expertise, and resources in its development. It has also underscored the need for robust and interoperable health information systems that can provide real-time data on disease alert and spread, healthcare capacity, and resource allocation to support decision-making at all levels.

At the national level, maintaining mutual trust between the public and government is critical for effective health emergency management. Countries need to assess their national surge capacity plans, including the readiness of their health infrastructure to ensure preparedness. Streamlining decision-making processes and increasing coordination between various organizations and institutions will enable faster and more effective responses. UN organizations and government institutions should undergo major reforms to underpin their leadership role in any emergency crisis. Sustained and coordinated funding at global, regional, and national is also essential for emergency preparedness

and response. Finally, it is time to go beyond the International Health Regulations (IHR) and develop a new pandemic treaty to improve global oversight, commitments, and coordination. In conclusion, global solidarity and unity are needed more than ever to tackle any global health crises.

## REFERENCES

1. World Health Organization. Statement on the fifteenth meeting of the IHR (2005) Emergency Committee on the COVID-19 pandemic [Internet]. 2023 [cited 2023 May 10]. [\[Full Text\]](#)
2. Johns Hopkins University. COVID-19 Map - Johns Hopkins Coronavirus Resource Center [Internet]. 2023 [cited 2023 Feb 9]. [\[Full Text\]](#)
3. International Labour Organization. ILO Monitor: COVID-19 and the world of work. Seventh edition [Internet]. 2021 Jan [cited 2023 Mar 5]. [\[Full Text\]](#)
4. World Bank Group. Global Economic Prospects [Internet]. 2020. 238 p. [\[Full Text\]](#)
5. Marani M, Katul GG, Pan WK, Parolari AJ. Intensity and frequency of extreme novel epidemics. Proc Natl Acad Sci U S A [Internet]. 2021 Aug 31 [cited 2022 Sep 21];118(35):e2105482118. [\[Full Text\]](#)
6. Mathieu E, Ritchie H, Rodés-Guirao, Lucas Appel, Cameron Giattino C, Hasell J, et al. Coronavirus Pandemic (COVID-19) [Internet]. Our World in Data. 2020 [cited 2023 May 5]. [\[Full Text\]](#)