

# Applying Lessons Learned from COVID-19 R&D to Future Epidemics

NASEM

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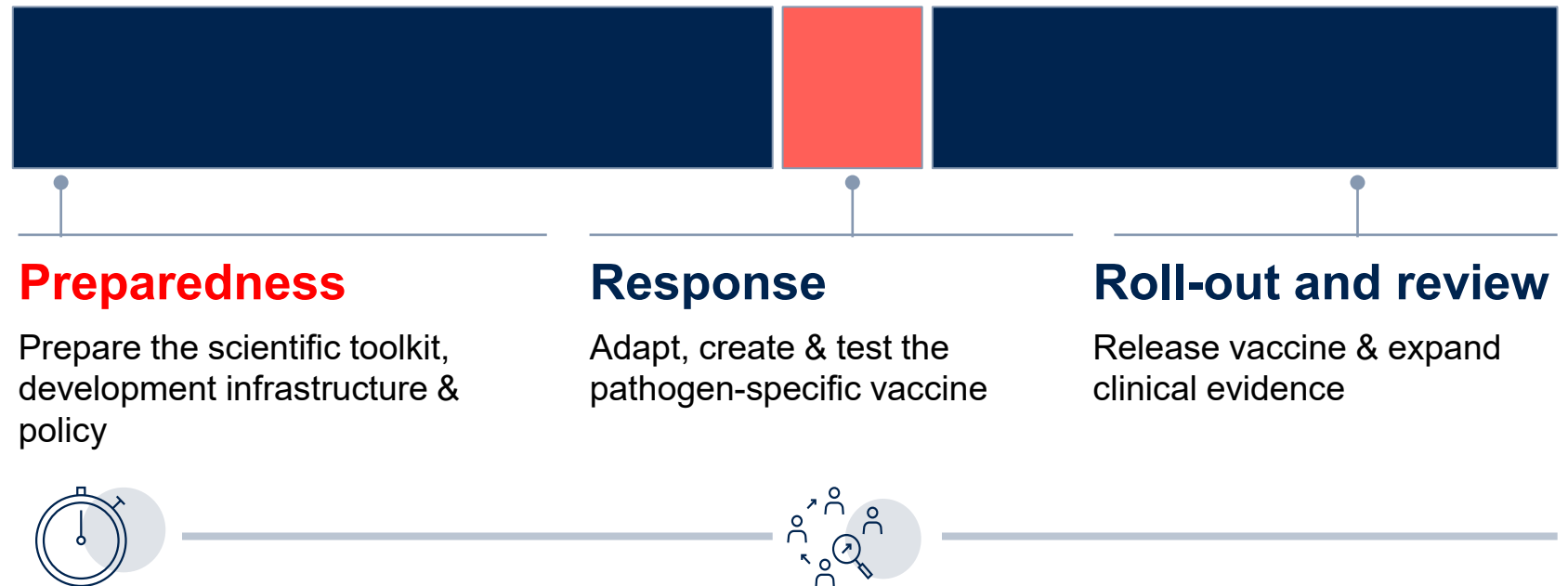
In-Kyu Yoon, M.D.

Director & Global Head of Programmes and Innovative Technology  
Coalition for Epidemic Preparedness Innovations (CEPI)

To dramatically decrease deaths in future epidemics or pandemics, CEPI is seeking to accelerate vaccine development response towards 100 days

#100DaysMission

Acceleration of  
vaccine development  
response towards 100  
days

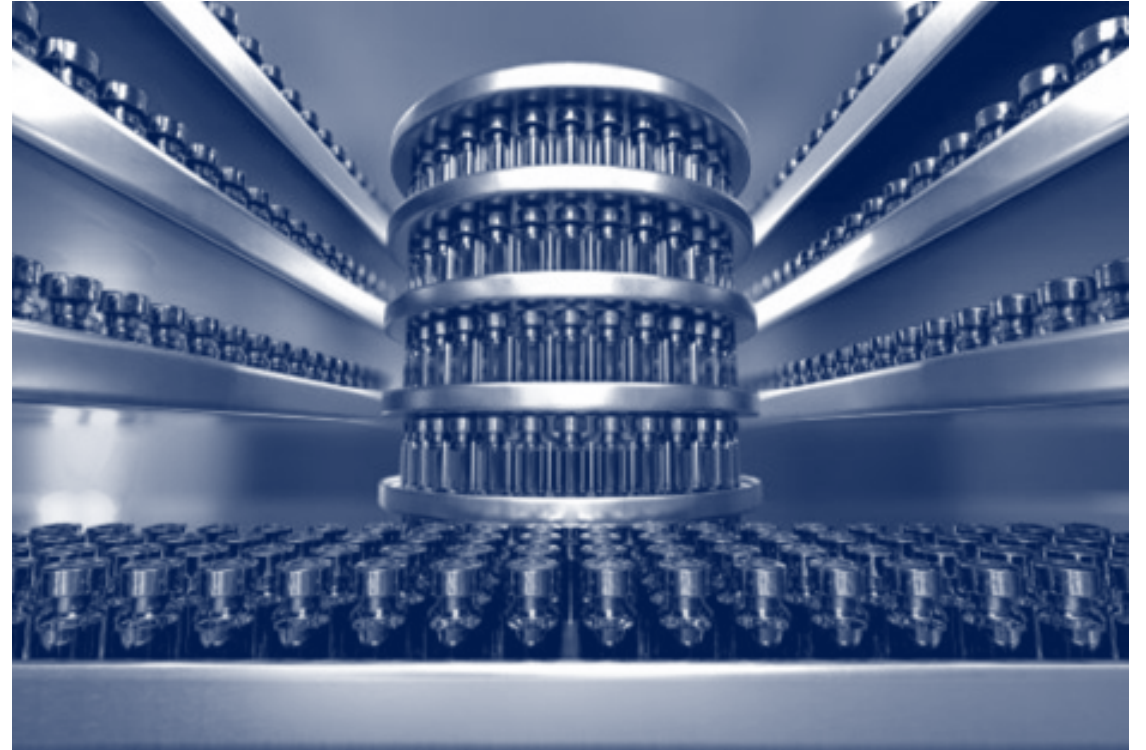


**This will require a paradigm shift:  
Significant front-loading in preparedness**

# CEPI's 100-days mission

Completing as many pieces of the puzzle as we can before a new virus emerges

We need to develop “vaccine libraries” against high-risk virus families that can be swiftly pulled off the shelf and adapted when a new virus emerges, so we don't lose valuable time creating a new vaccine from scratch



#100DaysMission

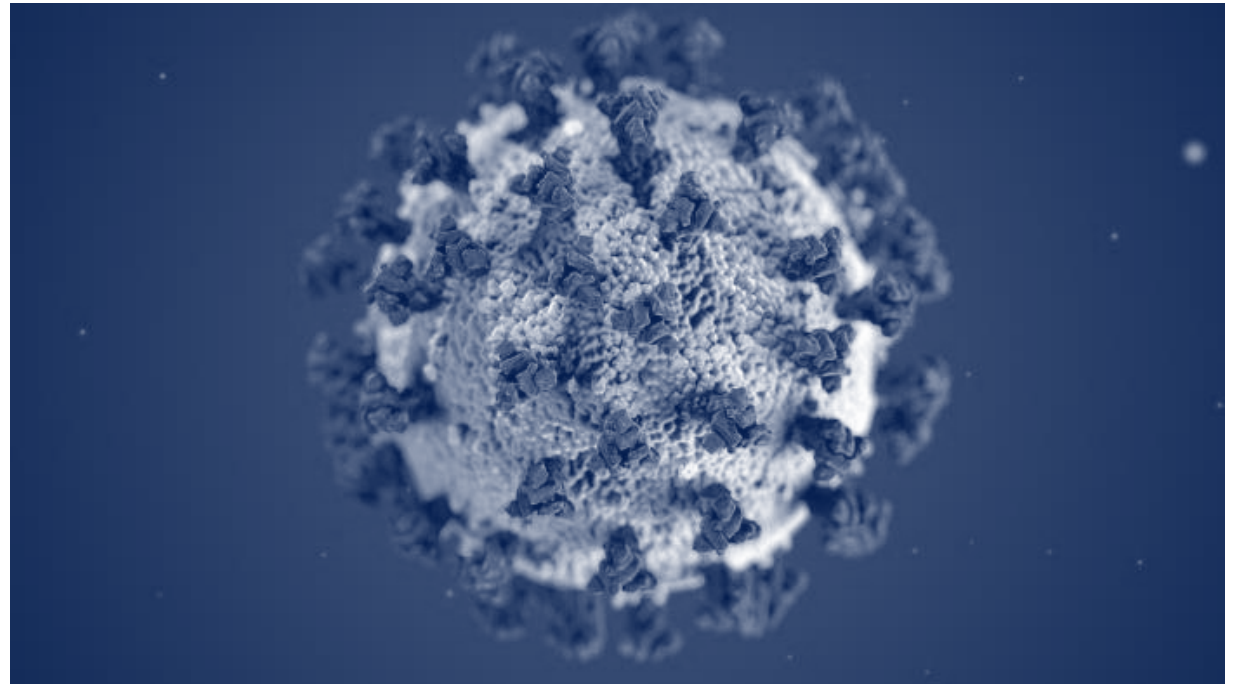
# CEPI's 100-days mission

## Vaccine libraries: What has COVID-19 shown us?

Before COVID-19, scientists were already working on vaccines against MERS and SARS

What those scientists learned enabled them to pivot quickly when COVID-19 emerged

We can replicate and improve this approach for other virus families



#100DaysMission

# CEPI's 100-days mission

Making a calculated shift in the way we do clinical trials and regulation

In future emergencies, the rapid rollout of vaccines based on pre-established safety data should go hand-in-hand with the ongoing review of real-world evidence of efficacy

This represents a change in the traditional mindset, as already occurs with seasonal flu shots



#100DaysMission



# CEPI's 100-days mission

Building vaccine R&D and manufacturing capacity closer to outbreaks

A globally distributed R&D&M network would enable rapid access to vaccine doses in low- and middle- income regions

It could also allow for vaccine development and production to take place closer to the source of an outbreak



#100DaysMission

# CEPI 2.0

## Vision statement

A world in which epidemics and pandemics are no longer a threat to humanity

## Mission statement

Accelerate the development of vaccines and other biologic countermeasures against epidemic and pandemic threats so they can be accessible to all people in need



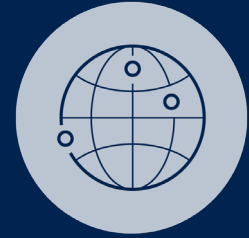
## Prepare

for known epidemic and pandemic threats



## Transform

the response to the next novel threat



## Connect

to enhance and expand global collaboration

**100**  
**days**  
**mission**

To develop a safe and effective vaccine in 100 days from when a pathogen is sequenced until a vaccine is initially authorized and can be manufactured at scale

CEPI