CEPI

Securing the Future

Investment Case 2027-2031

Contents

Executive Summary: Health Protection for a Vulnerable World

Epidemics and pandemics present a real and immediate danger. They can emerge anywhere, at any time. Outbreaks are increasing in frequency, scale and economic impact, with major events such as H1N1 in 2009, Ebola in 2014 and COVID-19 in late 2019 exacting profound tolls in human life and lost economic output. Estimates suggest that COVID-19 resulted in almost 15 million excess deaths[1] by the end of 2021 and cost the world as much as US$13.8 trillion in lost output.[2] The International Monetary Fund estimates that global losses from future pandemics will be, on average, more than US$700 billion each year.[3]

Given the world's deeply interconnected economies and global supply chains, managing epidemic and pandemic risk has become a defining security challenge of our generation. The Coalition for Epidemic Preparedness Innovations (CEPI) was created to meet this challenge. Our vision of what is within reach is clear: a world in which epidemics and pandemics are no longer a threat to humanity.

In less than a decade, CEPI has become a central pillar of the world's epidemic and pandemic defence system and galvanised global support for its 100 Days Mission – the goal to develop and authorise safe, effective and accessible vaccines within 100 days of identifying a new pandemic threat.

The organisation has supported the development of more than 50 vaccine candidates and over 25 vaccine production platforms, accelerated vaccine R&D, moved swiftly to invest in vaccine development programmes against SARS-CoV-2, built one of the world's largest portfolios of COVID-19 vaccines and shaped and co-led COVAX, which delivered nearly 2 billion doses of pandemic vaccine to 146 countries, saving over 2.7 million lives. CEPI's Lassa, Nipah and Middle East Respiratory Syndrome (MERS) vaccines were the first ever to reach Phase 2 clinical trials and the organisation has funded technology transfer to enable access both to COVID-19 vaccines and the world's first licensed Chikungunya vaccine.

Our track record shows that investment in CEPI is an investment in national resilience and global health security. It is an insurance premium to avoid the worst impacts of epidemics and pandemics.

1. https://www.who.int/data/stories/global-excess-deaths-associated-with-covid-19-january-2020-december-2021 (accessed Jan 22, 2026)
2. https://www.imf.org/-/media/files/publications/wp/2022/english/wpiea2022068-print-pdf.pdf (accessed Jan 22, 2026)
3. Glennerster, R., Snyder, C.M. & Tan, B.J. Calculating the Costs and Benefits of Advance Preparations for Future Pandemics. IMF Econ Rev 71, 611–648 (2023). https://doi.org/10.1057/s41308-023-00212-z

CEPI's new five-year strategy (2027–2031) is focused on where the organisation can have maximum impact. CEPI requires in total US$3.6 billion to deliver the CEPI 3.0 strategy, of which US$1.1 billion is already secured and committed. **Consequently, the coalition is seeking US$2.5 billion in new funding** to shift the world from reactive crisis response to proactive protection.

US$2.5 billion

CEPI 3.0 will focus on three interconnected priorities:

1) Vaccines: Tackling Known and Emerging Threats
We will **deliver response-ready vaccines** and investigational reserves for known epidemic threats, while building a systematic knowledge base across high-risk viral families. This priority area will cost US$1.6 billion, of which US$1.1 billion needs new funding.

2) Platform technologies: Accelerating Vaccine Development and Production
We will **accelerate the development of rapid-response vaccine platforms and regulatory readiness** to shorten timelines to develop safe and effective vaccines. We will strengthen global manufacturing and surge capacity to enable sufficient global supply and **equitable access** in all regions. This priority area will cost US$360 million, of which US$250 million needs new funding.

3) Networks: Executing the 100 Days Mission
We will **connect with our partners** and **exercise our global networks**, building, testing and demonstrating 100 Days Mission capabilities that are ready to execute at a moment's notice in an emergency. This priority area will cost US$380 million, of which US$260 million needs new funding.

Another US$450 million (US$310 million new funding) will **fund cross-cutting capabilities**, including both the application of Artificial Intelligence (AI) for vaccine development and protection against AI enabled threats, equity-by-design, and embedded biosecurity. Funding the CEPI organisation to deliver this programme, and to account for inflation and currency fluctuations, will cost US$800 million for the five-year period of which US$555 million needs new funding. Overhead costs not directly attributable to programme investments have historically been a lean average of 5.5 percent of overall spend.

A fully funded CEPI 3.0 will advance the world towards delivering the 100 Days Mission. It will strengthen global and national health security systems, reducing the likelihood, cost and impact of future epidemics and pandemics, while generating national and regional benefits through investments in R&D, manufacturing and preparedness. By funding CEPI 3.0, investors can help shift the world from scrambling to react to being truly response ready – poised to contain epidemics and stop pandemics before they spiral out of control.

CEPI's Unique Value Proposition

CEPI delivers impact because its model is built on strong collaboration and a clear view of the organisation's role in relation to others working in the fields of epidemic and pandemic preparedness and response. The coalition works with partners such as the World Health Organization (WHO) and Gavi, the Vaccine Alliance, national and regional health authorities, research institutions, civil society and the broader life sciences sector. These partnerships enable CEPI to align priorities, coordinate action and advance innovations for real-world use.

CEPI's partnerships span scientific discovery, product and platform development, manufacturing scale-up, regulatory readiness, access planning and delivery pathways, allowing the organisation to knit together fragmented capabilities into a unified system that can respond rapidly to emerging threats. CEPI 3.0 builds on this proven approach with a disciplined focus on three areas that will collectively transform the world's ability to respond to epidemic and pandemic threats.

CEPI doesn't just fund innovation and enable equity – it orchestrates it. By convening diverse partners early, co-creating end-to-end access roadmaps and embedding equity expectations throughout development, CEPI strives to advance promising technologies from the lab to population level impact as quickly as possible. CEPI's systemic approach enables its partners to work together efficiently and effectively to achieve this end.

By design, CEPI supports early-stage, high-risk and high-reward innovation in areas of public health need that do not attract commercial investment. CEPI invests in prototype vaccines, adaptable platforms, enabling technologies and Disease X-relevant science long before commercial incentives exist. CEPI derisks the pathway for the entire global health community, accelerates product development and emphasises the importance of equitable access from the start.

CEPI thus offers unique value to its investors. CEPI's partnership-driven model, system-level orchestration, transparency and willingness to take early innovation risks position it to deliver real impact. By pooling resources and coordinating its investments, CEPI achieves scale that others cannot. And, because CEPI is committed to producing global public goods, it provides outputs that can enable the efforts of others, including CEPI's investors, while advancing the cause of equitable access.

CEPI 3.0 at a Glance

CEPI 3.0 at a Glance

CEPI's five-year strategy will transform the world's ability to respond to epidemics and pandemics. **We will build on our track record of supporting vaccine development, working in collaboration with partners and establishing geo-diverse R&D and manufacturing capacity** in three interconnected ways:

1) Vaccines: to tackle known and emerging threats, we will

- Support clinical development of vaccines against eight of the nine viruses designated priority pathogens by the WHO since 2017, and against 'prototype pathogens' from at least nine of the 11 viral families designated by the WHO as presenting a high risk of causing a Public Health Emergency of International Concern or a pandemic.
- Build a shared knowledge base across at least nine high-priority viral families so vaccines can be rapidly developed for any Disease X that emerges from those families.
- Prepare for new threats, including AI-enabled viruses.
- Strengthen the enabling sciences needed to accelerate vaccine development across CEPI viral families.
- Initiate the first-ever Phase 3 clinical trial of a Lassa vaccine (with co-funding partners).
- Complete Phase 2 clinical trials and establish outbreak-ready investigational reserves for high-risk pathogens including Nipah, MERS and Rift Valley fever.
- Expand Chikungunya vaccine access in lower-income countries.

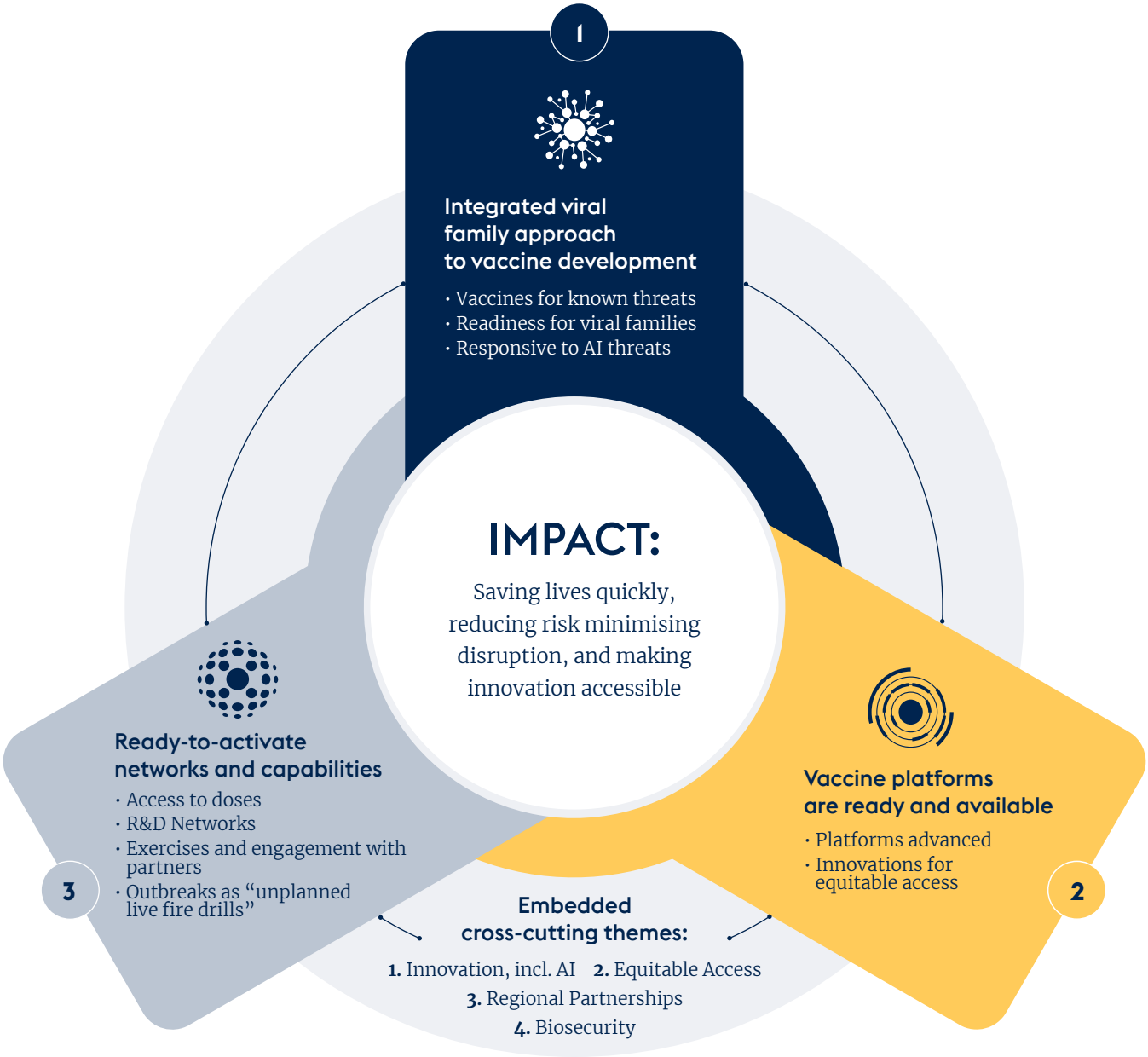
2) Platform technologies: to accelerate vaccine development and production, we will

- Advance a diverse portfolio of vaccine platforms with potential across multiple viral families, ensuring they are fast, safe and suitable for low- and middle-income countries.
- Embed platforms with regional manufacturing partners, support their sustainability for routine and outbreak deployment, and ensure they are ready for rapid, equitable use during emergencies.
- Advance regulatory readiness for the use of vaccine platforms in emergency settings.
- Build a knowledge base to inform platform and adjuvant selection across different viral families.

3) Networks: to improve our capacity to execute the 100 Days Mission, we will

- Embed 100 Days Mission implementation at national and regional policy level through exercises and pilots.
- Position CEPI's global networks for rapid activation and interoperability during outbreaks by strengthening core capabilities and enhancing coordination.
- Test and accelerate network readiness through exercises and real-world responses.
- Support the long-term sustainability of networks as core components of regional R&D infrastructure.
- Secure access to 1-2 billion doses of regional vaccine manufacturing capacity on multiple continents during outbreaks.

Snapshot of CEPI 3.O



Safety and Speed: No compromises from start to finish

Safety is at the heart of all CEPI's work and a cornerstone of CEPI 3.0. Our ability to move faster in future pandemics does **not** come from taking shortcuts or weakening standards, but from strengthening the systems we work in long before a crisis hits. By anticipating new viral threats, developing and validating vaccine platforms in advance and building the global networks needed to test, manufacture and deliver vaccines quickly, CEPI helps create an environment where speed and safety reinforce each other.

CEPI 3.0 focuses on laying the scientific and operational groundwork early: generating safety data on platforms ahead of outbreaks, investing in enabling technologies, supporting networked clinical trial capacity and working with regulators to clarify pathways that maintain rigorous review. These innovations make it possible to shorten timelines **without compromising on evidence, oversight or transparency**. When the foundations are strong, every step – from design to trials to scale up – can move faster while still meeting the highest safety standards.

CEPI has funded and established the Safety Platform for Emergency Vaccines (SPEAC), managed by the Brighton Collaboration, which provides crucial scientific expertise from an international network of vaccine safety experts to CEPI-backed projects. In addition, CEPI has invested in the International Network of Special Immunization Services. This aims to combine the use of clinical approaches and cutting-edge gene technologies to understand the biological factors that might predict adverse events of special interest potentially related to vaccination.

Artificial Intelligence – protecting against risk

AI-enabled tools are rapidly transforming medical countermeasure and pharmaceutical development, offering powerful opportunities to accelerate discovery, reduce attrition and significantly improve the speed, accuracy and scalability of systems that detect, predict and respond to biological threats. These advances have the potential to markedly strengthen global preparedness and response capabilities.

However, the same technologies also introduce new risks. Rapid progress in AI – including genome language models already used to design novel bacteriophages – raises the prospect of misuse, enabling the modification or creation of synthetic pathogens that could challenge existing vaccine and medical countermeasure development paradigms. The pace of AI innovation therefore heightens the need for sustained investment, governance and readiness to address AI-enabled biological threats.

CEPI, working with partners, will focus significant effort on understanding the nature of these emerging risks and on ensuring that the vaccine and broader medical countermeasure capabilities required to respond effectively are developed and ready.

The power of vaccines to save lives

Vaccines work by introducing an antigen – a viral protein or a weakened version of a pathogen – into the body to prime the immune system to respond rapidly and effectively to the target virus. And they are extremely effective.

It is estimated that since 1974, vaccination has averted 154 million deaths, including 146 million among children younger than five years, of whom 101 million were infants younger than one year.[4] Since 2000, GAVI, the Vaccine Alliance has helped lower-income countries prevent more than 16.2 million deaths through its support for routine immunisation programmes and vaccination campaigns.[5] Vaccines have helped eradicate deadly diseases such as smallpox, they save 2-3 million lives a year, and they can even combat certain types of cancer, as is the case with the human papillomavirus (HPV) vaccine, which prevents infection with viruses known to cause cervical cancer.[6] In Denmark, for instance, where HPV vaccination rates are high, high-risk strains of HPV have nearly been eliminated.[7] The impact of COVID-19 vaccines has been even starker. In the first year of their roll-out during the pandemic, those vaccines were estimated to have saved 20 million lives.[8] Modelling shows that had COVID-19 vaccines been available within 100 days of the release of the viral genome sequence, a further 8 million deaths could have been averted.[9]

4. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)00850-X/fulltext#:~:text=Since%20 1974%2C%20vaccination%20has%20averted,even%20well%20into%20late%20adulthood (accessed Jan 22, 2026)
5. https://www.gavi.org/sites/default/files/programmes-impact/our-impact/Gavi-Facts-and-figures-2023.pdf (accessed Jan 22, 2026)
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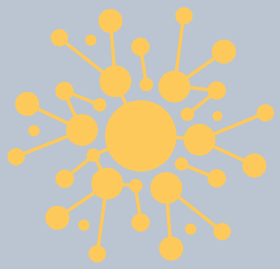
8. https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(22)00320-6/fulltext (accessed Jan 22, 2026)
9. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(24)00286-9/fulltext (accessed Jan 22, 2026)

Credit: UNICEF/UN0447368/Prasad Ngakhusi.

Vaccines: Tackling Known and Emerging Threats



Vaccines: Tackling Known and Emerging Threats

The world faces twin threats: repeated outbreaks from known pathogens – such as Lassa, MERS, Nipah, Rift Valley fever, Mpox, Ebola and Chikungunya – and the emergence of entirely new pathogens, as seen with SARS-CoV-2. **CEPI 3.0 will address both by developing vaccines and capabilities for today's epidemic risks in ways that simultaneously strengthen preparedness for future pandemics**.

We are able to do this because a scientific consensus has emerged that preparing for future pandemics requires shifting from a pathogen-by-pathogen approach to one **focused on viral families**. Viruses within the same family share structural and functional traits, infection mechanisms and patterns of host interaction. Studying these shared features enables the development of vaccines for known pathogens that can serve as templates for developing vaccines against related pathogens, including those yet to emerge – otherwise known as 'Disease X'.

CEPI aims to use 'prototype pathogens' as pathfinders, developing vaccines and generating foundational knowledge that can be rapidly adapted to other viruses in the same family. This approach strengthens preparedness for unforeseen variants, zoonotic spillovers and novel threats.

By combining this viral family strategy with advanced technologies – such as computational design and AI – CEPI seeks to dramatically accelerate vaccine development. The goal is twofold: deliver tools that address today's outbreaks and shorten future timelines for the development of vaccines against related threats from years to months or even days.

The Approach in Action: Designing COVID-19 Vaccine Candidates in 36 Hours

The unprecedented speed with which life-saving vaccines were developed against COVID-19 is a prime example of the effectiveness of the viral family approach.

Before the emergence of the novel Coronavirus in 2019, scientists had been working to develop vaccines against MERS (Middle East Respiratory Syndrome) and SARS (Severe Acute Respiratory Syndrome) – both pathogens from the same virus family as SARS-CoV-2.

Researchers studied the structural biology and key features of the MERS and SARS coronaviruses, and in doing so identified the spike protein as the most promising target for vaccines. When SARS-CoV-2 emerged, vaccines against MERS on mRNA and viral vector platforms were already in advanced development. As part of this work, scientists at the NIH Vaccine Research Center in the United States had discovered that by introducing mutations into the spike protein, it was possible to stabilise it in a conformation that produced a more robust immune response.

This meant that when the genetic sequence of SARS-CoV-2 was published, NIH scientists teaming up with the biotech company Moderna were able to design a vaccine candidate within 36 hours and then move it into further development and production within days. Clinical trials began within weeks, and the roll-out of the first doses of life-saving new vaccines began within a year.

This work underpins our 100 Days Mission, which aims to make it possible to develop safe, effective vaccines against new pandemic threats within 100 days – **a shift from reactive response to rapid, anticipatory readiness**.

In CEPI 3.0, we will deepen our work across at least **nine high-risk viral families**, creating a detailed scientific and technical knowledge base that makes rapid vaccine design possible for any new virus within those families. **This approach means CEPI's five-year strategy will advance preparedness against more than three-quarters of the viral families prioritised as highest risk by global scientific experts.** In addition to the vaccines we already work on, we'll advance **at least four new exemplar vaccines** to early clinical trials, deepening knowledge of viral families and scientifically viable vaccine-making technologies and producing tested and proven starting points for when a novel outbreak hits.

Amplifying CEPI's work

To accelerate our work, we will partner with the communities of scientists supporting the WHO Collaborative Open Research Consortiums for each of the high-risk viral families and we will take advantage of cutting-edge tools like AI-driven immunogen design that are transforming vaccinology.

Case Study: Lassa, Junín and the Arenaviruses

At least seven Arenaviruses are known to cause highly lethal viral haemorrhagic fever in humans, making it one of the most dangerous virus families. Lassa, a haemorrhagic fever virus endemic in West Africa, and Junín, which emerged in Argentina in the 1950s, are well-known representatives of the family.

CEPI has invested in developing vaccines against these viruses, treating them as prototypes for the development of general designs for Arenavirus vaccines, and thereby preparing for a possible Arenavirus Disease X. CEPI has also engaged its immunogen design consortium to begin developing antigen designs against a variety of Arenaviruses. Thanks to this work, scientists now have antigen designs for 15 different Arenaviruses, enhancing our preparedness to respond should new Arenavirus threats emerge in the future.

As CEPI's Disease X Project Leader Dr Tim Endy explains: "With Lassa, it took three months to stabilise the antigen protein into a good immunogen. For Junín, thanks to our knowledge base, it took three weeks. Now we can design antigens in days or hours, not weeks or months."

Case Study: Nipah and the Paramyxoviruses

In Bangladesh, India and Malaysia, outbreaks of the deadly Nipah virus, which has a case fatality rate of 40-70 percent, occur almost annually, and even more frequently in recent years. While Nipah itself does not appear to be highly transmissible, the Paramyxovirus family from which it emerges has produced measles, mumps and other highly transmissible viruses, raising concerns that the family could potentially harbour viruses that are both lethal and highly transmissible.

CEPI therefore funds research not only to develop Nipah vaccines to address the threat we know but also to build a knowledge base that will enable the rapid development of vaccines against any future Paramyxovirus Disease X. This means that if a more transmissible Paramyxovirus emerges, science won't start from scratch – it will build on a prepared, adaptable base.

By the end of 2031, CEPI will:

Reduce risk for known viral threats by:

- **Initiating the first-ever Phase 3 clinical trial of a Lassa vaccine**. Working with co-funding partners towards future approval of the world's first Lassa vaccine, protecting against one of the most persistent epidemic threats.
- **Advancing vaccines for high-risk pathogens**. Progressing Nipah, MERS and Rift Valley fever vaccines through mid-stage trials and maintaining investigational reserves for rapid deployment during outbreaks to generate evidence and save lives.
- **Expanding Chikungunya vaccine access in lower-income countries**. Securing approvals and broadening distribution beyond high-income countries, enabling equitable protection where outbreaks hit hardest.
- **Progressing additional vaccines towards licensure** where demand, data and co-funding opportunities exist.

Build viral family preparedness against future threats by:

- **Building a shared knowledge base across at least nine high-priority viral families**. Developing immunogen designs and enabling sciences for nine viral families so vaccines can be rapidly developed for any Disease X that emerges from those families.
- **Advancing at least four new exemplar vaccines to early-stage trials**. Deepening understanding of viral families and viable vaccine-making technologies by progressing exemplar vaccines to at least Phase 1 trials.
- **Strengthening enabling sciences across CEPI viral families**. Generating critical tools such as assays, reagents and correlates of protection that are needed to accelerate vaccine development and deployment in an outbreak.
- **Proactively preparing for new kinds of threats**. Investing in learning and the development of capabilities to guard against the risk of AI-enabled biological threats.

Innovation in Action: SK bioscience and COVID-19

CEPI's investment in SK bioscience's COVID-19 vaccine was a milestone in global health innovation, helping to deliver the world's first licensed AI-designed vaccine. Backed by CEPI funding, SK bioscience advanced SKYCovione, a recombinant protein vaccine created using cutting-edge computational design techniques pioneered at the University of Washington's Institute for Protein Design, run by 2024 Nobel Laureate David Baker and funded in part by the Gates Foundation. Researchers used AI-powered protein modelling tools to precisely engineer the vaccine antigen, optimising its ability to trigger effective immune responses. The vaccine received regulatory approval in both South Korea and the UK and was granted WHO Emergency Use Listing.

The Pandemic Preparedness Engine

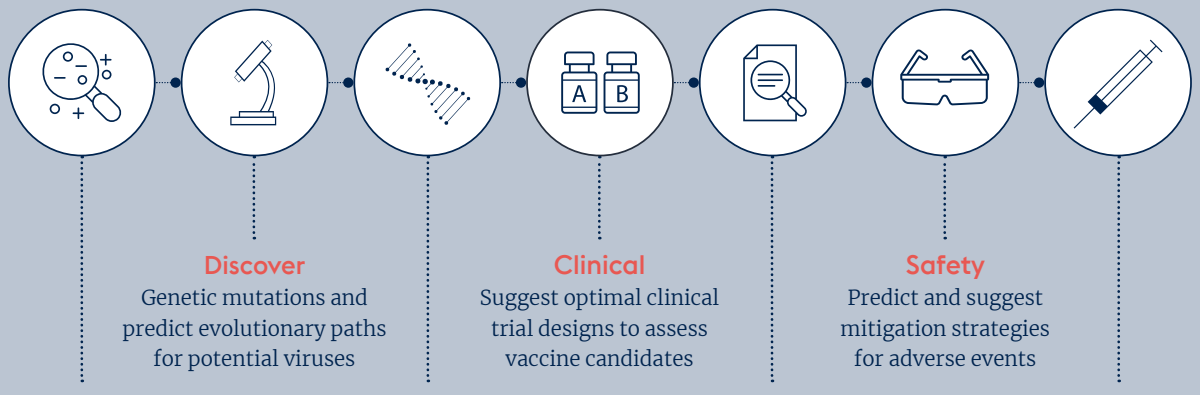
Artificial Intelligence is set to transform global pandemic preparedness. CEPI's 100 Days Mission – to enable the emergency authorisation of vaccines within 100 days of identifying a new threat – will be powered by multiple innovations with AI playing a key enabling role.

CEPI and partners are building a Pandemic Preparedness Engine: an end-to-end digital platform integrating genomic surveillance, epidemiology, vaccine design and regulatory data into one secure system. Using generative AI, it will scan global datasets, assess pandemic potential and propose vaccine designs within hours.

Initially trained on hundreds of studies across high-risk viral families – including Coronaviruses, Filoviruses and Arenaviruses – the Engine will evolve as new research emerges. Scientists will use it to model outbreaks, identify vaccine targets and simulate manufacturing to accelerate scale-up.

To ensure equity, CEPI is creating a global network of high-performance computing hubs – 'AI factories' – so researchers everywhere can access the technology. Built-in biosecurity safeguards, including real-time monitoring by autonomous agents, will guarantee responsible use. Harnessing AI will deliver speed, equity and security – turning cutting-edge technology into a frontline defence against future pandemics.

The Engine will contribute to and enhance key stages of the vaccine development process



Monitor
Rank & list Disease X threats including their genetic sequence

Discover
Genetic mutations and predict evolutionary paths for potential viruses

Pre-clinical
Produce antigens designs that could elicit the desired immune responses

Clinical
Suggest optimal clinical trial designs to assess vaccine candidates

Regulatory
Rapidly curate preclinical and clinical data into regulatory filings

Safety
Predict and suggest mitigation strategies for adverse events

Manufacturing
Recommend optimal immune boosting adjuvants to pair with vaccine candidates

Platform Technologies: Accelerating Vaccine Development and Production

Platform Technologies: Accelerating Vaccine Development and Production

The COVID-19 pandemic showed that global health security depends on the ability to **rapidly develop, scale and deploy vaccines**. Platform technologies will be critical to enabling such responses in the future, because the core components of the vaccine – such as the delivery system, manufacturing process and quality controls – are pre-established, validated and scalable. When a new pathogen emerges, only the pathogen-specific genetic or antigenic 'insert' needs to be changed, while the underlying platform remains constant.

Because these platforms are supported by prior clinical, safety and manufacturing data across multiple vaccines, development timelines can be dramatically shortened, regulatory risk reduced and production rapidly expanded across existing manufacturing networks. The result is not only faster vaccine development, **but swift transition to large-scale, global manufacturing**, enabling earlier access, more equitable supply and far greater impact in future outbreaks.

Because vaccines can only be used when regulators are confident that they are safe and effective, CEPI will work with regulators in advance – building the evidence base around the platforms it supports so that when the next outbreak hits, regulators already have the data they need to make fast, rigorously informed decisions.

CEPI will back a diverse range of vaccine platform technologies, because no single platform can tackle every threat. By building an array of ready-to-use options, CEPI will give countries – especially in low- and middle-income regions – the tools they need to **respond faster and more effectively to viral outbreaks**. A broader platform toolbox means stronger national and regional resilience, providing a far greater chance of stopping future epidemics before they spread. This approach will support speed, scale and access to vaccines during outbreaks.

By the end of 2031, CEPI will:

- **Advance at least three additional vaccine-making technologies into clinical trials**, which have potential against a range of viruses – including known epidemic threats and prototype pathogens as placeholders for a Disease X.
- **Embed platforms with regional manufacturing partners**, support their sustainability for routine and outbreak deployment, and ensure they are ready for rapid, equitable use during emergencies.
- **Advance regulatory readiness** to evaluate vaccines developed on established platforms during the response to emerging viruses.
- **Build a knowledge base to inform platform and adjuvant selection** by generating the evidence needed to understand which technologies are most effective across different viral families.

From Platform to Production in 16 Days

In late 2025, an outbreak of Rift Valley fever (RVF) erupted in Senegal and spread to Mauritania. CEPI was already working with Oxford University on an advanced RVF candidate based on the ChAdOx1 viral vector vaccine platform, with a Phase 2 clinical trial beginning in July 2025 in Kenya. However, there were no additional doses of investigational vaccine available to conduct a clinical trial as part of the outbreak response.

In January 2024, CEPI had established a partnership with Serum Institute of India to enable CEPI-backed vaccine developers to quickly transfer their technology to Serum within days or weeks of an outbreak to begin rapid production. Serum already had extensive experience producing vaccines on the Oxford ChAdOx1 platform, having produced billions of COVID-19 vaccines during the pandemic as well as Lassa, Nipah and Ebola vaccines.

This deep experience with the platform enabled Serum to produce bulk vaccine for more than 400,000 doses of Oxford's RVF vaccine within 16 days of receiving the master virus seed from Oxford – a fraction of the time usually required. From this bulk material, some 12,000 doses were immediately filled and finished for potential use in a clinical trial in the outbreak zone, subject to the completion of quality control and sterility tests.

Production of the ChAdOx1 RVF vaccine in record time illustrates what can be achieved when capable vaccine manufacturers have access to, and are practiced in using, rapid response production platforms during public health emergencies. CEPI's goal is to ensure that by the end of 2031 manufacturers across its network of partners can replicate this performance with a wide range of rapid response production platforms.

The Approach in Action: CEPI's work on the platform technologies that are critical for rapid response

Nucleic acid (mRNA or DNA), viral vector and protein subunit vaccines are among the most important vaccine platforms relevant for outbreak response, and all were used during the COVID-19 pandemic to develop life-saving vaccines.

CEPI's projects include research on technologies such as:

mRNA platforms

Similar to the ones used in COVID-19 vaccines, these offer rapid design and manufacturing. CEPI is partnering with Moderna and BioNTech as well as others to use mRNA for H5N1, Mpox and Nipah, as well as potentially for a wider range of diseases.

Viral vector platforms

These include Merck's VSV, which is the basis for the highly effective licensed Ebola vaccine, and which is being used by IAVI to develop vaccines against Lassa, Marburg and Sudan; and the Oxford University-developed ChAdOx1, which was used successfully in vaccines for COVID-19 and is currently being used for vaccines against Lassa, Nipah and Rift Valley fever. Viral vector platforms are now being adapted for other high-threat diseases.

Protein subunit platforms

These are well established and can be made using existing equipment in many low- and middle-income countries. Such vaccines may require co-administration with an immune-stimulating adjuvant to elicit an effective immune response. CEPI supported multiple protein subunit COVID-19 vaccines to licensure, including those from SK bioscience, Clover, Novavax and Biological E, and is funding a number of broadly protective Coronavirus vaccine candidates on protein platforms. CEPI has also backed the University of Queensland molecular clamp platform that has recently been acquired by Sanofi.

Novel nanoparticle-based platforms

Technologies such as POP Bio's SNAP™, which is being assessed against Severe Fever with Thrombocytopenia Syndrome (SFTS) and H5N1, allow for rapid display of antigens and have shown promise in boosting the immune response. CEPI is also supporting other such nanoparticle platforms, including a broadly protective Filovirus candidate, developed by Stanford University, and a MERS candidate, developed by Uvax.

Networks: Executing the 100 Days Mission

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Transforming the concept of the 100 Days Mission into a workable reality requires more than just scientific innovation. It also **requires concerted, focused investment in the 'operational backbone' to ensure a fragmented system can work seamlessly when a new threat emerges**.

CEPI has a unique ability to bring different partners together and has built a distinctive set of networks. The shift in CEPI 3.0 will be to test, connect and operationalise them to create high-performing networks **that are country-owned, regionally anchored and globally connected**.

The Approach in Action: Global Networks to Accelerate Vaccine Development

CEPI and its global network partners are testing and demonstrating the interoperability of CEPI's networks – from vaccine design to manufacturing and testing – through a live-fire drill response using H5N1 as a simulated future pandemic threat.

- **Houston Methodist Research Institute** is designing an AI-optimised, broad-spectrum H5 influenza antigen.
- Vaccine Manufacturing Facility Network partner **Serum Institute of India** is developing and manufacturing AI-designed vaccines using its validated vaccine platform.
- Preclinical Models Network partner **UK Health Security Agency** is testing the vaccine's immunogenicity and efficacy in preclinical studies.
- Centralised Laboratory Network partner **Medicines and Healthcare Products Regulatory** Agency is confirming the vaccine in a validated potency release test.

This cross-network approach not only pressure-tests pandemic readiness but also identifies and addresses gaps in handoffs between partners, helping CEPI to streamline processes and transitions in preparation for a future infectious disease outbreak.

Map of selected CEPI network partners

CEPI's networks

Our networks span the critical set of product development capabilities required to produce vaccines rapidly and safely in response to outbreaks. These alliances strengthen every stage of the vaccine development pathway, from early immunogen design through manufacturing, preclinical and clinical evaluation to regulatory alignment. They include:

- **The Immunogen Design Consortium**: A collaborative initiative focused on designing and optimising vaccine antigens to ensure strong and durable immune responses against priority pathogens and a potential Disease X.
- **The Vaccine Manufacturing Facility Network**: A global alliance of manufacturers that works to improve rapid, equitable vaccine supply. This network also collaborates closely with the Regionalised Vaccine Manufacturing Collaborative and the WHO's mRNA technology transfer programme. CEPI's investments in global manufacturing are highly targeted: we do not build factories and, while we work closely with organisations that focus on long-term financing and buying vaccines at scale, CEPI's unique role is to help partners get ready to develop and produce vaccines quickly and safely. We do this by ensuring they have access to relevant rapid response platforms and opportunities to exercise using them – thereby improving processes and operational excellence. Where needed, CEPI can support technology transfer, the development of standards and assays, and planning for surge production.
- **The Preclinical Model Network**: An international alliance of 19 partners coordinating standardised, high-quality preclinical/animal models to accelerate vaccine development.
- **The Clinical Research Preparedness Network**: A multi-regional consortium that strengthens clinical trial readiness and infrastructure to enable rapid, high-quality evidence generation during outbreaks.
- **The Centralised Laboratory Network**: An alliance of more than 20 laboratories across the world that standardises the evaluation of immune responses to various vaccine candidates against priority pathogens and a potential Disease X.
- **The Regulatory Network**: An international collaborative of more than 40 regulatory authorities seeking alignment to accelerate vaccine development and enable rapid outbreak response.

The Lassa Coalition as a Model for Regional Health Security

In 2025, a new chapter in regional health security began with the launch of the Lassa Coalition. Spearheaded by the West African Health Organization and supported by national governments across Nigeria, Benin, Guinea, Liberia and Sierra Leone – alongside CEPI – the Coalition set out to tackle one of the region's most persistent threats.

In its first year, it shaped a pioneering policy research agenda for Lassa fever vaccines, secured vital co-financing commitments and built mechanisms for collaboration across borders. Looking ahead, under CEPI 3.0 we will work hand in hand with the Lassa Coalition to expand this effort into a broader regional platform – one capable of accelerating vaccine research, development and delivery for multiple pathogens. This model captures the essence of CEPI's 100 Days Mission: turning progress against one disease into preparedness for many, with regional leadership and equitable partnership to the fore.

By the end of 2031, CEPI will:

- **Test and accelerate readiness through exercises and real-world responses**: We will run tabletop exercises, functional drills and live-fire simulations with countries and regions to test CEPI-supported networks, validate plans, identify gaps and embed lessons learned.
- **Position CEPI's networks for rapid activation during outbreaks**: This will strengthen the core capabilities of each network and streamline coordination between them so they are ready to respond seamlessly.
- **Support long-term sustainability of networks as core components of regional R&D infrastructure**: We will facilitate use of the networks by developers across academia and the life sciences industry – whether or not they are CEPI-backed – for use both in and beyond outbreaks.
- **Secure access to regional manufacturing capacity during outbreaks**: By strengthening partnerships and facilities we will enable access to 1-2 billion doses of vaccine manufacturing capacity across multiple technologies and continents, supporting regional production, rapid scale-up and equitable access during outbreaks.
- **Demonstrate 100 Days Mission implementation at national level**: We will support countries to map capabilities, develop joint plans and test them through progressive exercises, building on pilots in Rwanda, South Korea and Indonesia.
- **Launch the 100 Days Mission Learning Network**: We will create a global platform to standardise knowledge, best practice and innovations that accelerate readiness and response.
- **Create practical tools for faster activation**: To ensure networks can connect and operate effectively, we will develop handbooks, standards and frameworks that define roles, decision points and protocols.

Starting Clinical Trials of a Marburg Vaccine within 10 Days

When Marburg struck Rwanda for the first time in September 2024, the country's response showed what preparedness means in the face of a deadly disease outbreak in real time.

Just weeks earlier, CEPI and Rwandan officials had run a tabletop simulation of a 100 Days Mission outbreak response. That theoretical but prescient exercise laid the groundwork for what happened next: within 10 days of Rwanda's detection of the Marburg outbreak, frontline health workers were being offered an investigational vaccine in a CEPI-supported clinical trial.

This rapid, coordinated and practiced response not only helped to contain the outbreak swiftly but also furthered the development of a candidate vaccine against Marburg – one that could protect communities and save lives in future outbreaks in Africa and beyond.

The experience showed how quickly and effectively investing in outbreak preparedness and building and testing 100 Days Mission capabilities can pay off.

"The partnerships and preparedness that helped bring this Marburg outbreak to such a swift end saved many lives in Rwanda and helped protect the rest of the world from a potentially catastrophic deadly epidemic."

– Dr Sabin Nsanzimana, Minister of Health for Rwanda.

A man receives a vaccine at King Faisal Hospital, Kigali as part of a Marburg clinical trial. Credit: Sabin Vaccine Institute.

Invest in Innovation: Creating Health Security for All

Invest in Innovation: Creating Health Security for All

Investors are the heart of CEPI's unique coalition and CEPI has raised more than US$4.25 billion to date from more than 30 national governments, the European Commission and numerous philanthropic organisations, predominantly the Gates Foundation and Wellcome Trust.

Our funding comes from a diverse set of countries with differing levels of income and is drawn from health, science, development and security budgets. Investing in CEPI is both an act of enlightened self-interest and a commitment to tackle a problem that, by its nature, requires strong and intricate international cooperation.

A US$2.5 billion funding request for readiness and security

CEPI's five-year strategy will transform the world's ability to safely tackle the threat of epidemics and pandemics. Through targeted investment, catalytic action, partnership and advocacy, CEPI will drive measurable progress to turn the pandemic-busting potential of the 100 Days Mission into a reality.

CEPI requires US$3.6 billion in total to deliver on the proposal outlined in this Investment Case. With US$1.1 billion already secured and committed, **CEPI is now seeking an incremental investment of US$2.5 billion** to unlock its new strategy to protect the world against epidemic and pandemic threats.

We will do this in three interconnected ways:

1) Vaccines: tackling known and emerging threats
Strengthen preparedness for known and unknown threats through an approach that delivers response-ready vaccines for known pathogens and ready-to-use knowledge and prototype vaccine designs for high-risk families. This will enable rapid response when new viruses emerge. It positions the world to close gaps systematically and provides a head start in responding to future Disease X threats. **CEPI will invest US$1.6 billion in this priority area, of which US$1.1 billion needs new funding.**

2) Platform technologies: accelerating vaccine development and production
Expand and strengthen a portfolio of proven vaccine production platforms that are ready and available to accelerate vaccine development and enable equitable access. **CEPI will invest US$360 million in this priority area, of which US$250 million needs new funding.**

3) Networks: executing the 100 Days Mission
Build, test and demonstrate 100 Days Mission capabilities within and beyond CEPI's R&D and manufacturing networks. This will ensure that those capabilities can be rapidly and reliably combined to translate scientific advances into timely, real-world impact. **CEPI will invest US$380 million in this priority area, of which US$260 million needs new funding.**

Another US$450 million (US$310 million new funding) will **fund cross-cutting capabilities**, including both the application of AI for vaccine development and protection against AI enabled threats, equity-by-design, and embedded biosecurity. Funding the CEPI organisation to deliver this programme, and to account for inflation and currency fluctuations, will cost US$800 million for the five-year period of which US$555 million needs new funding. The vast majority of operational expenditure is direct support for R&D and manufacturing programmes. In CEPI 2.0 the overhead costs average 5.5 percent of overall spend (and 4 percent in 2025), which is lean compared to comparable organisations.

Capital Allocation (2027–2031)

We plan to allocate around 60 percent of CEPI's 2027–2031 programmatic funding to vaccines that target the highest-risk viral families, including Filoviruses, Coronaviruses and Togaviruses, addressing current threats while strengthening pandemic preparedness. We will invest around 15 percent in scalable, rapid response vaccine platform technologies across multiple modalities to enable faster, more flexible outbreak control. A further ~15 percent will support national, regional and global preparedness networks – such as preclinical and central laboratory infrastructure – to ensure seamless end to end handover from immunogen design to product delivery. The remaining ~10 percent will fund cross cutting capabilities, including both the application of AI for vaccine development and protection against AI-enabled threats, equity-by-design, and embedded biosecurity.

60% Vaccines: tackling known and emerging threats

15% Platform technologies: accelerating vaccine development and production

15% Networks: executing the 100 Days Mission

10% Cross cutting capabilities

All investors contributing to CEPI's core funding pool are invited to join our Investors Council, which in turn elects four representatives to the CEPI Board, offering multiple levels of engagement with CEPI's operations and opportunities for guidance and oversight.

Funds provided to CEPI will be deployed by an organisation with a track record in delivering industry-standard R&D and manufacturing programmes without compromising on equitable access. CEPI operates with very low overhead compared with other global health organisations and has built a strong team of deeply experienced subject matter experts in both the technical and strategic aspects of epidemic and pandemic preparedness. CEPI's leadership team and Board comprise some of the most important thought leaders and executives working on epidemic and pandemic preparedness and response over the last two decades, and they benefit from the expertise of world-class scientific advisors on CEPI's Scientific Advisory Committee.

Innovation and Equity in Action: Lives Protected, Futures Secured

Innovation and Equity in Action: Lives Protected, Futures Secured

Since its founding in 2017, CEPI has become a vital part of the world's health security system. CEPI's mission to develop medical tools for rapid, equitable responses to epidemics and pandemics means working with over 470 partners worldwide, tackling today's threats and preparing for tomorrow's, putting equity, innovation and regional resilience at the heart of everything we do.

Over the past decade, CEPI has mobilised more than US$4.25 billion, supported the development of **over 50 vaccine candidates and more than 25 platform development projects/candidates**, and – in collaboration with partners – has helped establish geo-diverse R&D and manufacturing capacity.

Importantly, CEPI has embedded equitable access into its efforts from the outset through deep partnerships that enable the right products to be developed and made available at the right time and price, and which are sustainable over the long term.

Suprabhat / Shutterstock

Key milestones have included:

CEPI 1.0 (2017–2021)

CEPI was established as an innovative global coalition focused on epidemic preparedness, delivering historic firsts such as the first Lassa and Nipah vaccine candidates entering Phase 1 trials and the launch of ENABLE, the world's largest Lassa epidemiology study.

COVID-19 response

CEPI moved rapidly, providing early at-risk funding for vaccine candidates, co-leading the establishment of COVAX and supporting global manufacturing scale-up to expand access in low- and middle-income countries. CEPI supported 14 vaccine candidates, including the first AI-designed vaccine; four achieved WHO Emergency Use Listing and three received domestic approval. COVAX delivered nearly 2 billion doses to 146 countries, averting 2.7 million deaths.

The 100 Days Mission

In 2021, CEPI inspired the world by articulating the goal of developing and authorising safe, effective and accessible vaccines within 100 days of identifying a new pandemic threat.[10] Governments, industry and civil society have since embraced and embedded this goal in their own strategies.[11]

CEPI 2.0 (2022–2026)

Focused on investing in the building blocks needed to make the 100 Days Mission a reality, CEPI expanded vaccine development investments, rapid response platforms and next-generation vaccine innovations, and it established several R&D and manufacturing networks. The coalition advanced multiple firsts for pathogens, including the first vaccines against Lassa, Nipah and MERS to enter Phase 2 trials, and it supported technology transfer of the first licensed Chikungunya vaccine to endemic manufacturers. CEPI initiated work against viral families by focusing on prototype pathogens. It also expanded its understanding of what it takes to achieve the 100 Days Mission by testing capabilities through responding to real-world outbreaks and by initiating work on prototype pathogens for viral families.

10. 100 Days Mission to respond to future pandemic threats – A report to G7 by the pandemic preparedness partnership. Available at: https://www.gov.uk/government/publications/100-days-mission-to-respond-to-future-pandemic-threats

11. Countries including the UK, Japan, Rwanda, India, South Korea, Singapore, Canada, South Africa, Brazil, France, Germany, Italy, US, Saudi Arabia, Australia, Russia, UAE, Netherlands, Ireland and Malaysia have engaged with or endorsed the 100 Days Mission, including through the G7 and G20, as well as through national activities or strategies. (Reference: tracking by International Pandemic Preparedness Secretariat; noting that Member State engagement is administration dependent)

Case Study: Lassa – Trials Bring Hope to West Africa

First participant vaccinated in a Phase 1 clinical study of the IAVI Lassa fever vaccine in the PREVAIL clinic, Redemption Hospital, Liberia. Credit: PREVAIL, an IAVI partner.

Across West Africa, Lassa fever has been a source of fear and tragedy since it was first identified in Nigeria in 1969. Millions of people are at risk of acquiring this rat-borne virus, with hundreds of thousands of cases and thousands of deaths recorded across the region each year. For doctors like Dr Kumblytee Johnson in Liberia, the impact is both professional and personal – she regularly witnesses patients suffering and families losing loved ones.

But hope is growing. CEPI is the world's leading funder of Lassa research, supporting on-the-ground scientific studies that are closer than ever to delivering protection. The first mid-stage trials of a candidate Lassa vaccine are underway in the countries where the disease hits hardest. These trials, along with other CEPI-backed projects, including one exploring rapid response mRNA technology, are not only paving the way for a licensed vaccine that could save thousands of lives, but are also changing the development model to one where end-to-end research is being conducted in the most affected countries.

The benefits go far beyond West Africa. Deep research into Lassa is helping scientists understand the wider Arenavirus family, building a knowledge base that will help defend against future epidemics and pandemics sparked by new Arenaviruses or variants.

"On the day this vaccine is licensed and starts to be used in clinics, I will feel very good. It will prove that research is saving lives and improving global health." – Dr Kumblytee Johnson

Case Study: Nipah – Closing in on a Lethal Threat

First person in the world to receive a Phase II Nipah vaccine dose at icddr,b. Credit: The University of Oxford.

Nipah virus is one of the world's most lethal pathogens, with death rates of up to 75 percent among those infected. Its natural hosts, fruit bats, range across regions home to billions of people, making the risk of spillover and outbreaks a constant threat.

That's why CEPI has built a US$150 million programme for solutions, including a candidate Nipah vaccine developed by the University of Oxford and manufactured by Serum Institute of India. This vaccine – ChAdOx1 NipahB – is now being tested in Bangladesh as the first Nipah vaccine to reach mid-stage clinical trials. Meanwhile, the same project aims to create an investigational reserve of up to 100,000 doses for rapid deployment under a research protocol during future outbreaks.

Because vaccines can take time to generate immunity, CEPI is also funding the development of an antibody treatment designed to protect people immediately after exposure – a critical bridge for frontline workers. Early- to mid-stage trials of this treatment are expected to start in a Nipah-affected country in 2026.

Together, a ready-to-deploy vaccine and fast-acting antibody will offer a protective shield to contain outbreaks quickly, while building regional know-how to respond to Nipah and other related Paramyxoviruses.

Case Study: Rift Valley fever – Protecting People and Livestock

Manufacturing line at Serum Institute of India's Pune facility. Credit: Serum Institute of India.

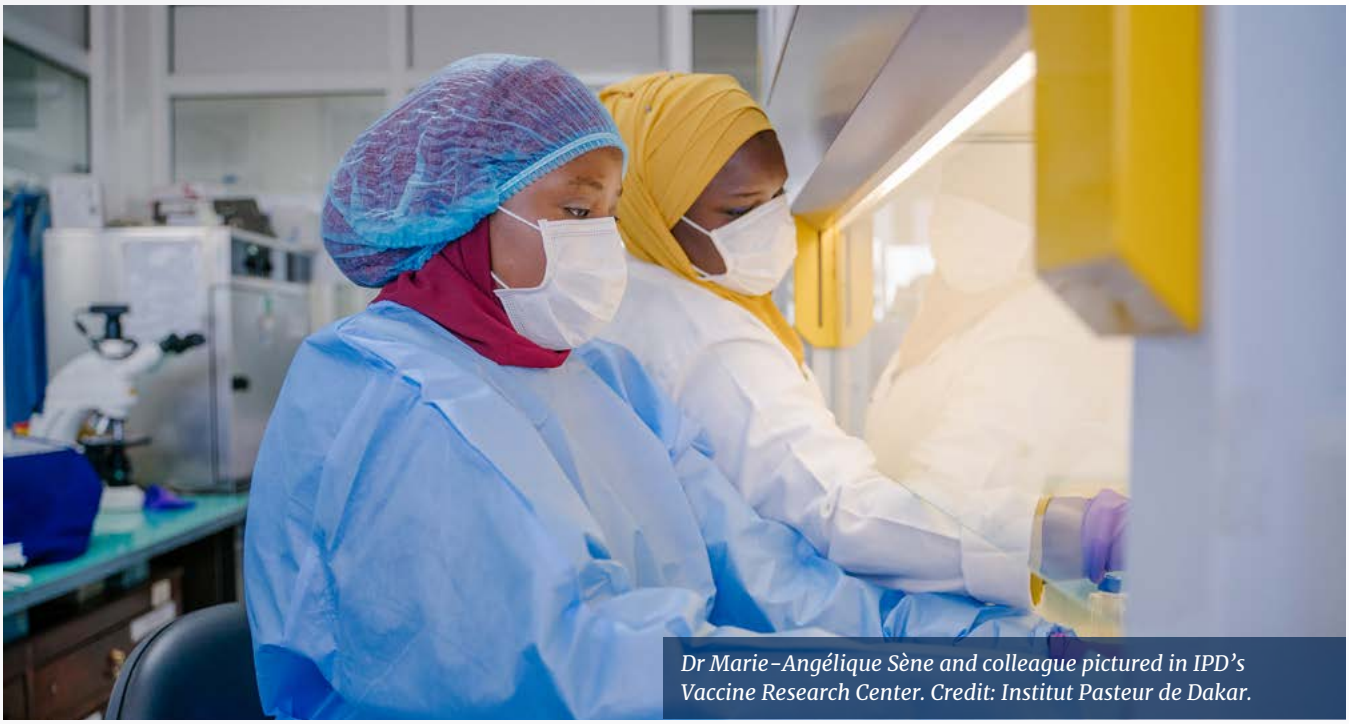
In sub-Saharan Africa, Rift Valley fever is a threat not just to people, but also to the animals farmers depend on for their livelihood. Spread by mosquitoes, the disease causes severe illness in humans and devastating losses in livestock – threatening food and financial security.

Professor George Warimwe, who grew up in Kenya in a family partly reliant on livestock, was inspired to study Rift Valley fever and find ways to reduce its impact. Now, with CEPI's backing, Warimwe is leading a first-of-its-kind clinical trial in Kenya of a candidate vaccine that could offer protection for both people and animals.

Outbreaks are already expanding into new areas and erupting in larger waves, such as the one in Senegal and Mauritania in 2025. CEPI's work on this outbreak demonstrates the power and pace of its approach: CEPI had been working with Oxford on a Phase 2 candidate, with clinical trials under way in Kenya. With insufficient doses of investigational vaccine available to be used in a clinical trial for the Senegal and Mauritania outbreak, CEPI turned to its manufacturing partner, Serum Institute of India, which had the requisite ChadOx1 platform technology already well developed and used for other vaccines.

Thanks to its knowledge and ability to rapidly allocate capacity, Serum was able to produce bulk vaccine for 400,000 doses of Rift Valley fever investigational vaccine in only 16 days, a fraction of the time usually taken.

Case Study: Manufacturing – Strengthening Vaccine Independence



Dr Marie-Angélique Sène and colleague pictured in IPD's Vaccine Research Center. Credit: Institut Pasteur de Dakar.

One of the ugliest aspects of the COVID-19 pandemic was the vaccine nationalism that left millions waiting far too long for help. Because the world's vaccine production capacity was largely concentrated in just a few areas, the countries and regions with that capacity looked after their own interests first, leaving much of the world unprotected.

This meant that, as the pandemic unfolded, millions of people across Africa watched and waited, knowing that every delay meant more lives at risk. The COVID-19 crisis made it painfully clear that in future the continent could not defend itself against disease threats by relying on suppliers in far-off countries.

Changing this dependency for good is a key element of CEPI's mission. An early partner in making that change is Senegal's Institut Pasteur de Dakar (IPD) which is expanding its manufacturing capacity and integrating new rapid response platforms with CEPI's support. With flexibility to pivot quickly to new threats, IPD is helping Africa build vaccine sovereignty – not just for routine immunisation but for the next Disease X epidemic or pandemic.

IPD's expansion is part of a wider transformation in regional vaccine manufacturing, with CEPI also backing hubs in India, Indonesia, South Africa and Brazil. By building this network, CEPI is helping to ensure that next time, no region is left behind.

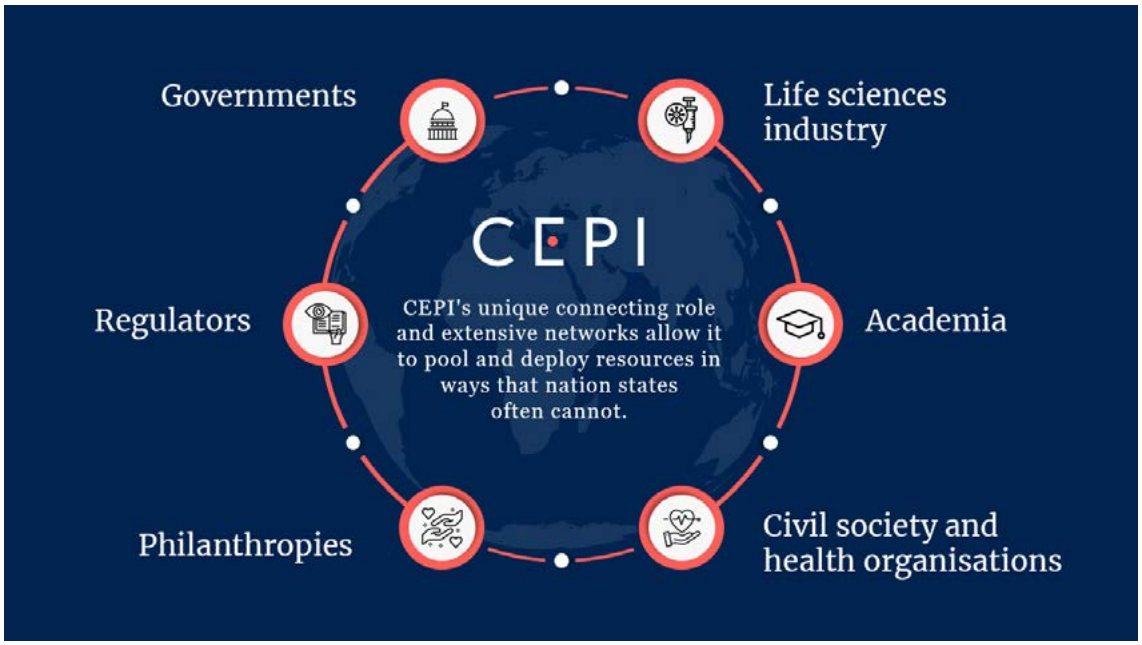
Annexes

1. Composition of the CEPI Coalition

CEPI is an innovative global partnership between public, private, philanthropic and civil society organisations. We're working to accelerate the development of and equitable access to vaccines and other biologic countermeasures against emerging infectious diseases.

As a globally recognised organising force for R&D collaboration and innovation, CEPI is uniquely placed to coordinate an international approach to epidemic and pandemic preparedness. We are a trusted partner helping donors build a more coherent, effective and equitable global health architecture – anchored in rapid R&D and the 100 Days Mission. In particular, CEPI offers a global focus on equitable access and the agility to move quickly.

CEPI leverages its unique connecting role and extensive networks to pool and deploy resources in ways that nation states often cannot.



CEPI is a Norwegian Association and its primary governing body is the CEPI Board. The Board has 12 voting members (four investors and eight independent members, representing competencies including the life sciences industry, global health, science, resource mobilisation and finance) and five observers. CEPI also has four Board Committees: Executive and Investment; Nominations, Compensation, Diversity and Inclusion; Audit and Risk; and Equitable Access. The Board appoints additional members or advisers to committees to expand expertise as needed.

The CEPI Board Committees
CEPI's Executive and Investment Committee provides strategic guidance to the CEO. It approves investment decisions up to US$50 million or as delegated by the Board, engages on critical strategy and policy topics, approves formal policies and addresses arising matters.

The responsibilities of CEPI's Nominations, Compensation, Diversity and Inclusion Committee include, but are not limited to, nominations of Board members and oversight of the competency matrix of the Board, reviewing total compensation for CEPI employees and for the Executive team and supporting CEPI's work to develop a diverse and inclusive work force.

The Audit and Risk Committee provides governance oversight of CEPI's internal and external audit processes and plays a major role in the development and oversight of risk. The Committee also reviews and monitors CEPI's budget and financial activities and reviews and receives reports of activities relating to compliance, whistleblowing and fraud.

The Equitable Access Committee oversees CEPI's approach to enabling equitable access and the implementation of CEPI's Equitable Access Policy and Framework.

Investors Council
The Investors Council is a permanent body established under CEPI's Articles of Association and is composed of representatives of legal entities that contribute to CEPI's general fund.[12] The Investors Council serves as the formal platform for engagement with CEPI governance bodies, receiving regular updates and providing guidance on the management and oversight of activities and – at each investor's discretion – supporting resource mobilisation efforts. It elects four investor representatives to the CEPI Board, three from sovereign/international organisation investors and one from foundation/NGO investors.

Crucially, the Investors Council holds pre-approval rights over any single proposal by the CEO to commit CEPI funds exceeding US$100 million before the Board takes its final decision. Further information is available in CEPI's Investors Council Terms of Reference.[13]

The Scientific Advisory Committee
The Scientific Advisory Committee (SAC) is an independent body within CEPI. The SAC provides scientific support, advice and challenge to the CEPI Leadership and Board on a range of scientific issues related to vaccine R&D and manufacturing to support the effective implementation of CEPI's strategic objectives.

Joint Coordination Group
The Joint Coordination Group (JCG) is a roundtable of independent institutions that are critical access partners with an interest in seeing CEPI's vaccines successfully developed and deployed in an outbreak. The JCG includes global health, science and development organisations that play important roles in the end-to-end vaccine lifecycle. It meets to discuss and implement activities related to the development of CEPI-funded vaccines and technologies, from early R&D, through to manufacturing, procurement, distribution and administration. Its work helps to maximise fast and equitable access to CEPI-funded vaccines and other countermeasures.

12. https://static.cepi.net/downloads/2025-08/CEPI's%20Articles%20of%20Association_April%202025.pdf
13. https://static.cepi.net/downloads/2023-12/CEPI-Investors-Council-Terms-of-Reference_07-December-2022_FINAL.pdf

As of January 2026, JCG members include:

- Africa Centres for Disease Control and Prevention (Africa CDC)
- African Vaccine Regulatory Forum (AVAREF)
- Developing Countries Vaccine Manufacturers Network (DCVMN)
- European Medicines Agency (EMA)
- FIND, the global alliance for diagnostics
- Gavi, the Vaccines Alliance
- Health Emergency Preparedness and Response Authority (HERA)
- International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- Médecins Sans Frontières (MSF)
- Pan American Health Organization (PAHO)
- UNICEF
- US Food and Drug Administration (FDA)
- Wellcome Trust
- World Bank
- World Health Organization (WHO)

2. Viral families and priority pathogens

CEPI 3.0 demonstrates strong alignment with global pandemic preparedness priorities by targeting the majority of viral families identified by the WHO as posing the most significant threats. By focusing on entire viral families rather than isolated pathogens, CEPI is building adaptable scientific and operational platforms that can be leveraged to address both current and future viral risks. This approach means CEPI's strategy covers approximately 75 percent of the viral families prioritised as highest risk by global scientific experts, including Arenaviridae, Filoviridae, Coronaviridae, Paramyxoviridae, Phenuiviridae, Nairoviridae, Hantaviridae, Poxviridae and Togaviridae. Within these families, CEPI is actively addressing high-risk pathogens such as Ebola, Marburg, Lassa, Nipah, MERS, SARS, Mpox, CCHF and Chikungunya. However, several important families – such as Orthomyxoviridae, Flaviviridae and Picornaviridae – remain outside CEPI's current scope, representing ongoing strategic gaps that a fully funded CEPI 3.0 strategy may be poised to fill.

Despite covering a significant portion of viral family R&D, we cannot stop every outbreak at its source. However, the world will have a critical headstart because of CEPI: R&D, improved vaccine platforms and strengthened networks and response capabilities developed for one pathogen can be rapidly adapted to related viruses within the same family. This enables CEPI to respond quickly and efficiently to both known and unknown threats, maximising the impact of its investments and strengthening global pandemic preparedness. By leveraging shared scientific insights and operational efficiencies across family members, CEPI will ensure greater agility and resilience in the face of evolving viral threats and improve pandemic readiness.

Table: Summary of CEPI priority pathogens, associated viral families and programmes targeting broadly protective vaccines within the viral families

Viral family	Current CEPI priority pathogens (and programmes targeting broadly protective vaccines within the viral families)	Risk of viral family posing Public Health Emergency of International Concern (PHEIC) according to WHO*
Arenaviridae	• Lassa fever • Junin	High
Coronaviridae	• MERS-CoV	High
Filoviridae	• Ebola Zaire • Marburg • Broadly protective Filovirus vaccines	High
Non-Arenavirus Bunyaviricetes	• Rift Valley fever • Crimean-Congo Haemorrhagic fever (CCHF) • Severe Fever with Thrombocytopaenia Syndrome (SFTS)	High

Paramyxoviridae	·	Nipah	High
Poxviridae	·	Mpox	High
Togaviridae	·	Chikungunya	High

As well as the viral families above, and subject to available resources, CEPI may also directly invest in research on additional viral families, guided by the evolving threat landscape, feasibility, funding availability and regional priorities. Our initial assessment suggests that Flaviviruses and Orthomyxoviruses may be strong candidates for inclusion.

**Risk classification as reported in the 2024 WHO Pathogen Prioritisation (accessed Jan 12, 2026: https://cdn.who.int/media/docs/default-source/consultation-rdb/prioritization-pathogens-v6final.pdf).*

The special case of flu

Influenza is widely regarded as the most likely cause of the next pandemic, and we agree with the scientific consensus that flu is one of the most important threats we face and the only disease that we can say with certainty will cause a future pandemic. Because of this, there has long been significant investment in this space and much effort, particularly in high-income countries and through multilateral channels, to promote preparedness.

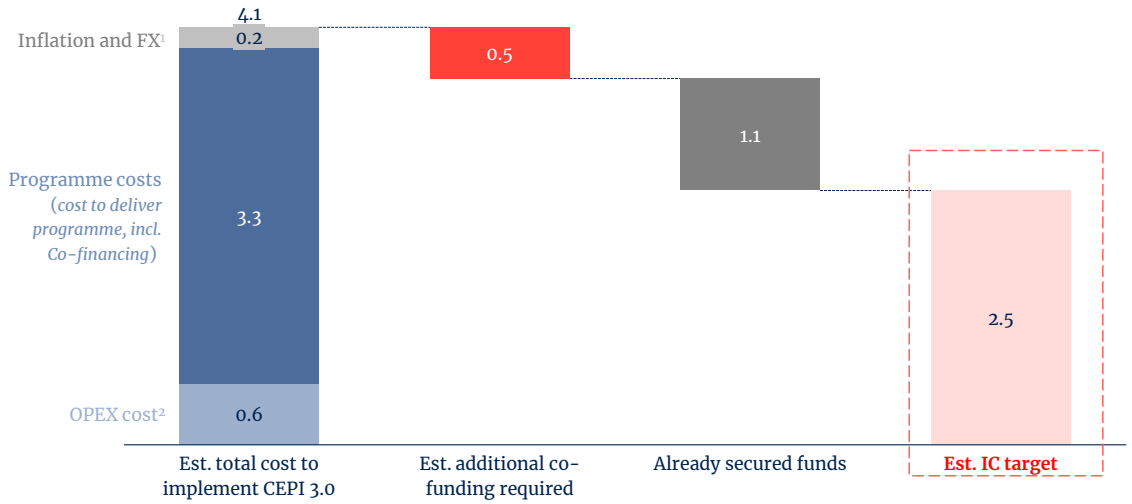
Through its investments, CEPI has provided added value both directly and indirectly. For example, it has supported CEPI's partners to use flu as a pathogen with established correlates of protection when demonstrating platform or manufacturing capabilities. It has also made investments that are accomplishing CEPI's other objectives – enhancing system readiness, enabling rapid manufacturing and access to vaccines for lower-income countries, or preparing for the rapid execution of clinical trials.

CEPI's support for the Phase 3 clinical trial of Moderna's H5N1 vaccine, the early-stage development of which was supported by the US government, aims to deliver the world's first mRNA pandemic flu vaccine, representing a huge head start should an avian influenza pandemic emerge. The project leverages CEPI's longstanding strategic partnership with Moderna and will substantially enhance global preparedness for avian influenza by securing supply commitments for lower- and middle-income countries should an avian influenza pandemic materialise. This late-stage direct investment was undertaken in close consultation with the CEPI Board.

3. Projected spend per strategic area for CEPI 3.0

CEPI assesses that approximately US$2.5 billion of new funding is required to deliver CEPI 3.0 (see breakdown in below figure). This has been informed by a set of costing models that provide an evidence base for the CEPI 3.0 Investment Case. Costing is based on a combination of historical data and external benchmarks to estimate costs to deliver the 3.0 programme. This approach is consistent with methodologies employed by comparable organisations to develop their strategic investment cases.

The breakdown of the estimated total cost to implement CEPI 3.0 (2027-31), *US$ billion*



1. The target includes a conservative estimate of inflation and FX of US$0.2 billion consistent with sector standards and tailored to CEPI's context
2. OPEX estimations range from US$0.5-0.7 billion

CEPI developed specific models for assessing programmatic and operating costs. The programmatic model encompasses the three priority areas: vaccines and viral families; platform technologies; and networks, as well as other material cost areas including AI and the 100 Days Mission toolkit, which includes enabling projects in our current portfolio. This approach was also used to factor in existing activities such as biosecurity and Global South partner investments.

Based on the models developed, programme costs are predominantly driven by vaccines and viral families (approximately 60 percent of total programme costs), platform technologies (approximately 15 percent) and networks (approximately 15 percent), reflecting CEPI's strategic priorities for 3.0 (see table).

This allocation enables CEPI to advance numerous critical activities in the CEPI 3.0 strategy. These include: bringing priority pathogen programmes to critical endpoints; expanding to a viral family approach; strengthening platform technologies and manufacturing capabilities; building, testing and demonstrating 100 Days Mission capabilities within, across and beyond CEPI's R&D and manufacturing networks; and integrating cutting-edge tools to

accelerate vaccine development while building regional capacity.

Assuming a fully funded strategy, costs are broadly distributed across viral families in priority area 1. Informed by CEPI's current portfolio, Arenaviruses and Coronaviruses show higher projections than others, but no single family dominates the strategic cost model. Additional vaccine exemplar investments (US$200 million) remain unassigned by design: future portfolio review and prioritisation decisions will inform choices. Enabling sciences and access costs (US$300 million) are cross-cutting across families.

For certain activities in the strategy, our approach included several assumptions of the need to catalyse co-funding, for example in Lassa late-stage development, where those investments are substantial, and in other select areas such as platforms, networks and capabilities and AI, which may lend themselves to specific interest from other funders outside of the CEPI common pool. In these areas, CEPI would plan to pursue co-funding arrangements with partners. In some instances, for example Lassa, this work is already underway and in others, for example the AI Pandemic Preparedness Engine, it is actively being conceptualised and will support regional diversification.

For purposes of cost modelling, CEPI's technical working groups estimated the percentage costs of these activities that would require co-funding to achieve the 3.0 ambition. Specific opportunities to secure co-funding will be further developed during resource mobilisation and programmatic implementation planning in 2026.

The costs and percentages in the table below represent these projected estimates. We assess that the exact nature of co-funding will differ across areas, based on the type of activity and stakeholder landscape. We assess that a lack of co-funding will not jeopardise a priority area in its entirety and CEPI would modulate its ambition contingent on those additional resources.

Funding the CEPI organisation to deliver this programme, and to account for inflation and currency fluctuations, will cost US$800 million for the five-year period of which US$555 million needs new funding. The vast majority of operational expenditure is direct support for R&D and manufacturing programmes. In CEPI 2.0 the overhead costs average 5.5 percent of overall spend (and 4 percent in 2025), which is lean compared to comparable organisations.

Costed area	Estimated CEPI funding [of which new funding] (excl. co-funding; US$ million)	Estimated co-funding (US$ million)	Total programme costs (US$ million)
Strategic area 1: Vaccines and viral families	1616 [1122]	340	1956
Priority pathogen programmes to 3.0 endpoints*	906	240	1146
Expanding to viral families (1. Immunogen design; 2. Exemplar vaccines up to Phase 1)	330	..	330
New viral families to be decided	87	..	87
Enabling Science, evidence generation/ post-market studies and access projects	292	100	392

Strategic area 2: Platforms	359 [249]	50	409
Potential platform investments (i.e., pre-licensure, next-generation, supports a range of preparedness and response use cases)	205	..	205
Manufacturing innovations	85	..	85
Innovative processes	19	..	19
Platform integration into Global South	50	50	100
Strategic area 3: Networks	379 [263]	81	463
Expanding and advancing existing R&D and manufacturing networks	263	45	308
Tools, Capability Handbook and Operational Handbook	2	..	2
Simulated and real-world exercises to test, demonstrate and accelerate readiness	114	36	150
Other material programmatic costs	449 [310]	33	481
AI	109	33	142
100 Days Mission toolkit	152	..	152
Other 3.0 priorities†	188	..	188
Other costs	800 [555]	..	..
Estimated Opex	600	..	..
Assumption for inflation/foreign exchange rates	200	..	..
Total	**3602 [2500]**	**505**	**4107**

**Costs include Lassa fever (endpoint: licensure; US$268 million and US$240 million of co-financing); Filovirus (licensure – updated ERVEBO vaccine against Ebola and vaccine against Marburg plus progression of proof of concept broadly protective filovirus vaccines to Phase 1; US$94 million); Nipah virus (Phase 2a proof of concept plus investigational ready reserve (IRR); US$130 million); Mpox (Phase 2a proof of concept plus expanded access for licensed vaccines; US$44 million); Chikungunya (LMIC approvals, WHO pre-qualification; US$33 million); Rift Valley fever (Phase 2a proof of concept and IRR; US$70 million); Coronavirus (broadly protective Coronavirus vaccine candidate to Phase 1 proof of concept and MERS Phase 2a proof of concept and IRR; US$269 million).*

†Reserved to develop innovative medical countermeasures against novel or AI-enabled threats (US$100 million); Global South activities (US$54 million); Biosecurity programmes (US$20 million); and convening and events (US$14 million).

In addition to the programmatic costs, CEPI anticipates:

- *US$0.6 billion operational expenditure – final estimated cost to be determined based on implementation planning. The vast majority of operational expenditure is direct support for R&D and manufacturing programmes. In CEPI 2.0 the overhead costs average 5.5 percent of overall spend (and 4 percent in 2025), which is lean compared to comparable organisations.*
- *US$0.2 billion assumed for inflation and/or foreign exchange rate/currency value fluctuation*

The total cost of CEPI 3.0 is US$4.1 billion, of which CEPI will spend US$3.6 billion and US$0.5 billion will be co-funded. CEPI has existing commitments from investors of US$1.1 billion and therefore seeks to raise US$2.5 billion to execute CEPI 3.0.

4. Risk management and mitigation

Managing and reducing risk is at the core of CEPI's mission and how it works. CEPI's investments are targeted towards significant and major risks, and the CEPI 3.0 strategy was developed through extensive consultation and consideration of where CEPI should focus its efforts.

To ensure continued relevance and effectiveness, CEPI will systematically anticipate and monitor risks that could materially affect the feasibility, prioritisation or impact of CEPI 3.0. This includes structured horizon-scanning across geopolitical, economic, scientific, technological, environmental and societal domains, drawing on internal analysis, partner intelligence and external expert inputs. Particular attention will be paid to developments that could alter the threat landscape, constrain or enable financing, reshape regulatory or policy environments, or accelerate technological change – including advances in AI and biotechnology. This forward-looking approach will allow CEPI to identify emerging opportunities and risks early, rather than reacting once they have already begun to affect delivery.

CEPI will define and track a set of strategic triggers that signal when assumptions underpinning the strategy may no longer hold or when the balance of risks and opportunities has shifted. These triggers may include major outbreaks or near-miss events, significant changes in funding conditions, breakthroughs or setbacks in key technologies, regulatory or normative shifts, or material changes in partner capacity or behaviour. Where such triggers arise and are assessed to affect CEPI's ability to deliver its intended impact, CEPI will undertake off-cycle strategic reassessments. These reassessments will be proportionate and targeted – focused on adjusting priorities, sequencing, delivery approaches or partnerships – to ensure agility without undermining strategic coherence.

Portfolio risk and attrition

CEPI manages its vaccine R&D portfolio in line with industry best practice, recognising that risk and attrition are inherent and must be handled at the portfolio level. This includes a deliberately structured portfolio cycle, an Annual Portfolio Review, continuous analytical monitoring of risk and value, and strong governance from internal and world leading external experts.

Risk management is embedded throughout implementation and annual planning, with systematic identification and mitigation of operational, financial, partnership and external risks. Clear ownership and escalation pathways ensure issues are addressed early, while risk assessments inform planning, portfolio adjustments and investment decisions. This integrated approach enables CEPI to stay flexible and responsive while ensuring value for money and alignment with long term goals – keeping CEPI 3.0 resilient, adaptive and positioned to deliver impact in an increasingly uncertain global environment.

5. Resources and existing pledges: CEPI 1.0, 2.0, COVID-19 vaccines portfolio and 3.0

CEPI's funding model is truly multi-sector, drawing not only on Official Development Assistance (ODA) but also on substantial contributions from ministries of research and science, health and foreign affairs, as well as philanthropies – reflecting broad commitment to global epidemic preparedness.

US$ million[3]	CEPI 1.0* contributions[1]			CEPI 2.0** contributions[1]			CEPI 3.0***			Grand
Investors	COVID-19 vaccines portfolio	CORE portfolio	Total	COVID-19 vaccines portfolio[4]	CORE portfolio[4]	Total	Contribu-tions[1]	Pledges[2]	Total	Total
Government of Australia	4.81	4.55	9.36	-	73.73	73.73	-	-	-	83.09
Government of Austria	1.80	0.45	2.25	-	5.25	5.25	-	-	-	7.49
Government of Belgium	5.45	0.59	6.04	-	-	-	-	-	-	6.04
Government of Canada[5]	66.28	18.60	84.88	-	73.94	73.94	-	-	-	158.82
Government of Denmark	-	1.48	1.48	-	-	-	-	-	-	1.48
Government of Ethiopia	-	0.30	0.30	-	0.30	0.30	-	-	-	0.60
Government of Finland	3.39	2.26	5.65	-	6.56	6.56	-	-	-	12.21
Government of Germany	257.66	106.85	364.51	232.24	97.84	330.08	81.32	-	81.32	775.91
Government of Greece	-	1.69	1.69	-	-	-	-	-	-	1.69
Government of Hungary	0.82		0.82	-	-	-	-	-	-	0.82
Government of Iceland	1.96	-	1.96	-	-	-	-	-	-	1.96
Government of Indonesia	-	1.00	1.00	-	5.00	5.00	-	-	-	6.00
Government of Italy[6]	9.88	1.10	10.97	4.88	23.08	27.96	-	-	-	38.93
Government of Japan	96.27	125.00	221.27	-	300.00	300.00	-	-	-	521.27
Government of Kuwait	10.00	-	10.00	-	-	-	-	-	-	10.00
Government of Lithuania	0.11		0.11	-	0.22	0.22	-	-	-	0.33
Government of Luxembourg	0.87	-	0.87	-	1.07	1.07	-	-	-	1.94
Government of Malaysia	-	3.00	3.00	-	3.00	3.00	-	-	-	6.00

US$ million[3]	CEPI 1.0* contributions[1]			CEPI 2.0** contributions[1]			CEPI 3.0***			Grand
Investors	COVID-19 vaccines portfolio	CORE portfolio	Total	COVID-19 vaccines portfolio[4]	CORE portfolio[4]	Total	Contribu-tions[1]	Pledges[2]	Total	Total
Government of Mexico	–	0.60	0.60	0.30	1.00	1.30	–	–	–	1.90
Government of Netherlands	53.68	1.10	54.77	–	14.14	14.14	–	–	–	68.91
Government of New Zealand	8.17	0.91	9.08	–	6.86	6.86	–	–	–	15.94
Government of Norway[7]	211.06	183.00	394.06	67.73	111.55	179.28	–	–	–	573.34
Government of Panama	–	0.015	0.015	–	–	–	–	–	–	0.015
Government of Philippines	–	–	–	0.01		0.01	–	–	–	0.01
Government of Portugal	–	–	–	0.35	–	0.35	–	–	–	0.35
Government of the Republic of Korea	–	9.00	9.00	–	60.89	60.89	–	–	–	69.89
Government of Romania	–	0.22	0.22	–	–	–	–	–	–	0.22
Government of Senegal			–	–	1.00	1.00	–	–	–	1.00
Government of Serbia	1.21	–	1.21	–	–	–	–	–	–	1.21
Government of Singapore	0.21	1.80	2.01	1.50	13.50	15.00	–	–	–	17.01
Government of Spain[8]			–	–	85.25	85.25	–	–	–	85.25
Government of Switzerland	8.31	2.08	10.39	–	22.70	22.70	–	–	–	33.09
Government of the United Kingdom	274.81	38.10	312.91	22.27	211.64	233.90	–	–	–	546.82
Government of the United States of America	–	12.00	12.00	50.00	155.00	205.00	–	–	–	217.00
Kingdom of Saudi Arabia	148.00	2.00	150.00	–	–	–	–	–	–	150.00
European Commission[9]	109.73	82.96	192.69	–	105.39	105.39	–	–	–	298.08
Total Public investors	**1,274.46**	**600.65**	**1,875.11**	**379.28**	**1,378.90**	**1,758.18**	**81.32**	**–**	**81.321**	**3,714.608**

US$ million[3]	CEPI 1.0* contributions[1]			CEPI 2.0** contributions[1]			CEPI 3.0***			Grand
Investors	COVID-19 vaccines portfolio	CORE portfolio	Total	COVID-19 vaccines portfolio[4]	CORE portfolio[4]	Total	Contribu-tions[1]	Pledges[2]	Total	Total
Avast	8.00	-	8.00	-	-	-	-	-	-	8.00
Gates Foundation[10]	20.00	100.00	120.00	-	155.28	155.28	-	-	-	275.28
Fidelity Charitable gift funds	1.50	-	1.50	-	-	-	-	-	-	1.50
Goldman Sachs Gives	1.63	-	1.63	-	-	-	-	-	-	1.63
Nestle	1.04	-	1.04	-	-	-	-	-	-	1.04
Sumitomo Mitsui Banking Corporation	1.14	-	1.14	-	-	-	-	-	-	1.14
The Paul G. Allen Family foundation	3.50	-	3.50	-	-	-	-	-	-	3.50
UN Foundation C19 Solidarity Fund	10.00	-	10.00	-	-	-	-	-	-	10.00
Wellcome Trust[11]	-	88.41	88.41	25.00	167.50	192.50	-	-	-	280.91
Other Private Investors and Philanthropies[12]	2.00	-	2.00	1.28	-	1.28	-	-	-	3.28
Total Private investors and Philanthropies	**48.81**	**188.41**	**237.22**	**26.28**	**322.78**	**349.06**	**-**	**-**	**-**	**586.28**
Total contributions and pledges	**1,323.27**	**789.06**	**2,112.33**	**405.55**	**1,701.69**	**2,107.24**	**81.32**	**-**	**81.32**	**4,300.89**

** CEPI 1.0 covers CEPI's first strategic five-year period, from 2017–2021. The columns include COVID-19 ACT Accelerator contributions and pledges made in 2020.*
*** CEPI 2.0 covers CEPI's second strategic period, from 2022–2026. The columns include contributions to CEPI allocated towards COVID-19 ACT-Accelerator work in 2021 that count as down payments towards CEPI 2.0, and funding pledges made to CEPI towards CEPI 2.0.*
**** CEPI 3.0 covers CEPI's third strategic period, from 2027–2031. The column includes early pledges made during 2025–2026 towards CEPI 3.0.*

Notes

1. *'Contribution' means a pledge that has been converted into a fully signed financial contribution agreement between the investor and CEPI and that contributions have been made to CEPI as specified by the terms of the agreement.*
2. *'Pledge' means a publicly announced amount of funding that is pledged to CEPI.*
3. *Contributions for CEPI 1.0 before 2020 use the exchange rate on the date pledges were signed into financial contribution agreements. Contributions for CEPI 1.0 after 2020, for CEPI 2.0 and for CEPI 3.0 use pledge-date exchange rates.*
4. *Includes pledges made through at the Global Pandemic Preparedness Summit on 7–8 March 2022.*
5. *Excludes CA$1.0 million for the development and implementation of the CEPI Biosecurity strategy in September 2023.*
6. *Includes a €5 million contribution for COVID vaccines in 2021 received via the International Finance Facility for Immunisations (IFFIm)*
7. *Includes contributions of NOK 600 million frontloaded in 2019 through IFFIm and NOK 2 billion frontloaded through IFFIm for COVID-19 in 2020*
8. *Pledge made in May 2020 for payment to CEPI via IFFIm. As CEPI moved into a new strategic period in 2022, Spain agreed to transfer the pledge to CEPI 2.0. Previous investor overviews/annual progress reports included this pledge as part of CEPI 1.0*
9. *Includes funding from Horizon 2020 and Horizon Europe. Excludes CEPI-EDCTP co-funded projects totalling €24.5 million*
10. *Includes a US$3.88 million pledge for CORE from Gates Philanthropy Partners in 2022*
11. *Excludes US$606,064 for development of an Evidence Generation Platform for Therapeutics with a focus on LMICs in 2022*
12. *Private investors with contributions of less than US$1 million are grouped under 'Other Private Investors and Philanthropies'*

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