A global insurance policy to defend against future epidemics

**Vision:** Vaccines can prevent outbreaks of emerging infectious diseases from becoming humanitarian crises.

**Mission:** To stimulate, finance and co-ordinate vaccine development against diseases with epidemic potential in cases where market incentives fail.

**Scope:** CEPI takes a comprehensive approach to vaccine development, focusing on two initial priorities.

1. CEPI will bring priority vaccine candidates through the end of phase II clinical trials.
2. CEPI will support vaccine platforms that can be rapidly deployed against known and unknown pathogens.
Over ten years, the global costs of epidemics could amount to $600bn. They arise anywhere, anytime and they pay no respect to borders.

1 History teaches us
SPANISH INFLUENZA
Known as the “Great Influenza” or “Flu of 1918” 1.25 of the world’s population is thought to have been infected, killing more people than WWI.

- 500 million INFECTED
- 50 million LIVES LOST
- 5% GLOBAL GROSS DOMESTIC PRODUCT
Estimated cost of similar pandemic today

- Forewarned is forearmed.
But what happens when there is no warning?
The world isn’t ready.

In the modern world with urbanisation and global travel, 21st Century epidemics could start in a big city and then take off the way Ebola did in West Africa.

Pathogens are not only spreading faster, they are emerging more quickly than ever before: since the 1970s, newly emerging diseases have been identified at the unprecedented rate of one or more per year.

2 A wake-up call
EBOLA
The world’s failure to control Ebola quickly in the 2014 and 2015 West Africa outbreak resulted in:

- 28,616 INFECTIONS
- 11,310 LIVES LOST
- $2.8 bn LOSS in worst-affected countries in 2015

- Known as “Zika”
- First discovered in East Africa in 1947
- In 2007 it reached the Pacific island of Yap – nearly 75% of the population is estimated to have been infected indicating its epidemic potential.

- 99 COUNTRIES AFFECTED
- 5% RATE OF BIRTH DEFECTS
in US Zika-infected mothers
- 50 million LIVES LOST
- 33 million INFECTIONS
- 250 days

3 New threats emerge constantly
ZIKA

- 3 The 21st century’s future outbreak...
A virulent respiratory virus spreading as fast as flu could spread to all major global capitals within 60 days.

- 33 million LIVES LOST
- WITHIN 250 days

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Building on lessons learnt through recent tragedies to outsmart epidemics

The Ebola paradox and the CEPI solution:
The coalition was created not because of the failure to deliver an Ebola vaccine in time for it to be useful, but because of how close that project could have come to success.
For the first time in history, a vaccine was tested in the middle of an epidemic with unprecedented speed and collaboration.


Vaccine development is complex and expensive
It starts with small scale studies for safety and immune responses in hundreds of people who are not at risk for the disease. Vaccines that pass those tests move on to trials to establish effectiveness in thousands of volunteers.

2014 2016

2014 2016

The delay in deployment cost thousands of lives.
Similarly, Zika was recognized as a global problem early in 2016 and over 30 candidate Zika vaccines were in development by the end of the year, some using 14 different technologies.
Today, at least 6 of these candidates are in clinical trials but none will be ready even for emergency use before 2018.

The Challenge
Outbreaks come and go | Poor countries are hit hardest putting strain on already fragile health systems | Market potential is often limited | Governments’ efforts to fund R&D preparedness can be inefficient and unsustainable

But the momentum and opportunities for transformative progress are there…
Too often, global panic about epidemics has been followed by complacency and inaction. The world is living on borrowed time before we see the kind of global pandemic we have all been warned to expect.

CEPI is testament to an emerging consensus that for new vaccines to be game changers, we must put an end to today’s fragmented approach and adopt a systematic, concrete plan for collective action.
CEPI is in a unique position to deliver a major advance in global health security

We have an urgent choice to make between best- and worst-case scenarios.

CEPI is actively seeking partnerships with governments, potential funders, industry partners, regulators, and civil society organisations with an interest in building a proactive and accelerated approach to vaccine development.

For further information, please contact the Secretariat via info@cepi.net
For references and sources please see cepi.net