PRESS RELEASE

Ground-breaking COVID-19 innovations made possible by unprecedented amount of R&D funding

Latest data shows that investments to develop products and technologies to diagnose, treat and prevent COVID-19 totalled over 4.6 billion US dollars in 2020.

Sydney, Australia, 30 June 2022- After five years of consecutive growth, funding for emerging infectious disease (EID) research and development ballooned to US$5.9 billion in 2020, with more than $4.6 billion invested in creating tools to fight COVID-19.

The second Landscape of Emerging Infectious Disease R&D report by Policy Cures Research, uses the latest G-FINDER data from 2019 and 2020 to analyse global funding for health innovations to tackle priority EIDs, such as COVID-19, Ebola and Zika. The scale and speed at which R&D funds were provided in response to the COVID-19 pandemic were unprecedented, aided by an increasingly robust R&D funding infrastructure.

Both the US Biomedical Advanced Research and Development Authority (BARDA) and the Coalition for Epidemic Preparedness Innovations (CEPI), two organisations specifically created to prevent and respond to epidemic and pandemic threats, provided major funding commitments early and consistently across 2020 alone, backing more than a dozen vaccines and therapeutics between them. CEPI was one of the first organisations to announce funding in response to COVID-19 in January 2020, followed by BARDA which by the end of March had committed $367m, or 44% of all funding announced in the first quarter of 2020. Both organisations have since supported additional COVID-19 R&D projects.

Overall, BARDA provided $827m over the course of 2020, making it the single largest funder of COVID-19 R&D, followed by the German Federal Ministry of Education and Research (BMBF) and US National Institutes for Health (NIH). The single largest recipient of reported COVID-19 R&D funding in 2020 was CEPI.

Dr. Nick Chapman, CEO, Policy Cures Research said:

“The response to COVID-19 has been exceptional and this is reflected in the level of funding made available to develop innovative tools to manage the pandemic. We’ve seen an unprecedented number of funding commitments and announcements which resulted in $4.6 billion spent in the first year of the pandemic. This is significantly higher than any other pandemic response we’ve tracked so far; in one year, funders have provided nearly double the $2.4 billion that was spent on Ebola R&D in the seven years between 2014 and 2020”

CEPI transforms the EID R&D funding landscape

Prior to the COVID-19 pandemic, global investments in emerging infectious disease R&D grew more than fivefold between 2014 and 2018, driven by Ebola and Zika outbreaks in Africa and

South America. EID R&D funding continued to increase in 2019, bolstered by CEPI's growing disbursements for its priority diseases.

The organisation's contributions significantly shaped the R&D landscape for diseases such as Lassa fever, Nipah, MERS and Rift Valley fever, sharply increasing funding flows, boosting investments for product development by 30 percentage points and, in some cases, providing the first meaningful funding for clinical development. Together with the US NIH, it provided 89% of global funding for these four pathogens in 2019 and 2020.

Dr. Frederik Kristensen, Deputy CEO, CEPI said:

"As a result of key financial donations from our contributors since our launch in 2017, CEPI has been able to make a series of diverse scientific investments and move the research needle forward across our priority pathogens. With CEPI's support, the world's first Nipah, Lassa, and MERS vaccines have entered clinical trials and CEPI has also created one of the world's largest and most diverse portfolios of COVID-19 vaccines, helping save millions of lives worldwide.

"Policy Cures Research offers a valuable and important independent tool to capture, monitor, and highlight R&D spending made by CEPI and others. With the ever-increasing threat of more frequent and severe epidemics and pandemics impacting the world, I hope future reports will document greater global investment in R&D to fortify our outbreak preparedness and response efforts going forward. Without sustained R&D funding and spending, the world is at risk of another COVID-like scenario or worse."

Funding for Disease X grows thanks to massive increase in platform technology investments

The report uncovers a significant trend in the EID R&D landscape, as funding has climbed for research designed to protect against multiple, lesser-known or entirely novel pathogens, commonly categorised under the label 'Disease X'. Funding for Disease X R&D continued to rise rapidly in 2020, reaching $465m, up from just $43m in 2016. Since 2018, it has been the second biggest area of EID R&D spending every year.

This growth was driven by increased investments in platform technologies, a technology or process that can be adapted for use in more than one product or disease area. This area of rapid growth was responsible for two-thirds of the increase in overall Disease X funding since 2016, as platform technologies' share of Disease X funding rose from 38% in 2016 to 64% in 2020.

Recent discoveries include Ebola and COVID product innovations, which relied heavily on platform technologies. Encouragingly, the large funding increases recorded across most platform categories, even prior to the current pandemic, suggest a growing commitment to being better prepared for the next one.

Innovations help contain Ebola threat

Whereas more than 11,000 people died over the course of the West African Ebola epidemic in 2014, subsequent outbreaks were controlled increasingly rapidly in 2018 and 2021, resulting in just six reported fatalities in the latest outbreak in North Kivu, DRC. This was made possible by

the development and approval of an arsenal of products including two registered vaccines, two biologics and a rapid diagnostic test. The report notes, however, that this progress sits in notable contrast to the investment figures seen for COVID-19 R&D. Whereas the world spent a little under $2.4bn over seven years in response to Ebola, it invested over $4.6bn in just one year in response to COVID-19. This highlights the importance of funding and political will in shaping product development timelines, ultimately playing a central role in the number of lives saved.

For further information, or to request a copy of the report, please contact the Policy Cures Research team at gfinder@policycuresresearch.org

About the G-FINDER project
The G-FINDER EID project is part of Policy Cures Research's flagship G-FINDER project tracking annual R&D investment for new products and technologies designed to address persistent global health challenges unduly affecting vulnerable populations.

Methodology
G-FINDER funding data on R&D investments for global health is collected in a global annual survey run by Policy Cures Research. The survey targets the world's funders and developers of global health R&D and includes public, private and philanthropic organisations as well as research and intermediary groups. The survey is supplemented by an analysis of publicly available funding databases. The result is a unique repository of investment data, providing an unmatched resource for policymakers, donors, researchers, and industry to inform their decision making and deliver more impactful outcomes.

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About Policy Cures Research
Policy Cures Research is an independent, not-for-profit, research and policy organization providing strategic analysis and decision-making tools for those involved in the creation of new health technologies for neglected diseases, sexual and reproductive health, and emerging infectious diseases. Its focus is on providing governments, funders, researchers and civil society organizations with the insights they need to make optimal R&D policy and funding decisions for diseases affecting the world's poorest populations.