

PDPs Continue to Play Key Roles in the Global COVID-19 Response and Broader Pandemic Preparedness Efforts

The COVID-19 pandemic has taught the world valuable and expensive lessons about the benefits of proactively identifying, responding to, and containing pandemics. Product development partnerships (PDPs) are at the center of some of the world's most effective pandemic preparedness and response efforts and have helped stop and contain outbreaks of Ebola, enhance the appropriate use of antibiotics to curb multidrug-resistant infections, and led efforts to develop tools to combat life-threatening pandemic diseases. Additionally, by making use of their expertise in treatments and diagnostics, PDPs played—and continue to play—a pivotal role in the global response to COVID-19.

Developing New Tools to Combat COVID-19

PDPs have participated in and led efforts to develop new COVID-19 technologies.

- **FIND** has developed and earned approval for three COVID-19 diagnostic technologies.
- **FIND** co-led the Diagnostics Pillar of the Access to COVID-19 Tools (ACT) Accelerator.
- **IAVI** is developing an intranasal COVID-19 vaccine candidate. Recently published research demonstrated that in animal studies, a single dose induced immunity to SARS-CoV-2 infection. **A Phase 1 study in humans is planned to start not earlier than September 2023**, pending funding decisions.
- **DNDi** continues to work to identify drug candidates for treatment of mild to moderate COVID-19 and future coronaviruses, including by coordinating the COVID Moonshot project, which is on track to **advance a candidate to clinical testing in 2023**.
- **DNDi** is a partner in the ANTICOV Consortium, an **adaptive clinical trial platform to identify treatments that can be used to treat mild and moderate cases of COVID-19**. The trial tests multiple drug combinations. More than 1,750 patients have been recruited from 12 participating countries.
- **CBR** researchers have **conducted research** related to molecules that may have antiviral activity against COVID-19.
- **EVI** participated in **3 clinical trials** related to COVID-19 vaccine candidates.



Non-COVID-19 Pandemic Preparedness Initiatives and Successes

PDPs have played and continue to play critical roles in the response to pandemics past, present, and future.

- **MMV** and **DNDi** launched the **Pandemic Response Box** to provide researchers with free access to **400 diverse compounds** to accelerate the discovery of new treatments for life-threatening pandemic-prone diseases.
- **FIND** is leading the diagnostic component of the **100 Days Mission**, an initiative that seeks to proactively identify and act on future pandemic threats, **enabling a comprehensive response, including development of a vaccine, in no longer than 100 days.**
- In Vietnam, **PATH** and the CDC supported the Ministry of Health (MOH) in establishing a reporting portal to collate AMR WHONET data files from 16 hospitals that integrates powerful, user-friendly visualization and data analysis functions that **help monitor future pandemic threats.**
- **FIND** developed and maintains a **directory to track the pipeline of diagnostic tests for monkeypox.** To date, it includes more than 90 tests. FIND works with a host of partners to validate some of these tests.
- In Vietnam, **PATH** worked with two hospitals to pilot **initiatives to prevent multidrug-resistant infections** and enhance the appropriate use of antibiotics.
- During the 2018 Ebola outbreak in Democratic Republic of the Congo, **PATH** partnered with the MOH to **streamline the collection of high-quality data and create a dashboard** for monitoring case data, including contact tracing, epidemic curve, treatments, and more. These tools helped inform quick, data-led decisions that help drive the response to the outbreak.
- Digital Square, a **PATH**-hosted initiative, co-leads the OpenHIE COVID-19 Task Force, which supports collation of information relating to data standards and data exchange relevant to the pandemic response. The goal of this task force is to ensure that **rapidly deployed solutions can be integrated into national digital health architectures and contribute to long-term health system improvements.**

Impacting Policy, Global Coordination, and Thought Leadership for Equitable and Effective Pandemic Responses

PDPs help to guide policies, coordinate research, and set the global agenda for equitable responses to pandemics.

- **DNDi** published a policy report revealing how many of the R&D and access challenges arising from COVID-19 are actually acute examples of the chronic failures of the biomedical innovation system. The report also **outlines specific opportunities for how future pandemic preparedness and response architecture can be re-oriented** to treat scientific progress as a global public good, equally benefiting all.
- **IAVI** participated in the WHO's "COVID-19 vaccines: Developing a framework for evaluating new COVID-19 vaccines" to develop **a new framework proposal** that supports developers, regulators, and scientists to rapidly determine which combinations of new and existing evidence may be needed to support WHO Emergency Use Listing of new vaccines.
- **FIND** developed and maintains the **ACT-A Dx Knowledge Hub**, a global repository of shared knowledge and lessons learned through its work on COVID-19 diagnostics.
- **DNDi** co-created the **COVID-19 Clinical Research Coalition** (COVID-19 CRC), which aims to leverage global experts for high-impact COVID-19 research, **ensure global and stakeholder equity** in the decision making and the global search for COVID-19 technologies, **champion equitable and affordable access to COVID-19 tools**, and promote open sharing of research knowledge and data. The coalition now has more than **900 members**, representing more than **300 institutions** from nearly **100 countries**. The coalition has identified priority research questions for low-resource settings, conducted webinars, created a **protocol repository** where investigators can share and standardize research tools, and supported a **living systematic review of COVID-19 clinical trials** to help researchers identify ongoing trials, spot knowledge gaps, and avoid duplication.