Collaborative One Health Research Initiative on Epidemics
Strengthening epidemic preparedness and response

There has been an increase in the scale and impact of epidemics over the last 20 years. These have deepened social inequalities and had devastating impacts for women, children, and other vulnerable and marginalized groups.

Epidemics like SARS-CoV, H1N1, H5N1, MERS, Ebola and COVID-19 have been devastating, resulting in lost lives and livelihoods, ravaged economies and health care systems, and disruptions to regional and global health security. They have exacerbated social and gender inequalities and threaten to roll back decades of global development progress.

There is an increased global interest in strengthening epidemic preparedness and response, particularly in low- and middle-income country hotspots, where infection disease outbreaks often occur. These hotspots are key to developing and implementing policies to strengthen capacity and infrastructure to mitigate and control the threat of future epidemics.

Within this context, Canada’s International Development Research Centre (IDRC) launched the Collaborative One Health Research Initiative on Epidemics (COHRIE) in 2021, using a One Health approach for epidemic prevention and response. One Health applies an intersectoral, multidisciplinary and systems-based approach to research, policy and actions around situations where humans, animals and the environment intersect.

Objectives
COHRIE activities are designed to
• support research that applies a One Health approach to identify, implement and assess potential innovations in policies, programs or practices
• assist countries in better preventing, preparing and responding to emerging infections and epidemics

COHRIE is funding four multi-sectoral One Health research projects, which kicked off in late 2021 and early 2022.

They are expected to produce stronger localized evidence on the following themes:
• Understanding and addressing the intersectoral drivers of epidemics
• Identifying and developing structural, systemic and policy-level interventions
• Strengthening data systems for enhanced multisectoral communication, coordination and collaboration

A fifth knowledge mobilization project will coordinate knowledge mobilization efforts to facilitate the uptake and use of this evidence into national and global programs, policies and practices.

Next steps
Over the next two years, research projects will continue to produce local evidence on the best method to implement the One Health approach to epidemic and pandemic prevention efforts by focusing on the Congo and Amazon basin regions. New projects focusing on Asian hotspots at high risk of epidemic outbreaks will also be initiated.

The formal launch of COHRIE will take place at the Canadian Conference on Global Health, Toronto, Canada, November 21–23, 2022.

Learn more
Explore the COHRIE funded projects:
• West African One Health actions for understanding, preventing and mitigating outbreaks: idrc.ca/en/project/west-african-one-health-actions-understanding-preventing-and-mitigating-outbreaks


• Decentralize and operationalize the One Health platforms in Guinea and the Democratic Republic of Congo: idrc.ca/en/project/decentralize-and-operationalize-one-health-platforms-guinea-and-democratic-republic-congo

• Knowledge mobilization and use of the results produced by the COHRIE initiative: idrc.ca/en/project/knowledge-mobilization-and-use-results-produced-cohrie-initiative