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CIHR Centre for Research on Pandemic Preparedness and Health Emergencies

January 25, 2023

Dr. Marisa Creatore

Executive Director, Centre for Research on Pandemic Preparedness and Health
Emergencies (CRPPHE)



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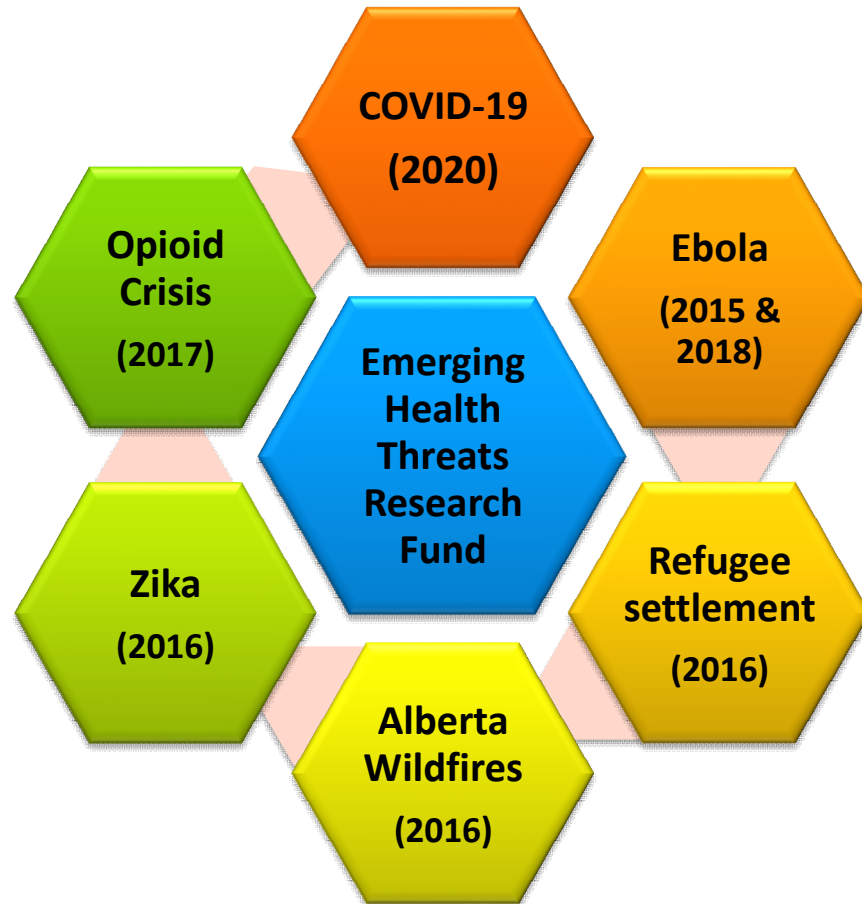
Presentation Overview

- **Some Context**
- **Objectives & Levers**
- **Where we are**
- **Strategic Considerations as we move forward**
- **Next Steps & Discussion**



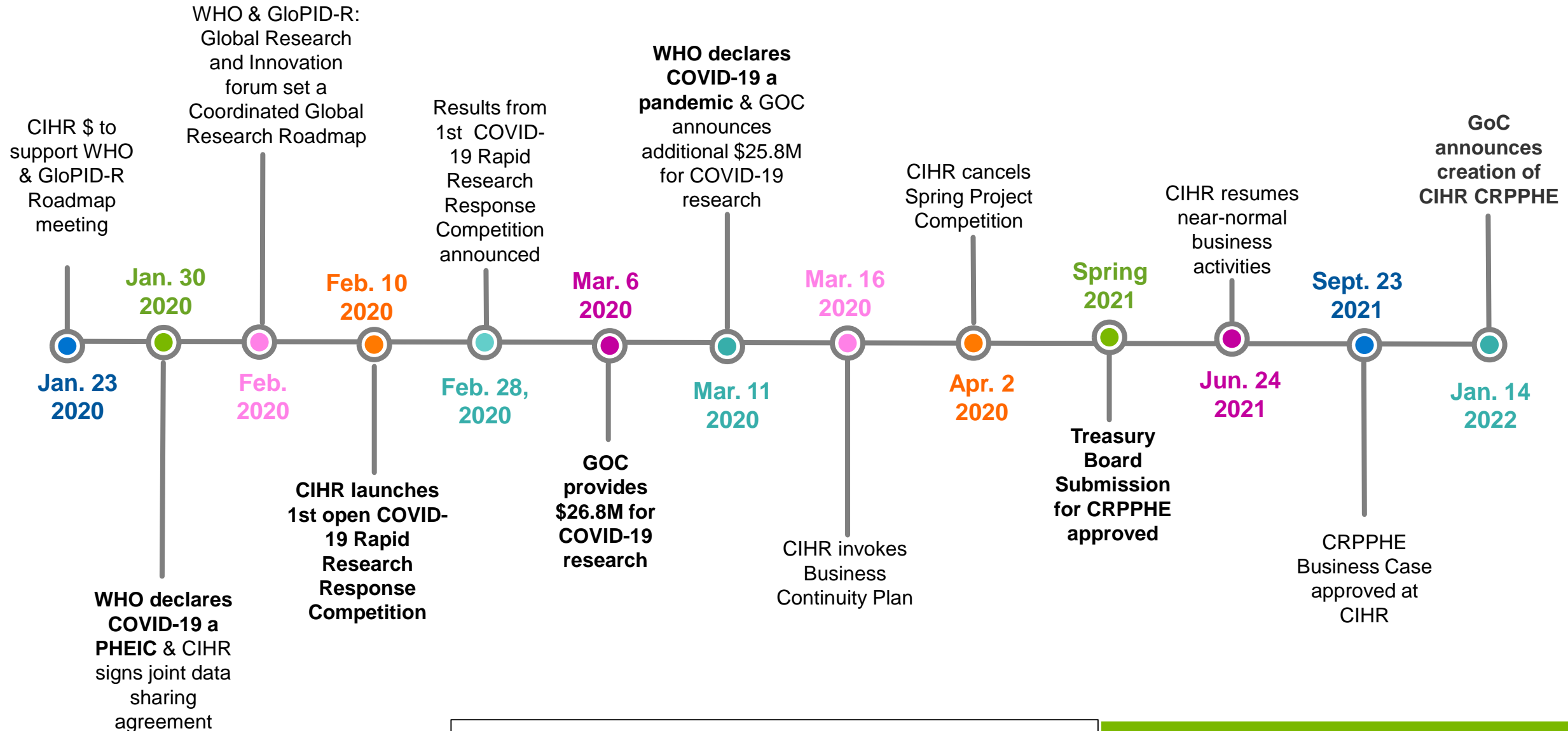
COVID-19 CIHR Context

History of CIHR Funding for Pandemics and Emergencies



- Since 2014-15, CIHR has up to \$5M a year for research to mitigate the harms and impact of an identified emerging health threat
- Focus on rapid response on urgent health threats
- Specific governance pathway to access EHTF
- CIHR activated these funds during COVID-19

Timeline: Key Milestones in CIHR's COVID-19 Response



CRPPHE = Centre for Research on Pandemic Preparedness and Health Emergencies

2020

March: Canadian Immunization Research Network (CIRN)

May: Canadian Venous Thromboembolism Research Network (CanVECTOR) and Canadian Critical Care Trials Group

June: Mental health operating grants

July: Legal frameworks for vaccination

August: Canadian Immunization Research Network – vaccine readiness

October: Canadian International COVID-19 Surveillance Border Study
Knowledge synthesis network
Evaluation of harm-reduction approaches to address the opioid crisis during COVID-19

February: First COVID-19 Rapid Research funding competition

April: Supplementary funding: Sex as a biological variable

Second COVID-19 Rapid Research funding competition

Mental health knowledge synthesis grants

Canadian Research Initiative in Substance Misuse (CRISM) urgent guideline activities related to COVID-19

Frailty and COVID-19 in older adults

Canadian Treatments for COVID-19 (CATCO) trial

September: Strengthening pandemic preparedness in long-term care homes

Indigenous COVID-19 Rapid Research grants

November: Canadian Longitudinal Study on Aging (CLSA)

Canadian Network of COVID-19 Clinical Trials Networks

Emerging COVID-19 research gaps and priorities – I

2021

March: Emerging COVID-19 research gaps and priorities - II

Canadian Treatments for COVID (CATCO) trial – supplementary funding

July: Emerging COVID-19 Research Gaps and Priorities - III

COVID-19 Research Gaps and Priorities

December: Drug Safety and Effectiveness Network (DSEN) targeted research
Grant extension for CoVaRR-Net
Respiratory Health Effects of Long COVID

February: Supplementary funding – COVID-19 variants
Network for Emerging Variants

June: Understanding/mitigating the impact of COVID-19 on children, youth and families
COVID-19 vaccine confidence

September: Addressing the Wider Health Impacts of COVID-19

October: Extension to the COVID-19 Evidence Network to Support Decision-making (COVID-END)

Indigenous COVID-19 Rapid Research Funding Opportunity II

COVID-19 Funding Opportunity Timeline



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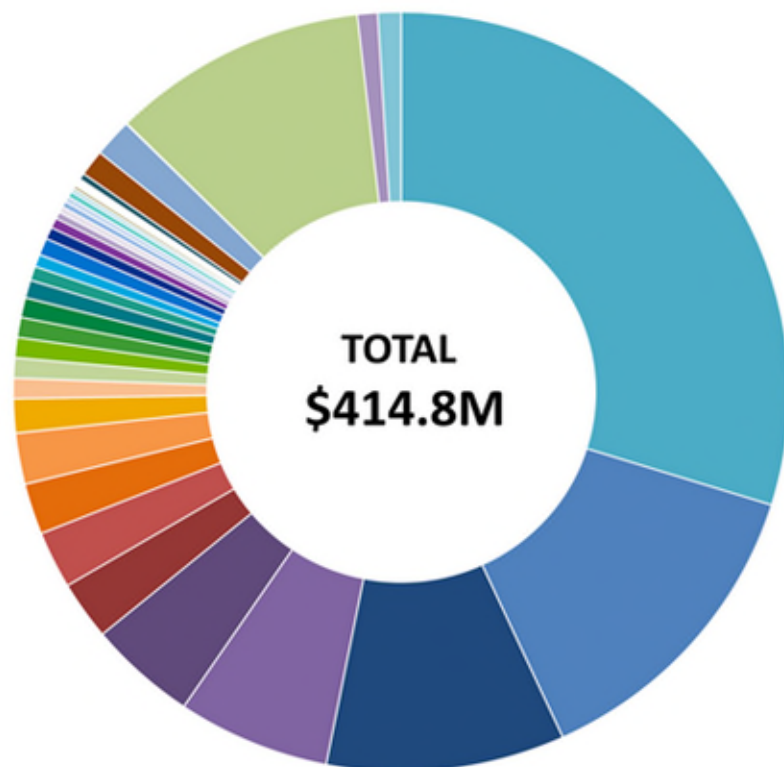
CIHR COVID-19 Investments

\$414.8M
Total investment

965 *
Grants funded

40
Competitions

Investment breakdown



CIHR funded a diverse range of research, for example:

- Identification and evaluation of COVID-19 medical & social/policy countermeasures
- WHO Solidarity Trial Scale-Up COVID-19 Funding Opportunity (CATCO)
- Strengthening Pandemic Preparedness in Long-Term Care
- Evaluation of Harm Reductions Approaches to Address the Opioid Crisis in the Context of COVID-19
- Indigenous COVID-19 Rapid Research Funding Opportunity
- Understanding and mitigating the impacts of the COVID-19 pandemic on children, youth and families
- Building COVID-19 Vaccine Confidence
- Addressing the Wider Health Impacts of COVID-19

* 128+ of which include international collaborations

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Research Centre Mandate, Objectives & Levers



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Government of Canada creates Centre for Research on Pandemic Preparedness and Health Emergencies

From: [Canadian Institutes of Health Research](#)

News release

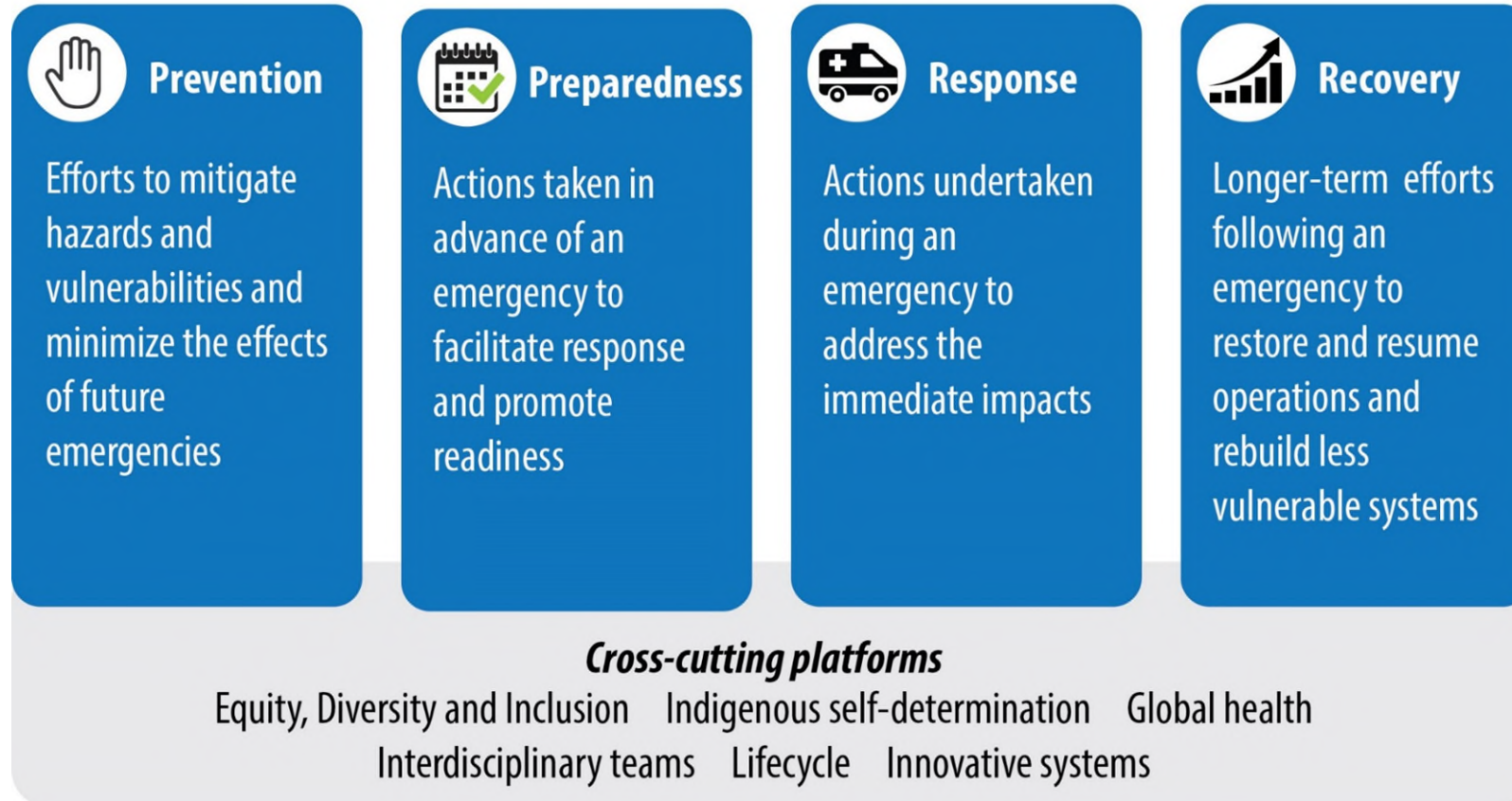
January 14, 2022 — Ottawa, ON — Canadian Institutes of Health Research

Canada's health research community responded quickly to the COVID-19 pandemic from the time the first cases were identified in late 2019. Over the past two years, researchers across the country have rallied together to create new scientific knowledge and provide critical evidence to guide Canada's response to the pandemic and keep Canadians safe.

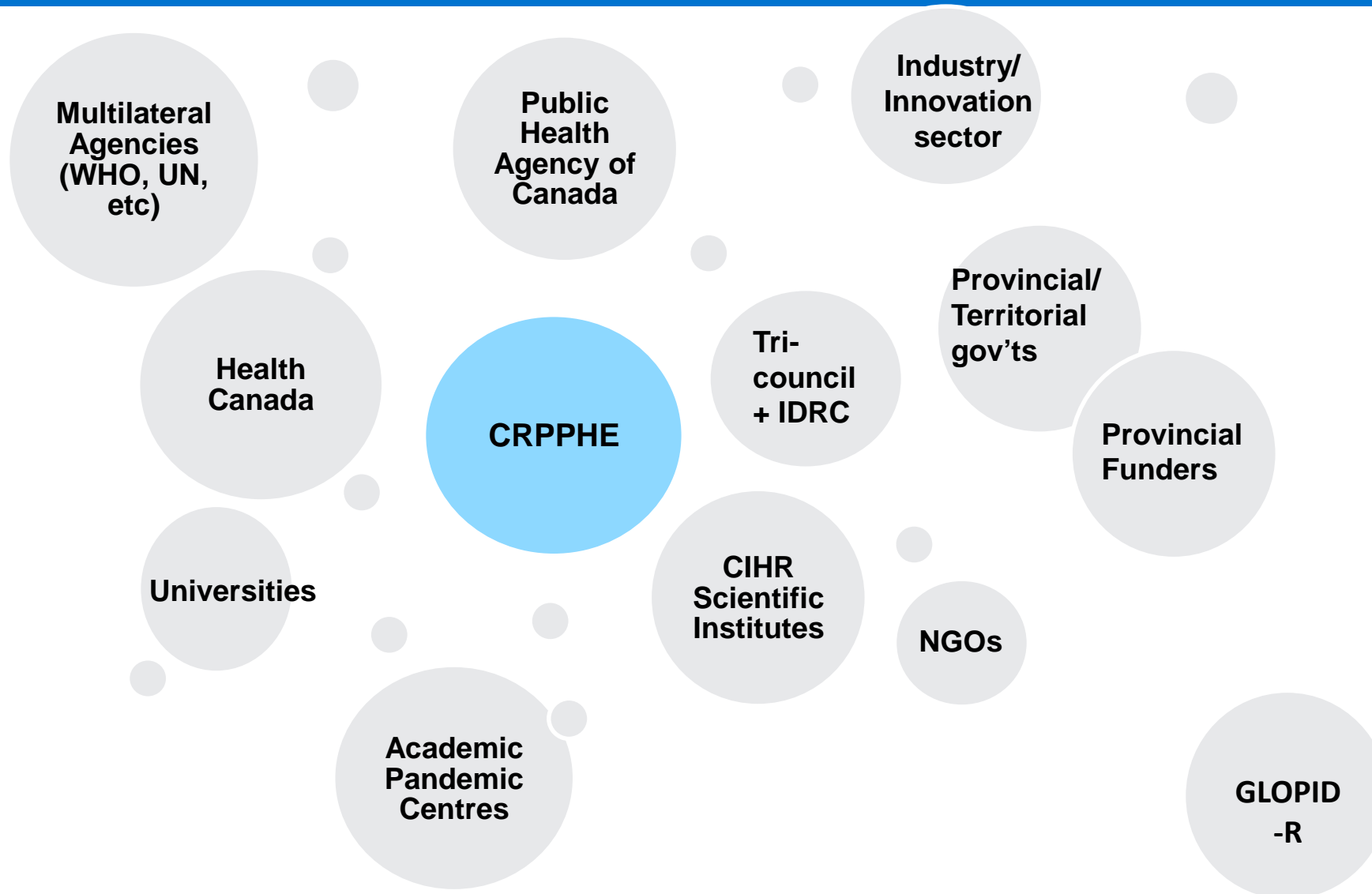
Overall Goal of the Research Centre

Protect the health of all people living in Canada by supporting, coordinating, and mobilizing an emergency-ready health research system that contributes meaningfully to timely, equitable and effective decision-making.

Advance Knowledge Build Capacity Knowledge Mobilization



Strengthen coordination and capacity within the health emergency research system to equip decision-makers with the best available evidence, and increased access to highly qualified personnel.



Defining Health Emergencies

The Research Centre is currently using the following working definition for a health emergency:

A present or imminent event or phenomenon, of a temporary, acute nature, with actual or potential significant negative impacts on human health, resulting in:

- A serious disruption of the functioning of a geographic, social or other community, and/or
- The declaration of a state of emergency by a municipal, provincial/territorial, federal or Indigenous government, or international partner/s, and that
- Requires prompt research action to address the immediate/acute health impacts.

Research Centre Levers

There are several levers the Research Centre can use to deliver on its mandate:



Ongoing Funding

\$15M annual grants and awards budget (base-funding*)



Federal Mandate

CIHR has a federal mandate for research, capacity building and knowledge mobilization; is part of the Health Portfolio; and has a central position in the research landscape (tri-council, IDRC, CFI, int'l)



Leadership

Track record of supporting Canada's research response during health emergencies; ability to rapidly identify and reach out to most comprehensive database of health researchers in Canada



Established Connections

Connections to research organizations, CIHR Institutes, existing research platforms, and networks within and outside of Canada

*base-funding is subject to increase during health emergencies

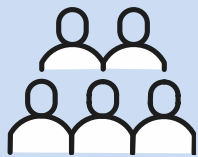


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What will the Centre do?

Key Achievements in 2022



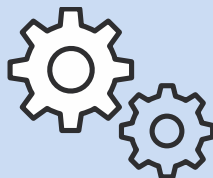
Research Centre officially launched and staffed with 5 FT and 12 PT

- Hiring and onboarding a team with diverse expertise and cross-organizational experience (including pandemic and global health research, program design, knowledge mobilization, communications, training and career support, partnerships, analytics and finance).



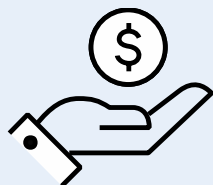
Established and launched governance and coordination structures

- Steering Committee recruited and established (Federal, provincial and local representation)
- Identification of, and participation in, domestic and international working groups and scientific tables



Developed operational processes to support rapid funding and KM

- Communications activities to raise public awareness and promote stakeholder engagement
- Developing knowledge mobilization mechanisms to support sharing of research results
- Continuing to streamline and improve rapid response mechanisms



As of October 2022, Funded \$26M in research on pandemics and health emergencies

- Rapid funding to respond to public health emergencies and urgent research needs Eg. Monkeypox Rapid Research Response,
- Canadian Post COVID-19 Condition Research Network Funding Opportunity
- Non-emergency funding to fund prevention, preparedness, recovery research Eg. Policy Research for Health System Transformation FO



Collaborated with key partners to identify research priorities and co-develop funding opportunities

- Transforming Public Health: 2021- Chief Public Health Officer of Canada report funding opportunity
- Monkeypox rapid research response with IDRC

Research Centre Steering Committee

The goal of establishing the Steering Committee is to facilitate enduring, mutually beneficial relationships for prioritization, coordination, and KM.



- 16 members representing F/P/T government, with links to networks and key actors in the pandemic and health emergencies space
- Research funders (SSHRC, IDRC, NSERC)
- Inaugural meeting held on November 10th, 2022

International collaboration & alignment



Proposed Investment Strategy Streams

Coordination of evidence base and capacity within health emergency research ecosystem

Research

- Proactive research (eg. Building vaccine confidence, Health Human Resource planning)
- Responsive research (eg. COVID-19, PCC, MPx)

Research Infrastructure

- Rapid knowledge mobilization mechanisms
- Rapid funding mechanisms (eg. pre-vetting teams)
- Ethical frameworks for emergency research
- Building a Community of Practice
- Platforms & networks

Training & Capacity Building

- Research Chairs
- Embedded and experiential training opportunities
- Academic-industry partnerships
- Training platforms
- Science Communications
- Increasing equity and diversity

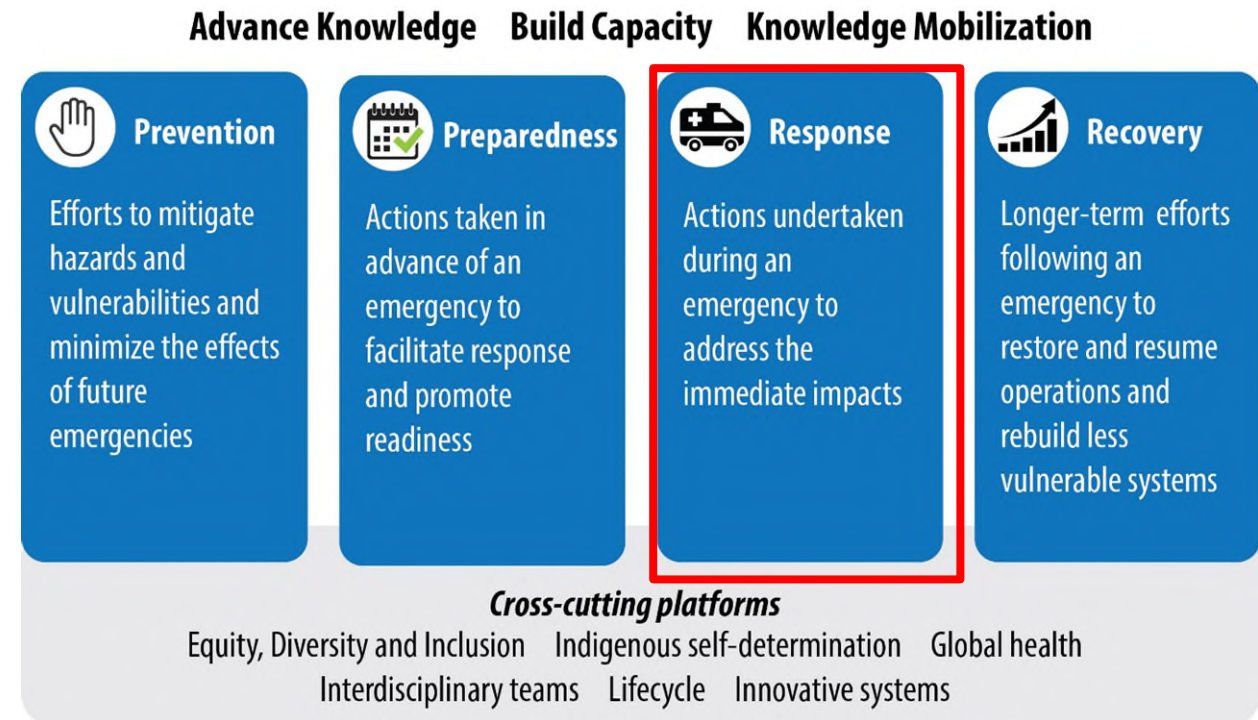
Science Policy Considerations (e.g. equity, ethics, & Indigenous self-determination)



Strategic Considerations: Emergency vs 'between times' - 1

During emergencies, it is necessary to have mechanisms in place to:

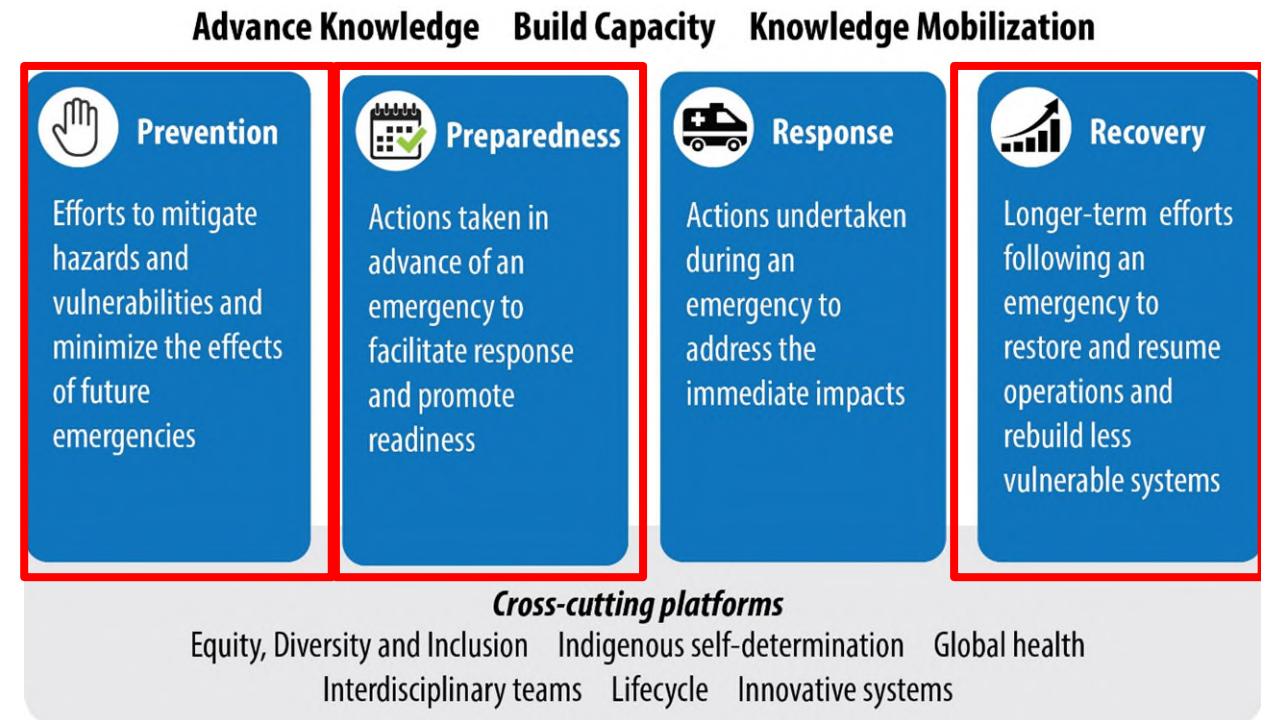
- Identify research priorities
- Ensure context appropriate evidence is available to support emergency response
- Ensure funded research generates timely, rigorous and unbiased results
- Ensure equity and inclusivity across the research enterprise
- Rapidly translate and mobilize knowledge
- Enable rapid knowledge sharing & coordination



Strategic Considerations: Emergency vs 'between times' - 2

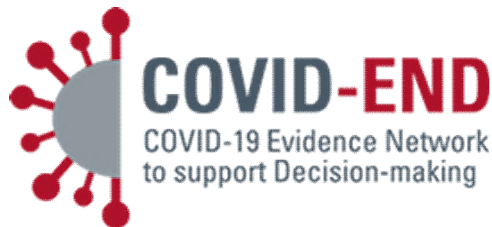
'In between' emergencies, advancing Canada's preparedness posture will rely on:

- Proactive, ongoing investments to build research capacity in key relevant areas
- Advancing methodologies to engage in community-based and community-led research
- Supporting collaborative research teams/networks that build on interdisciplinary insights
- Supporting systems research approaches to tackle complex, interdependent challenges
- Leveraging strengths and opportunities of Canada's innovation sector
- Ensuring that we don't lose the value of investments & learnings during emergencies



What's our Sustainability Plan? – the potential role of networks

- Long-term support for multi-institutional & interdisciplinary research
- Establish/Support a base of expertise and infrastructure that can pivot to address new research challenges
- Build and sustain partnerships and relationships between crises
- Promote responsive, coordinated, and comprehensive knowledge generation, sharing and application



COVID-19 Evidence Network to support Decision-making



Global Alliance
for Genomics & Health
Collaborate. Innovate. Accelerate.



CoVaRR+Net

Coronavirus Variants Rapid Response Network

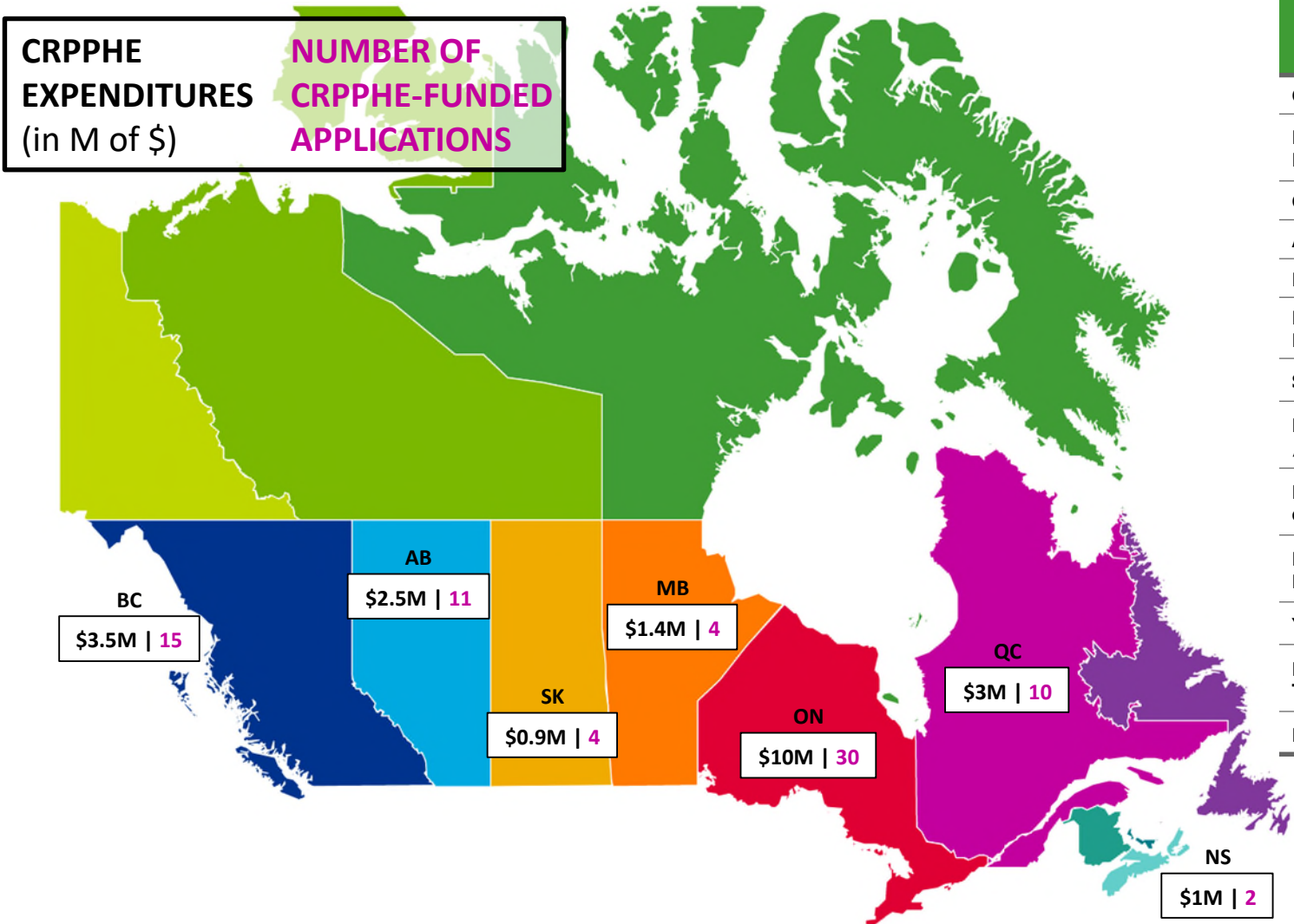


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COVID19 Recommendations

WHO has CRPPHE funded? - Geographical location



PROVINCE	CRPPHE EXPENDITURES	# OF CRPPHE-FUNDED PROJECTS
Ontario	\$9,955,733	30
British Columbia / Colombie-Britannique	\$3,474,838	15
Quebec / Québec	\$2,965,468	10
Alberta	\$2,481,966	11
Manitoba	\$1,377,456	4
Nova Scotia / Nouvelle-Écosse	\$1,044,647	2
Saskatchewan	\$872,415	4
Newfoundland and Labrador / Terre-Neuve-et-Labrador	\$0	0
Prince Edward Island / Île-du-Prince-Édouard	\$0	0
New Brunswick / Nouveau-Brunswick	\$0	0
Yukon	\$0	0
Northwest Territories / Territoires du Nord-Ouest	\$0	0
Nunavut	\$0	0

Distribution of CRPPHE funds based on location of institution paid.
All institutions paid by CRPPHE were located within Canada.

How do we improve knowledge mobilization during emergencies?

Illustrative Examples: Meaningful knowledge user and stakeholder engagement to improve research impact



Bringing together senior policy makers, researchers, implementation experts and key stakeholders to discuss high-priority, health-related topics to support the integration of research evidence into policy.

Organized in partnership with policy makers at federal, provincial, territorial, multi-jurisdictional and international levels.

Offering tailored #scicomm training to help researchers strategically adapt their communication efforts to meet the diverse needs of public audiences, policy makers, funders and collaborators.

Foundations of Science Communication



Dr. Chantal Barriault



Michelle Reid



Ki-Youn Kim



#SciComm on Social Media for Researchers



Dr. Samantha Yasmine

Science strategies for a better recovery

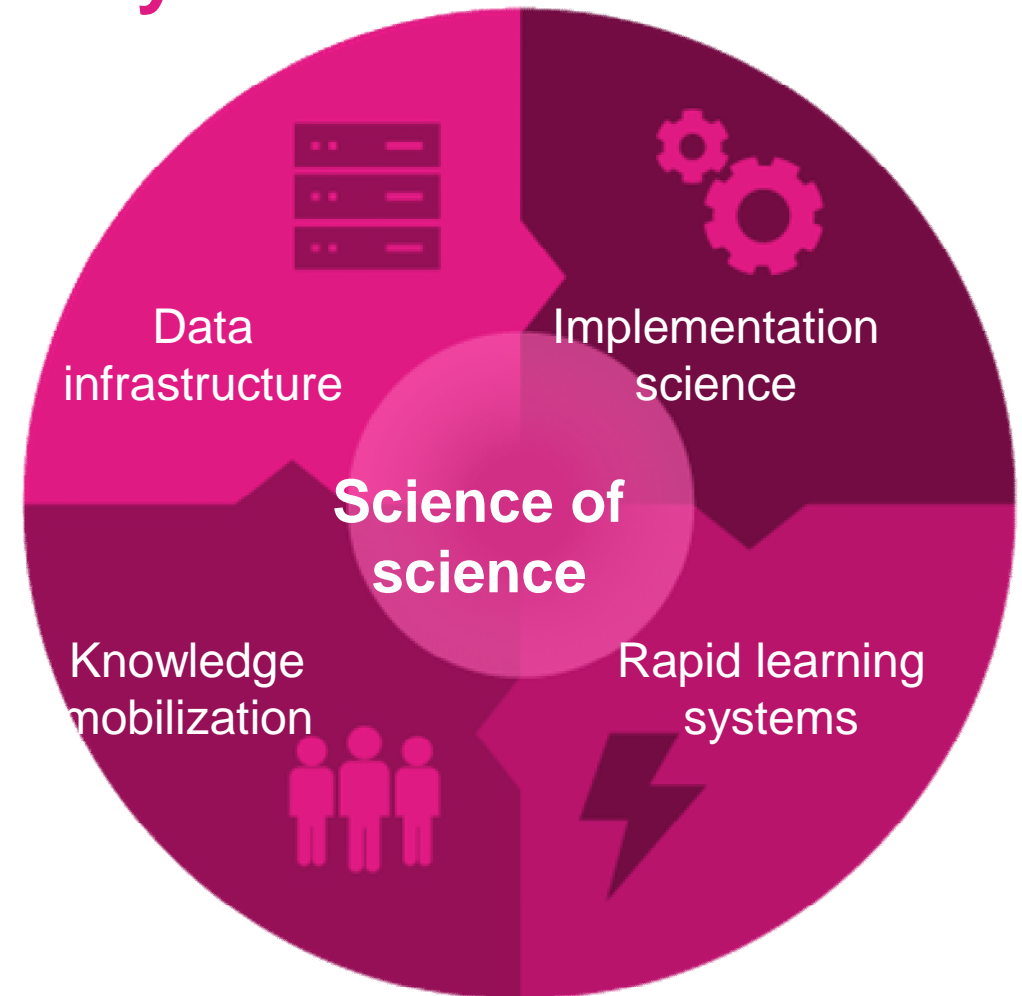
1) Data infrastructure includes the organizations, policies, processes, systems and technologies involved in the collection, storage, management, oversight, distribution and use of data.

2) Implementation science is the study of methods and strategies to promote the uptake of effective interventions into practices, programs and policies.

3) Rapid learning systems use the best available evidence and data to inform decisions and learn from their experiences to enable continuous improvements and contribute to the global evidence base.

4) Knowledge mobilization are efforts designed to promote the use of research evidence to inform choices and generate positive impacts.

5) Science of science is focused on how research is funded, practiced and evaluated, and how research cultures and systems can be made more efficient, open, inclusive and impactful.



Source: UN Research Roadmap for the COVID-19 Recovery; United Nations, November 2020

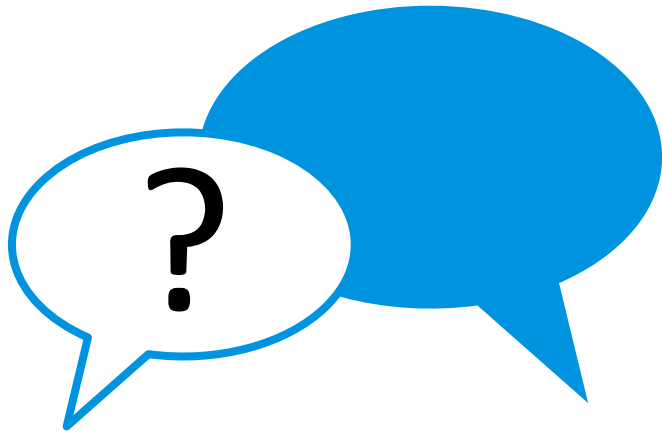


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**THANK
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