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# PHO Rounds: Strategies to Improve Vaccine Confidence and Uptake

April 30<sup>th</sup>, 2024

#### **Presenters:**

Erica Di Ruggiero (PhD) <sup>1</sup>; Shaza A. Fadel (PhD, MPH) <sup>1</sup>; Nazia Peer (MBChB, FCPHM) <sup>1,2</sup>

<sup>1</sup> Dalla Lana School of Public Health, University of Toronto

<sup>2</sup> Immunization Services Division, Region of Peel



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### **Presenters**



Dr. Erica Di Ruggiero

Principal
Investigator



Dr. Shaza Fadel
Co-Principal
Investigator



Dr. Nazia Peer
Principal Knowledge User
Acting Director of Immunization
Services Division, Region of Peel

### **Disclosures**

Drs. Erica Di Ruggiero and Nazia Peer have no conflicts of interests to disclose.

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### **Meet the Core Team**



Dr. Erica Di Ruggiero
Principal
Investigator



Dr. Shaza Fadel
Co-Principal
Investigator



**Dr. Sara Allin**Co-Principal
Investigator



Dr. Anushka Ataullahjan Co-Investigator



**Dr. Yun-Ju (Melodie) Song**Postdoctoral Research
Fellow



**Dr. Kadidiatou Kadio**Postdoctoral Research
Fellow



Denessia Blake (MPH)
Research Coordinator

#### **Co-investigators & Collaborators**

- **Dr. Akwatu Khenti**, Assistant Professor, Dalla Lana School of Public Health (DLSPH), University of Toronto (UoT); Director, Community Resources, City of Toronto
- Dr. Hashim Khan, Respirologist, University Health Network; Founder, COVID-19 Muslim Task Force, Canada
- Dr. Ross Upshur, Professor, DLSPH, UoT; Head, Division of Clinical Public Health, DLSPH, UoT
- Dr. Xiaolin Wei, Professor, DLSPH, UoT
- Dr. Barry Pakes, Chief Medical Officer of Health, York Region; Program Director, Public Health and Preventative Medicine Residency Program, DLSPH, UofT
- **Dr. Garry Aslanyan**, Manager, Partnerships and Governance, WHO.
- Samiya Abdi, Executive director, Black Health Education Collaborative

#### **Knowledge Users**

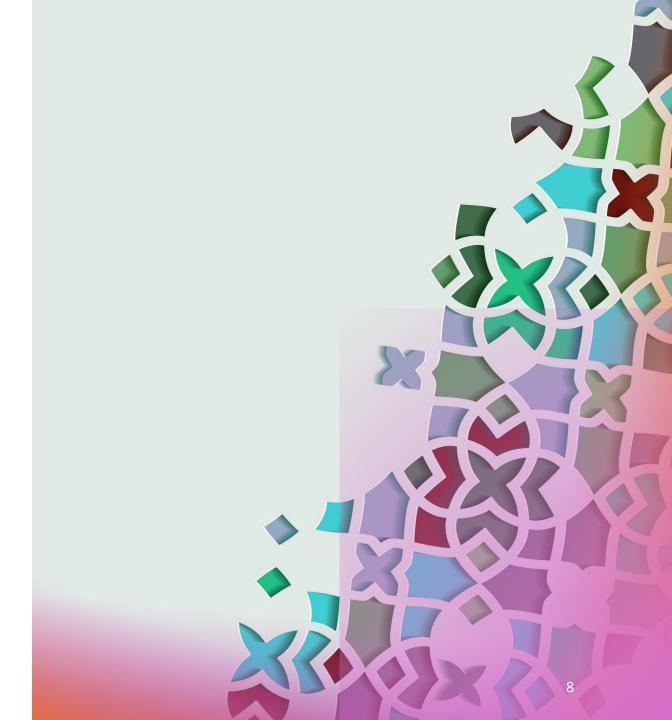
- Dr. Nazia Peer, Acting Director Immunization Services Division, Peel Public Health, Region of Peel
- Liz Estey Noad, Program Director, Health Equity, Partnerships and Innovation, Strategic Policy and Performance Division, Health Services, Region of Peel
- Monali Varia, Director, Public Health Intelligence, Region of Peel
- Dr. Barry Pakes, Chief Medical Officer of Health, York Region





### Presenters Current and Past Practicum Students and Research Assistants

- Dhra Chourey
- Tanvi Sharma
- Audrey Aw
- Haotian Liu
- Anna Karbasi
- Subrana Rahman





# Project Background & Rationale

- Globally, ethno-racially minoritized communities were less confident in vaccines compared to the general population (Gerretsen et al., 2021; Ochieng et al., 2021).
- Socio-structural and historical determinants such as systemic racism and mistrust in government organizations including the health sector exacerbate COVID-19 inequities, vaccine access, and uptake (Chowdhury & Turin, 2021; Razai et al, 2021).
- Successful public health partnerships involving public health agencies, faith-based organizations (FBOs), and community-based organizations (CBOs) have increased uptake and confidence for vaccines among minoritized communities in LMICs (Olivier 2016) and HICs (Ige et al, 2023; Tjilos et al, 2023).
- Despite increased vaccine confidence in Ontario overall, racialized differences in vaccine uptake persisted during the pandemic (Canada, 2022).
- All public health agencies were encouraged to address vaccine hesitancy and levelling confidence among minoritized communities.

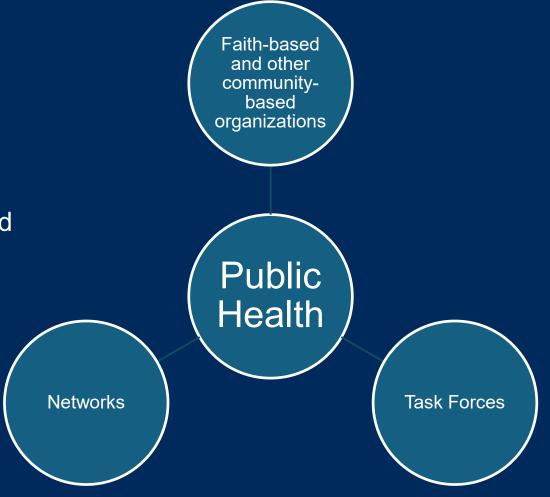
### Learning Objectives

- By the end of this event, participants will be able to:
  - Describe the implementation and impact of evidence-based and evidence-informed strategies, programs, and policies to promote and protect the public's health.
  - Identify considerations and approaches for enhancing collaboration and partnerships to address current and emerging public health issues.
  - To critically reflect on challenges with PHU-FBO collaborations and implications for future mass vaccination campaigns.

### **Research Questions**

What are PHUs' engagement processes of partnering with FBOs, CBOs, and Task Forces?

What are the intervention strategies and perceived outcomes related to vaccine delivery, uptake, and confidence for ethnoracially minoritized communities?







# **Broader Project Objectives**

Objective 1: Improve knowledge and understanding about the effectiveness of community-centered interventions involving partnerships with community-based organizations

- Phase 1: Synthesizing global literature (scoping review)
- Phase 2-1: Comprehensive analysis of vaccine delivery of PHUs (survey results and analysis)
- Phase 2-2: Analysis of partnership engagement processes (interviews)
- Phase 2-3: Trend analysis of social media use in the Region of Peel
- Phase 2-4: Focus groups with Task Forces, Network(s) and community agencies in Peel region.

Objective 2: Implement a practice learning network that generates implementation best practices based on community-centered interventions in Canada to promote vaccine confidence, in particular among structurally marginalized populations

Phase 3: Structured Operational Research and Training Initiative (SORT IT)





# **Progress to Date**

#### Phase 1 Synthesizing global literature (scoping review)

- Protocol: published in BMJ Open
- Scoping review: submitted to PLOS Global Public Health (under review)

# Phase 2-1 Comprehensive analysis of vaccine delivery of PHUs (cross-sectional survey results and analysis)

Submitted to International Journal of Public Health (under review)

# Phase 2-2 Analysis of partnership engagement processes (interviews with sub-set of PHUs)

- First paper (processes of engagement) submitted to PLOS Global Public Health
- Second paper (barriers, and enablers): in-progress

#### Phase 2-3 Trend analysis of social media use in the Region of Peel

Data collection and analysis complete





# Phase 2-1: Survey Results (Overview) 1/2

- Survey response rate: n=28/34 PHUs
- Priority ethnoracial groups (n=13)
  - Top 5: Indigenous (82.1%); South Asian (53.6%); Black Canadian/American (43.0%), African (43.0%), Afro-Caribbean (37.8%)
- Most PHUs (22/28, 78.6%) reported collaboration with FBOs.

#### Outreach methods

- Email
- Telephone
- Word-of-mouth
- Print media
- Websites
- Social media

#### **Intervention strategies**

- Pop-up clinics (e.g., mobile vaccine clinics)
- Vaccine educational session (e.g., townhalls)
- Community outreach (e.g., community ambassadors)
- Media campaigns (e.g., traditional and new media advertisement)
- Social media





# Phase 2-1: Survey Results (Overview) 2/2

- PHU Self- Assessment of Interventions:
  - Ten PHU respondents (35.7%) self-assessed that **gender considerations were incorporated** in the collaborative delivery of interventions with FBOs.
  - More than half (53.5% and 57.1%) incorporated some degree of anti-racism principles and were sensitive to ethnoracial considerations, respectively.
  - The majority (82.2%) of respondents assessed that [their] partnerships with FBOs promoted COVID-19 vaccinations.
  - Four (14.3%) PHU respondents specified these partnerships to be ineffective due to: not having sizeable hard-to-reach populations within their jurisdiction; lukewarm responses from FBOs.
  - For some, community outreach and equity-based interventions were more effective.
  - More than half (16/28, 57.1%) of PHUs reported not to have relied on any formal or informal evaluation methods.





# Phase 2-2: Interview Results (Overview) 1/2 (based on 18 interviews)

#### **How PHUs engage with FBOs**

#### Preparatory phase (Internal learning process about FBOs and their needs)

- Situational analysis (available data)
- Reorganization and creation of services to support engagement with FBOs
- Setting up PHU working groups and discussion tables

#### **Engagement process steps:**

- 1. Inform or consult to encourage interaction and open dialogue with FBOs
- 2. Involve FBOs in intervention planning,
- 3. Collaborate with FBOs, religious leaders and structurally vulnerable groups to deliver services.





# Phase 2-2: Interview Results (Overview) 2/2

Facilitators for successful collaborative vaccine program deployment	Challenges related to the engagement process
<ul> <li>✓ Relationships based on respect for different beliefs and opinions.</li> <li>✓ PHUs' receptiveness and openness to honest discussion and learning from FBOs.</li> <li>✓ Previous experience working with religious communities and FBOs,</li> <li>✓ Communication strategy adapted and sensitive to community needs.</li> <li>✓ Support from religious leaders and openness of FBOs to collaboration.</li> </ul>	Challenges related to internal PHU capacity.  ✓Low operational capacity of PHU (e.g., insufficient human and financial resources)  ✓Lack of analytical skills and competence in managing community collaboration.  Challenges related to more external issues.  ✓Regular changes to provincial guidelines  ✓Desire to maintain credibility gives rise to reluctance among FBO leaders  ✓Isolation of certain religious communities  ✓Weak operational capacity limits FBO involvement.





## Phase 2-3: Social Media Results (Overview)

•Three phases of COVID-19 vaccine rollout:

Phase 1 (Dec 2020 to March 2021)

Phase 3 (August to November 2021)

Phase 2 (April to July 2021)

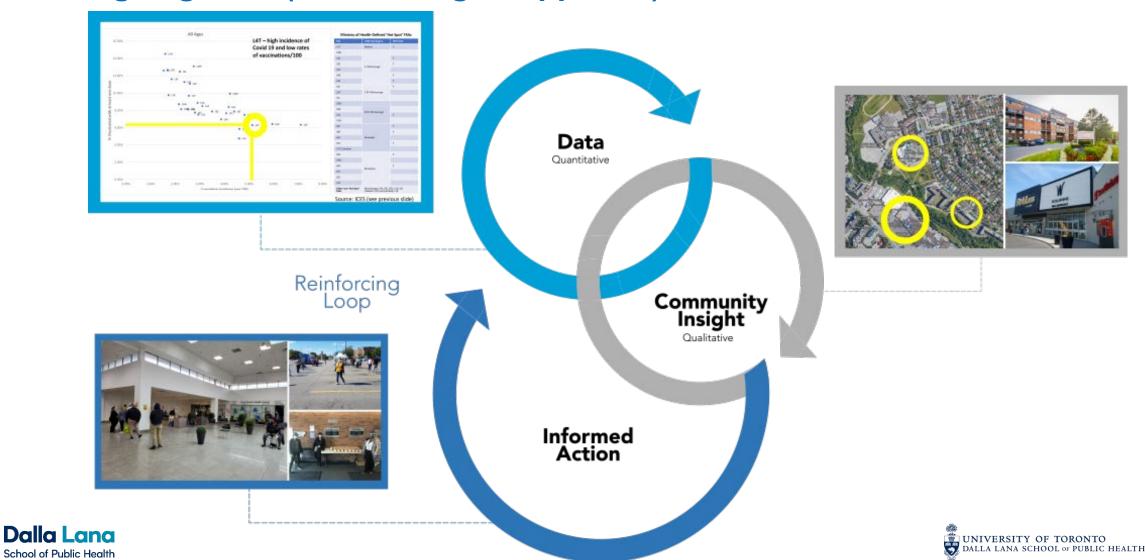
- Peel Public Health promoted vaccines on Twitter across the 3 phases of vaccine rollout through Information/knowledge sharing changed across three phases based on population targets.
- Strong and consistent presence on Twitter during the first phase, leading to a 23% increase in followership in the second phase.
- Engagement with Mass Vaccination Strategy (MVS) partners.
- Peel and Partners' ethnoracial and faith-based communications on Twitter were most visible for Indigenous, Black and Muslim communities.



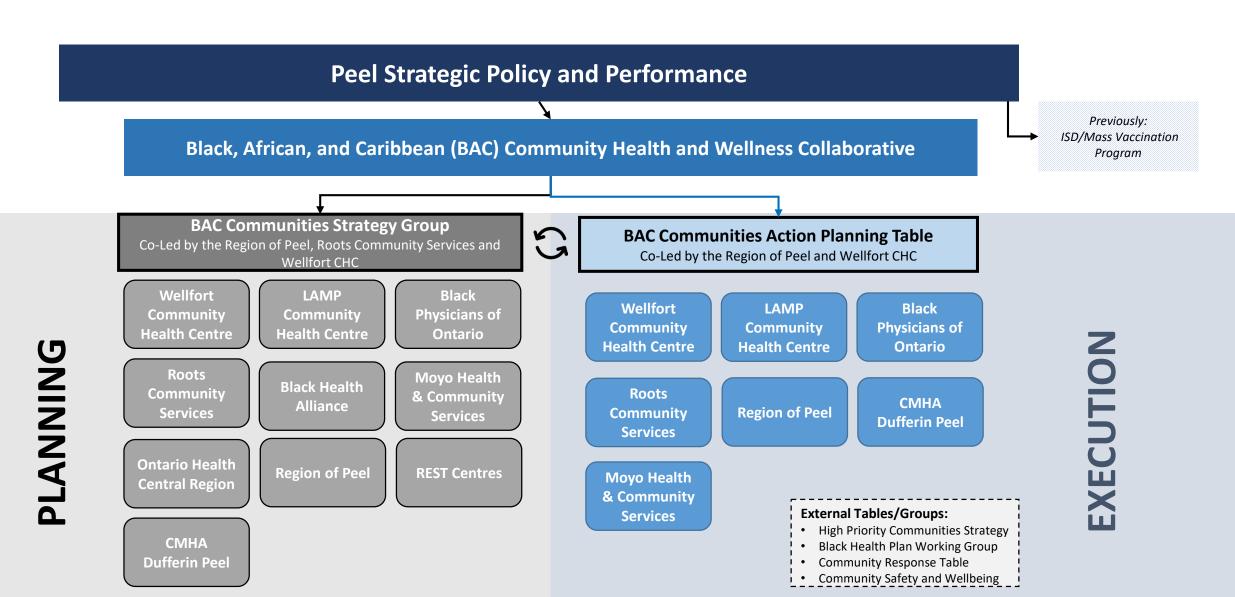


# Peel Public Health – Using Malton Community as an example

**Coming Together (How Change Happened)** 



### The Peel Model - Collaboration for Impactful Change



## **Key Messages**

In Canada and globally, PHA-FBO partnerships have sought to improve vaccine uptake by;

- enrolling and empowering faith leaders as ambassadors,
- using places of worship as vaccine clinics to improve vaccine access and uptake,
- co-designing faith-and-culturally sensitive educational materials, and
- providing wrap-around social services to promote equitable delivery of vaccines.
- In Ontario, the majority of PHUs consider FBOs as effective partners that can help promote vaccine access and confidence among ethno-racially minoritized groups.
- Using Peel as a case study, we found that cross-sectoral collaboration with other public sectors, hospitals, community-oriented non-profit organizations, community health services, school boards, and ethnicity-focused organizations (e.g., Black, African, and Caribbean-focused FBOs and CBOs) facilitated virtual public service announcements during vaccine rollout.
- PHUs generally adapt a two-phase process: (1) an internal learning process within PHUs in which operational communication frameworks are created to determine the needs of minoritized communities, and (2) an external engagement process to build rapport, form partnerships, and delegate roles between partnering organizations for vaccine delivery.





## Potential Implications of Findings: For Discussion

- Lessons learned from cross-sectoral (external) and cross-divisional (internal) engagement to improve the equitable delivery of vaccination programs
  - How do we maximize these learnings?

- Robust immunization programs require stable funding and human resources:
  - How will these programs be sustained at current funding levels?

Other?





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- Hastings and Prince Edward Counties Health Unit
- Huron Perth District Health Unit
- Kingston, Frontenac and Lennox & Addington Public Health
- Lambton Public Health
- Leeds, Grenville and Lanark
- Middlesex-London Health Unit
- Niagara Region Public Health Department

- North Bay Parry Sound District Health Unit
- Ottawa Public Health
- Southwestern Public Health
- Peterborough Public Health
- Porcupine Health Unit
- Renfrew County and District Health Unit
- Simcoe Muskoka District Health Unit
- Sudbury & District Health Unit
- Timiskaming Health Unit
- Toronto Public Health
- Region of Waterloo, Public Health
- Wellington-Dufferin-Guelph Public Health
- York Region Public Health Services











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Thank You!

