

Prioritization of Non-Enteric Zoonoses at the Public Health Agency of Canada



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Background

This placement was completed at the **Public Health Agency of Canada (PHAC)** in the Health Professionals Guidance Unit (HPGU). The HPGU is prioritizing nonenteric zoonoses using a **multi-criteria decision analysis (MCDA) approach** to rank diseases for the development of educational resources for health professionals. The HPGU is working with national health professional organizations to seek their expert advice while developing the criteria for the MCDA tool. As a practicum student, I worked on key components of this project to transition to the next phase of piloting the tool.



Public Health Agency of Canada Agence de la santé publique du Canada

Main Project

- 1. Developed knowledge to refine the Current Climate criterion.
 - Refined the expansion algorithm within the criterion
 - Presented current climate criterion to internal committee and answered questions
 - Developed consensus-building poll for external stakeholder committee
- 2. Planned and organized the Standard Operating 1. Procedures (SOP) Drafting Workshop. 2.
 - Facilitated full-day meeting
 - Created SOP and data collection form
- 3. Developed project management (PM) skills.
 - Created critical paths and meeting summaries

Additional Projects

- Scanned over 1500 articles related to COVID-19
- Extracted data from published literature to inform evidence briefs on COVID-19 variants
- Presented COVID-19 impact on rabies re-emergence in Latin America to zoonoses technical team
- Produced a Lambda variant profile evidence brief

SOP Development

The following topics were discussed during the full-day drafting workshop, and subsequently included in the data collection SOP:

6. Diseases for pilot

Curated a list of 10

diseases based on

expected amount of
information easily
available (range of
scenarios)

5. Project logistics

Established ongoing

meeting schedule for

project progress/

updates and discuss

issues of concern

1. MCDA tool

Tool still being developed,
decided to proceed with a
temporary data collection form

Data
Collection

SOP

4. Team roles

Identified MCDA tool expert, project manager, and data collection teams according to experience and knowledge

2. Data collection approach

Decided to collect data using a hybrid of 1 disease at a time x 12 criteria and 1 criterion at a time x 61 diseases

3. Hierarchy of data sources

Prioritized based on: recency, quality and Canadian origin

As a result of the meeting, the following 6 topics were incorporated into the SOP:

- 1. Instructions on the use of the temporary data collection form
- 2. Hybrid data collection approach (1 disease at a time in batches of criteria)
- 3. **6-level hierarchy** of data sources prioritizing recency, quality, Canadian origin
- 4. Team roles
- 5. 3 meetings per week (general team, project management, content-specific)
- 6. **10 diseases** curated for pilot.

Key Terms

Multi-criteria decision analysis: decision-science-based approach that accounts for varying priorities, preferences, and perceptions of impacts from different stakeholders when making decisions [1].

Zoonoses: infections transmitted between animals and humans that may be caused by a bacterium, fungus, virus, or other communicable disease agent [2]. **Standard operating procedures (SOP)**: document that describes the step-by-step directions for completing operations/tasks,to maximize consistency.

Challenges

When the team began data collection for the prioritization project, we identified the need to add more columns to the data collection form. This challenge was mitigated through the adoption of an iterative approach to data collection form development, where changes would be made as they were identified.

Successes

- ✓ Learned about a recognized decision-making and prioritizing approach and saw it applied in a "real-life" setting.
 - Gained experience and knowledge related to the Current Climate criterion
 - Engaged stakeholders in a public health setting through consensus-building live poll
- ✓ Delivered a successful SOP Drafting Workshop
 - Demonstrated interprofessional communication skills through discussion with colleagues
 - Facilitated productive conversation and addressed issues arising throughout the workshop
 - Applied systems thinking to attain meeting objectives
- ✓ Applied PM skills to a public health project
- ✓ Additional Projects
 - Applied epidemiological knowledge to extract, summarize, and synthesize data.

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References

- 1. Otten, A., Fazil, A., Chemeris, A., Breadner, P., & Ng, V. (2020). Prioritization of vector-borne diseases in Canada under current climate and projected climate change. *Microbial Risk Analysis*, 14, 100080.
- 2. Government of Canada. (2016). Audit of the management of non-enteric zoonotic infectious disease activities at the Public Health Agency of Canada. https://www.canada.ca/en/public-health/corporate/mandate/about-agency/audit-services-division/reports/2016/audit-management-non-enteric-zoonotic-infectious-disease-activities-public-health-agency-canada.html