Evaluation of PHAC's Border and Travel Health Program: 2020-2021 to 2025-2026

FINAL REPORT – JUNE 2026

Prepared by the Office of Audit and Evaluation
Public Health Agency of Canada

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

Canada

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—Public Health Agency of Canada

Également disponible en français sous le titre :

Évaluation du Programme de santé aux frontières et des voyageurs de l'ASPC : 2020-2021 à 2025-2026

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Publication date: November 2026

Cat.: HP5-282/2026E-PDF ISBN: 978-1-100-01181-3

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List of Acronyms

CATMAT	Committee to Advise on Tropical Medicine and Travel
CBSA	Canada Border Services Agency
CEPHS	Conveyances and Environmental Public Health Services
CFIA	Canadian Food Inspection Agency
CPAB	Communications and Public Affairs Branch (CPAB).
eTHI	Electronic Traveller Health Information System
GAC	Global Affairs Canada
IHR	International Health Regulations
NMLB	National Microbiology Laboratory Branch
PHAC	Public Health Agency of Canada
PHTRL	Public Health Travel Restriction List
TC	Transport Canada
QA	*Quarantine Act*
QO	Quarantine Officer

Executive Summary

Program context

To protect Canadians, the Public Health Agency of Canada (PHAC) fulfills a vital role in travel health and border health security by mitigating the introduction and spread of communicable diseases from Canadians travelling abroad, and by mitigating environmental health risks related to potable water, food safety, and sanitation on board conveyances and within ancillary facilities and services that support conveyance operations, in alignment with Canada's obligations under the *International Health Regulations* (IHR).

PHAC's Border and Travel Health Program has three main activity streams:

- **Travel Health Program**: provides guidance to health care professionals, and advice to help travellers protect themselves from travel-related health risks while travelling abroad;
- **Quarantine and Border Health Services Program**: works with border partners to limit the introduction and spread of communicable diseases, and to meet IHR requirements; and
- **Conveyances and Environmental Public Health Services** (CEPHS): delivers regulatory and operational public health functions, working with industry and partners to prevent the introduction and spread of communicable diseases and to protect against risks to water, food, and sanitation on board conveyances, as well as inspected ancillary facilities and services that support conveyance operations. CEPHS activities directly support Canada's IHR core capacities at points of entry, including ship sanitation certification and environmental public health controls.

Together these activities aim to protect Canadians from the public health risks associated with travel. The *Department of Health Act*, the *Public Health Agency of Canada Act*, the *Quarantine Act*, the *Food and Drugs Act*, and the *Potable Water on Board Trains, Vessels, Aircraft and Buses Regulations* provide the legislative basis for PHAC's border and travel health activities.

The Border and Travel Health Program is delivered by PHAC's Regulatory, Operations, and Emergency Management Branch (ROEMB), and supported by activities from the National Microbiology Laboratory Branch (NMLB) and the Communications and Public Affairs Branch (CPAB).

Key partners and stakeholders

All three main program activity streams engage with a variety of partners and stakeholders. These include, but are not limited to:

- **Key federal government departments**, such as the Canada Border Services Agency (CBSA), the Canadian Food Inspection Agency (CFIA), the Royal Canadian Mounted Police (RCMP), Global Affairs Canada (GAC), and Transport Canada (TC), to deliver and enforce travel-health measures.
- **Provinces, territories, and local public health units**, in managing ill travellers and conducting follow-up investigations.
- **Conveyance industries**, such as airlines, cruise lines, and other conveyance operators, to report illnesses and implement required public-health measures.
- **Service providers**, such as travel clinics, health care providers, and the travel industry to disseminate PHAC guidance to travellers.
- **International partners,** to share information and report under the IHR.

Evaluation approach and scope

The evaluation examined the effectiveness of PHAC's Border and Travel Health Program by assessing its achievement of intended results, and its efficiency by reviewing how processes and resources support readiness. The scope covered activities from April 2020 to March 2026. To develop findings, the evaluation drew on multiple lines of evidence, including the following:

- interviews with program staff and partners from other government departments and industry organizations;
- reviews of documents, performance data, and financial information;
- case studies;
- process mapping; and
- a review of academic and grey literature.

Findings

Achievement of results

The evaluation found that the three main activity streams of PHAC's Border and Travel Health Program are functioning effectively and contribute to mitigating risks to the health of Canadians before, during, and after travel.

Travel Health Program

During the evaluation period, PHAC shared information about emerging travel health issues and implemented proactive and tailored communications. The Agency created and disseminated customized travel health materials for several major international events and seasonal travel periods, sharing them proactively online and through relevant travel industry partners. The Program also provided secretariat support to the Committee to Advise on Tropical Medicine and Travel (CATMAT), an external advisory body that assists PHAC with travel health-related advice for travellers and health care professionals. The Program maintained this effectiveness despite declining public interest in travel health information post-COVID and the challenge of reaching an audience now dispersed across many platforms, also known as audience fragmentation, who are increasingly exposed to mis- and disinformation. Public opinion research (POR) shows that Canadians' perceptions of travel-related health risks declined from 75% to 63% between 2019 and 2023, alongside similar decreases in beliefs about seeking pre-travel health advice.

PHAC engaged in partnerships with private sector organizations, including airports, health care clinics, and travel agencies, to voluntarily share travel health information directly with travellers during COVID-19 in order to disseminate information quickly. While there was strong willingness to distribute information on PHAC's behalf during the pandemic, interviewees noted that these organizations are less willing to do so outside of a crisis period, particularly given competing priorities and limited resources.

Quarantine Program

While border measures cannot prevent the spread of all communicable diseases, PHAC took appropriate steps to detect and respond to travel-related health issues, supported by strong partnerships. PHAC's Quarantine Program relies on CBSA officers to initial border screening and refer ill travellers to PHAC quarantine officers (QOs). The vast majority of these referrals (93%) were deemed appropriate. In addition, international collaborations like the Public Health Travel Restriction List (PHTRL), which is a joint initiative between Canada and the United States, have contributed to significant reductions in ill travellers crossing borders. The Program's efforts have also ensured that Canada consistently meets the highest public-health response capacity (level 5) under the IHR monitoring framework for designated ports of entry.

CBSA's planned modernization will shift their screening activities to more virtual and pre-border operations, thus reducing opportunities to screen travellers in person for signs of illness at points of entry. It will be important for PHAC to adapt to changes and modernization among partner agencies.

Conveyances and Environmental Public Health Service (CEPHS)

Conveyance operators have generally demonstrated high levels of voluntary compliance with applicable regulations. PHAC conducted risk-based inspections and worked collaboratively with conveyance operators and local public-health partners to detect potential issues. As a result of these inspections, the Program found that rates of compliance with applicable public health requirements, and demonstrated “sound knowledge” of public health practices among conveyance operators, were both consistently about 95% each year.

In cases of non-compliance, PHAC can inform operators of issues using a graduated compliance approach; however, if operators do not voluntarily come into compliance, there are limited enforcement actions available, such as pursuing the matter in court. While operators of luxury conveyances like cruise ships have strong profit incentives to maintain hygienic practices, airlines and cargo ships are not subject to the same consumer-driven pressures. The evaluation therefore found that exploring a broader range of enforcement tools could help ensure compliance, while reducing reliance on more heavy-handed enforcement strategies in rare cases where voluntary compliance cannot be achieved.

Processes and resources to support readiness

Having learned from the COVID-19 pandemic, PHAC maintains strong collaboration with its partners and has strengthened its internal processes and modernized its tools to improve readiness and enhance the efficiency of future public health responses. Continued modernization of tools and processes, accompanied by training and reviews, will support ongoing improvements to efficiency.

Processes and systems

The Program has identified and begun implementing measures to standardize operational guidance and support nationally consistent implementation of the *Quarantine Act* and modernizations of its tools. Standardization helps ensure that conveyance operators and travellers can expect consistent public health protections and experiences, and it enables PHAC to more effectively monitor compliance, identify gaps, and take action when needed at all points of entry and regions. Risk-based approaches also help prioritize work in both the conveyance and quarantine domains, such as integrating risk assessment into CEPHS’s inspection-data repository and into the Quarantine Program’s assessments to quantify traveller risk, based on geographic service area and passenger volumes.

Efforts to modernize data-sharing platforms are underway, including the following:

- updates to the Yellow Fever Vaccination Centre Designation Program through the introduction of a web-based data collection and site management platform for the yellow fever vaccination centre designation service;
- modernization of CEPHS inspection data systems; and
- upgrades to Quarantine and Border Health Services' notification systems to help marine conveyance operators meet their legislative obligations.

These steps toward technological innovation, automation, and process standardization will help sustain the Program's operations during periods of high turnover and financial constraint. To ensure effectiveness, new tools should be accompanied by adequate training and periodic review to confirm they continue to meet staff needs.

Coordination with partners

Collaboration with local, provincial, territorial, and international partners is foundational to delivering the Border and Travel Health Program, and PHAC has developed and maintained strong relationships that continue to effectively support operations. PHAC relies on partners like airports to voluntarily disseminate public health information, and on delivery partners like CBSA, in order to implement elements of the Program on its behalf, including border screening and collecting and sharing surveillance data, as well as Global Affairs Canada, in order to maintain a travel website on which PHAC publishes travel health notices. However, because these partners have their own competing priorities and limited resources, these functions can be strained without adequate support. In addition, reliance on manual information-sharing methods, such as emailing situation report updates to partners during a response, can be effective, but is not efficient during large-scale events.

Maintaining readiness

PHAC and other organizations have conducted reviews of lessons learned from the COVID-19 response. The pandemic required PHAC to expand into areas outside its regular scope of work, creating significant challenges for staff. For example, PHAC assumed responsibility for managing designated quarantine facilities, government-authorized accommodations for quarantining travellers, and procurement of testing services through the National Microbiology Laboratory Branch. According to internal key informants, even with a substantial workforce expansion and increased expenditures, this work overwhelmed the Agency's resources. In future large-scale responses, PHAC should focus on its core functions and outsource other activities like managing quarantine facilities and procuring tests.

The pandemic also created staffing challenges for the Program, which had to recruit and train many quarantine officers (QOs) at points of entry, while simultaneously responding to the crisis, resulting in delays. The evaluation found strong consensus among internal key informants that a reservist model is needed to ensure a trained workforce that can be rapidly mobilized to support time-limited border activations during future public health events of international concern. Work to implement this model is already underway.

Recommendations

Recommendation 1: Examine applicable legislation, regulations, and tools to explore options to implement modernized approaches to program delivery, including updated screening options, in alignment with delivery partners.

As delivery partners modernize their processes for screening international travellers to shift towards more virtual and pre-border approaches, it will be important for PHAC to operate in alignment to protect public health and mitigate economic and social disruption caused by travel restrictions.

Recommendation 2: Explore legislative authorities to enable the use of a broader range of enforcement options, and develop an operational framework to support their effective implementation.

There is a limited range of enforcement options for non-compliance with legislation for conveyance operators. A broader range of tools could give PHAC more flexibility to match its response to the severity, context, and risk of the non-compliance.

Recommendation 3: As the Program continues to implement technological innovation and automation in its processes, ensure it is accompanied by appropriate training and periodic review.

There is a high reliance on manual processes for sharing information with a broad range of partners involved in delivering the Border and Travel Health Program, which is resource intensive and may increase risk of error and limit scalability of response.

While the Program is moving to more automated systems, it will be important to ensure that these new platforms, integrate lessons learned from previous platforms, enable data integration, support front-line operations, reporting and decision making, respect information sharing best practices and principles, and are supported with sufficient time and resources for training, change management, and future routine maintenance or upgrades to systems.

Management Response and Action Plan

Recommendation 1

Examine applicable legislation, regulations, and tools to explore options to implement modernized approaches to program delivery, including updated screening options, in alignment with delivery partners.

Management response

Management agrees with this recommendation.

Table 1: Plan to address recommendation 1

Action Plan	Deliverables	Expected Completion Date	Accountability
1.1 Review applicable legislation, including both statutes and regulations, and existing tools to identify opportunities and limitations for modernized program delivery approaches, including pre-border and digital screening.	1.1.1 Summary of feedback from engagement sessions with border partners and stakeholders.	1.1.1 October 2026	Director General, Centre for Border and Travel Health
	1.1.2 A report to PHAC's Executive Committee on statutory, regulatory, and policy analysis.	1.1.2 April 2027	
	1.1.3 A summary of identified opportunities and constraints provided to PHAC's Executive Committee.	1.1.3 April 2027	
	1.1.4 Scalable, risk-sensitive options and recommendations for program modernization and transformation presented to PHAC's Executive Committee for consideration for potential advice to Minister and Government.	1.1.4 April 2027	

Recommendation 2

Explore legislative authorities to enable the use of a broader range of enforcement options, and develop an operational framework to support their effective implementation.

Management response

Management agrees with this recommendation.

Table 2: Plan to address recommendation 2

Action Plan	Deliverables	Expected Completion Date	Accountability
2.1 Conduct a review of all existing legislative authorities, including the *Quarantine Act, Department of Health Act* and the *Food and Drugs Act,* to identify opportunities to enable a suite of nationally consistent compliance and enforcement options, such as administrative monetary penalties (AMPs) regimes.	2.1.1 Summary of feedback from engagement with enforcement partners and stakeholders. 2.1.2 A report (approved by the Director General of the Centre for Border and Travel Health) to the Vice President of Regulatory, Operations and Emergency Management Branch with the findings of an environmental scan and legislative analysis.	2.1.1 October 2026 2.1.2 April 2027	Director General, Centre for Border and Travel Health

Recommendation 3

As the Program continues to implement technological innovation and automation in its processes, ensure it is accompanied by appropriate training and periodic review.

Management response

Management agrees with this recommendation.

Table 3: Plan to address recommendation 3

Action Plan	Deliverables	Expected Completion Date	Accountability
3.1 Formalize a process for implementing a standardized approach to training and change management for new or enhanced program technologies, and for conducting periodic reviews to ensure alignment with operational realities, where applicable.	3.1.1 Guideline on standardized approach for training and change management, approved by Director of Operations and Coordination within the Centre for Border and Travel Health.	April 2027	Director General, Centre for Border and Travel Health

Program Description

To protect Canadians, the Public Health Agency of Canada (PHAC) fulfils a vital role in travel health and border health security. It does so by mitigating the introduction and spread of communicable diseases from Canadians travelling abroad and by mitigating environmental health risks related to potable water, food safety, and sanitation on board conveyances and within ancillary facilities and services that support conveyance operations, in alignment with Canada's obligations under the *International Health Regulations* (IHR).

PHAC's Border and Travel Health Program has three main activity streams:

- **Travel Health Program**: provides guidance to health care professionals, and advice to help travellers protect themselves from travel-related health risks while travelling abroad;
- **Quarantine and Border Health Services Program**: works with border partners to limit the introduction and spread of communicable diseases and protect the health of Canadians, as per the *Quarantine Act*, and to meet IHR requirements; and
- **Conveyances and Environmental Public Health Services** (CEPHS): delivers regulatory and operational public health functions, working with industry and partners to prevent the introduction and spread of communicable diseases and to protect against risks associated with water, food, and sanitation on board conveyances, as well as inspected ancillary facilities and services that support conveyance operations. CEPHS activities directly support Canada's IHR core capacities at points of entry, including ship sanitation certification and environmental public health controls.

Together these activities aim to protect Canadians from the public health risks associated with travel; see Appendix A for the full list of intended program results. The *Department of Health Act*, the *Public Health Agency of Canada Act*, the *Quarantine Act*, the *Food and Drugs Act*, and the *Potable Water on Board Aircraft, Vessels, Buses and Trains Regulations* provide the legislative basis for PHAC's border and travel health activities.

The Border and Travel Health Program is delivered by PHAC's Regulatory, Operations, and Emergency Management Branch (ROEMB), and supported by activities from the National Microbiology Laboratory Branch (NMLB) and the Communications and Public Affairs Branch (CPAB).

Key partners and stakeholders

All three main activity streams engage with a variety of partners and stakeholders. These include, but are not limited to:

- **Key federal government departments**, such as the Canadian Border Services Agency (CBSA), which provides Screening Officers under the *Quarantine Act*, and Global Affairs Canada (GAC), which hosts the travel.gc.ca website where travel health notices and advice are posted. It also includes Transport Canada (TC), the Royal Canadian Mounted Police (RCMP), the Canadian Food Inspection Agency (CFIA), and Immigration, Refugees and Citizenship Canada (IRCC).
- **Provinces, territories, and local public health units**, in managing ill travellers and conducting follow-up investigations.
- **Conveyance industry**, such as airlines, cruise lines, and other conveyance operators, to report illnesses and implement required public health measures.
- **Service providers**, such as travel clinics, health care providers, and the travel industry to disseminate PHAC guidance to travellers.
- **Committee to Advise on Tropical Medicine and Travel (CATMAT)**, the expert advisory body that assists PHAC with travel health-related advice for travellers and health care professionals.
- **Yellow Fever Vaccination Clinics**, who provide yellow fever vaccinations to travellers.
- **International partners,** to collaborate, share information, and report under the IHR.

Evaluation Scope and Approach

The evaluation examined the effectiveness of PHAC's Border and Travel Health Program by assessing achievement of its intended results, and its efficiency by reviewing how processes and resources support readiness. The scope covered activities from April 2020 to March 2026.

To support findings, the evaluation drew on multiple lines of evidence, including the following:

- interviews with program staff and partners from other government departments and related industry organizations;
- document and performance data review;

- financial data review;
- case studies;
- process mapping; and
- a review of academic and grey literature.

Additional details on methodology, including limitations, are provided in Appendix B.

Findings

Achievement of results

Overall, the Program's efforts have ensured that Canada consistently meets the highest capacity under the IHR for a risk-based approach to international travel-related measures. PHAC is effectively identifying and responding to travel-related health risks through strong partnerships and risk-based approaches. PHAC is integrating more proactive communication in its processes, despite challenges in traveller engagement.

Travel Health Program

Key Takeaway: PHAC has effectively shared information on new travel health issues, increasingly leveraging proactive and tailored communications. This progress has taken place in the context of declining interest among travellers, the fact that audiences are now spread across many different platforms, also known as audience fragmentation, and increasing mis- and dis-information.

The Travel Health Program aims to mitigate risks associated with travelling by education and awareness. To this end, the Program's activities include:

- assessing the health risks associated with international travel and providing recommendations to reduce risks to the Canadian population;
- supporting health care professionals who care for travelling public;
- providing secretariat support to the Committee to Advise on Tropical Medicine and Travel (CATMAT); and
- designating yellow fever vaccination centres in Canada and ensuring compliance with the IHR.

PHAC produces and shares specific travel health advice by destination in partnership with Global Affairs Canada on the travel.gc.ca website. Between 2020-2021 and 2025-2026, PHAC produced an average of 80 travel health advice products for web publication each year. This is the main way PHAC shares public health advice with travellers. The

Communications and Public Affairs Branch (CPAB), in collaboration with the Travel Health Program, also prepared media lines and other supporting proactive communications products to aid in effective communications on travel health issues. CPAB developed materials in response to changes in patterns of illness, such as when Canada lost its measles elimination status, or increasing concern over communicable diseases such as Oropouche and Chikungunya.

Table 4. Performance Metrics: Travel Health Program

Indicator	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
% of visitors to travel.gc.ca who seek health advice	N/A	N/A	81%	76%	65%	72%
Number of travel health advice products updated	16	63	126	79	90	115

Note: Web analytics data are only retained for a period of three years, therefore web analytics data was not available for 2020-2021 and 2021-2022.

Communication as a tool to influence traveller behaviour is inherently limited by an individual's willingness to seek and trust information, a challenge that has become more pronounced since the COVID-19 pandemic. Web analytics show that travellers seeking health advice still account for most visits (69%) to travel.gc.ca, where travel health notices and advisories are posted, but this share has declined since 2021-2022. Public opinion also indicates that, compared to 2019, Canadians were less likely to agree that international travel poses health risks not present in Canada (63% agreed in 2023 vs. 75% agreed in 2019) and were less likely to believe all international travellers should see a health care professional before travel (56% in 2023 vs. 64% in 2019), or that they should do so at least six weeks before the trip (57% in 2023 vs. 64% in 2019).

The survey data shows that some groups, particularly younger travellers aged 18 to 34, men, and non-citizens or recent migrants, report more barriers to following travel health recommendations and tend to perceive lower travel health risks. These populations were also more likely to research health information later or book trips at the last minute, reducing opportunities for professional health consultations and adequate pre-trip preparation. Furthermore, interviewees working at PHAC also identified increasing

audience fragmentation and the proliferation of mis- and disinformation as challenges. As audiences consume information across a growing number of platforms and sources, it becomes more difficult for public health authorities to reach travellers consistently with timely and credible messages.

The Centre for Border and Travel Health (PHAC) developed a three-year Promotions and Outreach Strategy to improve communication of travel health risks and mitigation measures in the post-COVID-19 context, with a focus on underserved populations. The strategy identifies priority groups through evidence from public opinion research (POR), media, surveys, and other sources. Groups identified for targeted messaging were health care professionals, youth and young adults, older adults and snowbirds, occupational workers, cruise ship travellers, and 2SLGBTQIA+ travellers. It also outlines key engagement partners to support outreach to travellers, including Global Affairs Canada (GAC), Immigration, Refugees and Citizenship Canada (IRCC), Employment and Social Development Canada (ESDC), the Canadian Centre for Occupational Health and Safety (CCOHS), and airport and port authorities.

PHAC has already taken steps to implement proactive and tailored communication, as described in the outreach plan. For example, in the period covered by this evaluation, PHAC developed tailored materials for the Hajj pilgrimage to Mecca in Saudi Arabia, which was posted online and distributed through specialized travel agencies serving these travellers.[1] They also developed products targeting travel for the 2026 Winter Olympics in Italy, and travel for Lunar New Year in multiple Asian countries.

PHAC also supports the development of awareness and tools for health care professionals. It also provides secretarial support for the Committee to Advise on Tropical Medicine and Travel (CATMAT), an external advisory body that assists PHAC with expert travel health-related advice for travellers and health care professionals. Since 2021, PHAC has published 10 CATMAT statements providing guidance on a variety of travel health issues, including the prevention of animal bites and rabies (2026), chikungunya (2025), dengue (2025), Malaria (2024), and a list of resources for Canadian travel medicine practitioners (2025).[2] Representatives working with CATMAT felt that PHAC does an excellent job providing secretarial support to CATMAT, and noted the added benefit of PHAC acting as a liaison when other government departments need to connect with travel health experts for advice outside of the regular mandate of CATMAT.

Risk communications expertise was identified by internal interviewees as a key facilitating factor to successfully implementing this stream of the Program. Risk communications is a

critical capacity in public health and a core capacity of the IHR.[3, 4] Effective risk communications enable experts to increase traveller understanding and inform appropriate action during a public health emergency. It also builds credibility for public health organizations as a reliable source of accurate information.[5] The increased incremental risk communication capacity developed during COVID-19 was staffed on a temporary basis. Since 2023, a temporary risk communications expert in CPAB has developed a new risk communications toolkit and an online risk communications training course to increase capacity among its staff. While internal interviewees feel the Agency has sufficient capacity in this area, it will be important to continue investing in maintaining a steady-state of capacity so that the Agency is prepared for future public health events of international concern.

Some interviewees, both internal and external to PHAC, suggested the Agency may more effectively reach travellers by "pushing" information, rather than relying on travellers to seek the information themselves. The Agency has already undertaken work to this end. For example, documents demonstrate that PHAC engaged in partnerships with private organizations, including airports and travel agencies, to share travel health information directly with travellers during COVID-19 to quickly share information. While there was a high willingness to distribute information on behalf of PHAC during the COVID-19 pandemic, interviewees working with PHAC reported that these organizations are less willing to do so outside of a crisis period, particularly as they have competing priorities and limited resources.

While traveller-based epidemiological systems like GeoSentinel and CanTravNet offer useful insights into patterns and emerging risks, their coverage is limited, as they only capture a subset of ill travellers, which makes them unsuitable for assessing program performance. Epidemiological data is instead used by the Program as a signal of emerging or changing risks.

Quarantine Program

Key Takeaway: While border measures cannot prevent the spread of all communicable diseases, PHAC applied appropriate steps to detect and respond to travel health issues, facilitated by strong relationships with partners. As partners like CBSA and Transport Canada (TC) modernize their activities, minimizing in-person screening activities and shifting towards pre-border screening, PHAC will need to adapt as well.

PHAC's Quarantine Program aims to protect the health of Canadians by preventing the introduction and spread of communicable diseases into and out of Canada. It does this by screening and assessing travellers at international points of entry and implementing public health measures, in collaboration with partners like the Canada Border Services Agency (CBSA), when potential health risks are identified.[6] Public health measures at the border, for example, screening, and in emergencies, possible testing and travel restrictions, are intended to delay the entry of communicable diseases, giving provincial, territorial, and local health care systems critical time to ramp up their services during a global health emergency; they are not intended to fully prevent entry of disease into a country. Their effectiveness depends on factors beyond the Program's control, such as geography, political conditions, and traveller cooperation. Nonetheless, the Program aligns its processes with international partners to mitigate importation and consistently meets the highest public-health response capacity (level 5) under the IHR monitoring framework at designated ports of entry.

Border screening and referral to quarantine officers (QOs) are central to PHAC's Quarantine Program, with CBSA conducting initial screening and referring cases as needed to PHAC QOs. In 2024-2025, CBSA made 98 referrals, 37% related to symptoms, and 93% were deemed appropriate. During COVID-19's peak in 2021, staffing exceeded 290 screening officers and 150 QOs; by 2025, this decreased to 27.5 QOs in 4 major airports and at headquarters.

PHAC also responds to maritime declarations of health threats received from cruise and cargo conveyance operators. In 2024-2025, 79% of cruise ships that visited Canada declared a communicable disease onboard. In 2024-2025, 83% of the referrals by conveyance operators were considered appropriate.

While it is not possible to demonstrate the full impact of the Quarantine Program on illness levels in Canada using current data systems, several examples demonstrate the positive impact of border activities. For example, PHAC collaborates with the USA and airline operators to prevent individuals with confirmed infectious diseases from boarding airlines travelling between Canada and the U.S. by using the Public Health Travel Restriction List (PHTRL); see Case Study: Addition to the PHTRL. One peer-reviewed study found that the PHTRL reduced importation of Tuberculosis up to 85%.[7] Furthermore, during COVID-19, the Program implemented 83 orders-in-council, including border entry restrictions, vaccinations, and testing requirements. These measures formed part of a broader suite of non-pharmaceutical public health measures designed to limit transmission. Modelling indicates that, without this combined suite of public health measures, Canada could have experienced millions more hospitalizations and up to 760,000 additional deaths.[8]

During COVID-19, PHAC worked with peace officers under the *Quarantine Act* (QA) to enforce orders when travellers were non-compliant. Throughout COVID-19, over 19,500 tickets were issued for non-compliance, over 90% of charges laid being related to section 58 of the QA, which is failure to comply with an order. Approximately 7,000 tickets were contested, about 36%. A policy review of the QA found that there were sometimes challenges enforcing the QA, as peace officers were not always available at the time of a traveller's entry into the country. This challenge is due in part to the fact that not all provinces and territories signed on to the Contraventions Regulations, and only those that signed were supportive of using their peace officers (police of jurisdiction) for compliance and enforcement under the QA. As such, the policy review suggests exploring options to address this gap, such as taking a proactive approach to compliance and enforcement. There was limited evidence of compliance and enforcement activities related to the QA outside of the COVID-19 context.

Case Study: Addition to the PHTRL

The PHTRL is a collaborative effort established by the United States Centers for Disease Control and the Public Health Agency of Canada as a mechanism for sharing information about individuals who are likely to try to travel internationally while ill with a serious illness and might require quarantine. This case illustrates how the two countries work together to prevent a traveller with certain confirmed communicable diseases from boarding an airplane for international travel.

The PHTRL identifies individuals who may attempt to travel while infectious and shares their information with authorized partners, including airlines, to enable measures such as “Do Not Board” and “Look-Out” orders or to alert Quarantine Services at the border. Names are removed from the PHTRL once the public health risk has been resolved.

The administration of the PHTRL requires coordinated action among provincial authorities, quarantine officers (QOs), and airline partners to ensure timely addition and removal of individuals. Provinces may also contact affected travellers directly, which streamlines communication and supports compliance. By enabling rapid and coordinated intervention across jurisdictions, the PHTRL demonstrates how travel restrictions can reduce the risk of cross-border disease transmission, providing evidence that such measures can significantly limit the importation of infectious diseases.

Collaboration with federal partners is essential to the operation of the Program, as PHAC often needs to rely on partners' authorities to leverage a broader suite of legislation, overcoming the limits of its own authorities. For example, PHAC was able to implement pre-border screening travel restrictions with ArriveCAN in collaboration with TC by leveraging their authorities under the *Aeronautics Act* and *Canada Shipping Act*. Similarly, the Agency has a memorandum of understanding with CFIA whereby PHAC conducts inspections on conveyances under the *Food and Drugs Act*.

Due to strong collaboration and support from delivery partners, the current system is working well to support the Border Program. However, PHAC must keep pace with technological changes taking place at delivery partner agencies. For example, the CBSA Traveller Modernization Initiative enables virtual, in-advance, pre-border operations.[9] While the shift to increased reliance on digital screening tools will improve efficiency for CBSA operations, it is likely to reduce in-person screening opportunities under the *Quarantine Act*. Key informants at PHAC noted that this will require PHAC to adjust its approach in order to ensure an effective screening program at points of entry. Suggestions included examining legislative approaches like enabling pre-border screening and operational solutions like leveraging PHAC screening officers in airports to observe and detect individuals who may have a communicable disease.

Furthermore, a program-led maturity assessment found that it has limited standardization with respect to interpretation of the QA, policies, standards, and guidance for designated officers, such as QOs and Environmental Health Officers. Standardization is important to ensure that conveyance operators and travellers can anticipate consistent protection and experience and make it easier for PHAC to effectively monitor compliance, identify gaps, and take action when needed, regardless of the point of entry or region. Work to standardize interpretations is underway, and as of December 2025, 69 standardized definitions or operational positions were approved, with a total of 194 areas needing clarification.

Conveyances and Environmental Public Health Services

Key Takeaway: There is a high level of compliance with applicable regulations among conveyance operators, and it is largely voluntary. While CEPHS has strong legislative powers, there is a lack of intermediary measures to correct non-compliance without litigation.

The Conveyances and Environmental Public Health Service (CEPHS) works to protect the health of travellers by mitigating environmental health risks on passenger conveyances

and related services. To accomplish this, CEPHS conducts risk-based inspections and assessments of aircraft, cruise ships, ferries, trains, and associated facilities to ensure safe food handling, potable water quality, and appropriate sanitation, and also performs ship sanitation inspections and issues Ship Sanitation Control Certificates in accordance with the IHR.

During the period covered by this evaluation, PHAC conducted a variety of inspection and audit activities to ensure compliance with applicable regulations on conveyances, as shown in Table 2. While annual data on the number of risk-based inspections was not available for the full evaluation period, in 2024-2025 PHAC conducted 411 risk-based inspection activities for food, water, and sanitation, and 986 ship sanitation inspections (SSIs). CEPHS issues approximately 1,000 SSIs each year on a cost-recovery basis, in addition to their risk-based inspection activities.

CEPHS also responds to issues related to cruise ships and, where appropriate, informs CBSA as a courtesy. While engagement with the cruise ship industry is not formally tracked, the Program estimates that CEPHS responded to approximately 6 gastrointestinal illness elevations in 2024-2025 and engaged with approximately 20 cruise ship industry stakeholders outside of the context of outbreaks that same year.

Table 5. Metrics on risk-based and ship sanitation inspections

Indicator	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
# of risk-based inspections on conveyances	91	316	460	468	411	TBD
# of SSI certificates issued or extended	987	1023	1066	987	1023	TBD
% of SSI certificates issued or extended within the service standard.	100%	100%	93.5%	99.4%	99.6%	TBD

The Program has found a high level of awareness among conveyance operators and a high level of compliance with applicable regulations. As shown in Table 2, rates of compliance with applicable public health requirements and demonstration of “sound knowledge” of public health practices were both consistently about 95% each year. The

Conveyances Program also conducted franchise audits related to food and potable water services across multiple sectors, including ferries, airline flight kitchens, and food service supply depots. These audits routinely included major operators. On average, approximately 600 violations are identified per year through inspections, with approximately 95% resolved upon follow-up; see Case study: Rodent infestation on a cruise ship.

Table 6. Indicators of compliance in inspections

Indicator	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
% of inspections where operators display sound knowledge of public health practices	95.8%	99.3%	94.6%	98.7%	99.0%	TBD
% of inspected passenger transportation operators and ancillary service facilities that meet public health requirements	100%	98.3%	97.5%	97.0%	95.0%	TBD

Case study: Rodent infestation on a cargo ship

During a routine inspection by PHAC environmental health officers at the vessel's arrival in Vancouver, evidence of a rodent infestation was discovered, prompting the issuance of a Ship Sanitation Control Certificate with specific recommendations for remediation.

The vessel operator voluntarily came into compliance by hiring a pest control company and implementing a series of corrective actions, including installing additional traps, applying rodenticide, and removing alternative food sources onboard. They then submitted a report to PHAC detailing these measures, demonstrating full cooperation and alignment with the recommended control steps. Since the effectiveness of these measures could only be observed after the ship's departure from

Canada, PHAC contacted the IHR Focal Point of the ship's next point of entry, informing them of the situation and sharing the Ship Sanitation Control Certificate with Control Certificate Recommendations.

As noted above, the conveyance industry demonstrates a high level of compliance with applicable regulations, supported by a combination of proactive inspection activities, international requirements for Ship Sanitation Certificates, and strong industry incentives. When non-compliance is detected, CEPHS uses a graduated compliance approach that includes education, follow-up inspections, and engagement with operator, and operators are typically willing to quickly bring their operations into compliance. However, there are currently limited options for responding to instances of non-compliance with the regulations, meaning that if an operator is not willing or able to come into compliance, PHAC will have to pursue corrective action through the courts. PHAC's administrative penalty regime differs from other regulatory regimes targeting travellers and conveyance operators from federal agencies and departments such as CFIA,[10] CBSA,[11] and Transport Canada (TC),[12,13] which all may employ administrative monetary penalties for conveyance operators if promotion is insufficient to bring the operator into compliance with applicable legislation, and as an alternative to judicial proceedings. Conversely, PHAC's administrative control measures include license suspensions, orders, or quarantine, and ticketing under the *Contraventions Act* for penal enforcement when other measures are insufficient.[14]

Interviewees working with CEPHS noted that many conveyance operators are subject to consumer-driven incentives to meet or exceed regulatory requirements. For example, operators of luxury conveyances like cruise ships have a strong profit incentive to maintain hygienic practices in compliance with public health standards, while operators of conveyances like airplanes and cargo ships may not be subject to the same incentives. Internal interviewees noted that exploring a broader range of administrative enforcement tools, such as administrative monetary penalties, would further strengthen the Program by providing more proportionate and flexible options to address non-compliance, in alignment with approaches used by partner organizations.

Processes and resources to support readiness

Good collaboration is the bedrock of PHAC's Border and Travel Health Program; however, continued modernization of tools and legislation is needed to address the high reliance on manual processes and limited standardization.

Processes and systems

Key Takeaways: The Program has identified opportunities for standardization of operational guidance to support nationally consistent QA implementation and tool modernization. Risk-based approaches help prioritize work related to conveyances and quarantines.

New data collection systems and tools to support more efficient processes should be accompanied by sufficient training and periodic review to ensure they are fit for purpose.

The Border and Travel Health Program has taken steps to address historic challenges with documentation and process standardization over the period covered by this evaluation.

Many internal interviewees stressed the need for standardized approaches across Canada's regions to ensure a truly national program. A Program-led maturity assessment found limited consistency in how quality assurance requirements, policies, standards, and guidance for designated officers, such as QOs and Environmental Health Officers, were interpreted. To support program maturation, the Centre for Border and Travel Health has been documenting processes and updating existing or developing new standard operating procedures (SOPs). As part of this work, the Centre initiated the development of an instrument inventory, which is a centralized and structured catalogue of all policies, directives, standards, SOPs, guidelines, and tools used, or in development, across the Program. By May 2025, the Program had identified more than 200 instruments that were either established or in development. The Program is also moving toward a formal hierarchy of instruments, which organizes instruments by their level of authority (from legislation and regulations, to policies and directives, to SOPs, guidelines, and tools) to clarify their relative weight and ensure consistent application. As this hierarchy is established, there are opportunities to implement centralized and systematic document management.

Furthermore, in support of program maturity, documentation shows that the Program has begun to integrate risk-based approaches to prioritizing work to ensure its efforts are efficiently directed towards areas of highest impact. For example, CEPHS integrates risk information within its inspection data systems to support risk-based decision making. While a formal risk assessment framework for CEPHS is under development, the Program currently applies a structured risk-based approach to determine what conveyances and ancillary service facilities are part of their annual inspection plan, in order to make efficient use of existing resources. The Quarantine Program also integrates risk-based decision

making via country and disease-specific “ultra rapid risk assessments”, which assess the current risk to Canada from public health events of international concern, inform consistent public health messaging, and evaluate the need for additional preparedness measures.

There have been efforts to modernize data sharing platforms, including modernization to the Yellow Fever Vaccination Centre Designation Program to implement web-based forms for data collection and a newly developed site management application, called the Yellow Fever Designation Application, as well as the implementation of the electronic traveller health information (eTHI) platform. While internal interviewees felt that the development of a new system was required, they noted that the scope of the eTHI project was much smaller than originally planned. These steps towards innovation, automation, and standardizing processes where possible will help support the Program’s continued functioning during periods of high turnover and financial constraint. In order to ensure effectiveness, new tools should be accompanied by sufficient training and periodic review to ensure that they are meeting the needs of their users.

Coordination with partners

Key Takeaways: Collaboration with local, provincial, territorial, and international partners is foundational to delivering the Program. Strong relationships effectively support operations. However, these partners have competing priorities and limited resources.

Responsibility for border and travel health is shared among local, provincial, territorial, federal, and international partnerships. Strong relationships and collaboration between these partners has been foundational to the success of the Program.

Partnership is a cornerstone of the program, with CBSA, Global Affairs Canada (GAC), and TC delivering portions of the Program on PHAC’s behalf or supporting program delivery, and PHAC carrying out activities on behalf of CFIA. Formal mechanisms are in place to coordinate among federal partners. For example, issue-specific committees may be formed during a response, such as the Border Measures Implementation Committee during COVID-19, while ongoing coordination takes place through the Federal Border Partners Initiative.

Collaboration with international partners is guided by the IHR, stablished by the World Health Organization. Coordination between the IHR focal point in Canada and other countries is largely conducted through manual efforts like email. Similarly, key informants indicated that situation reports and ad hoc communication are the primary mechanism for

coordination with local, provincial, and territorial partners. While key informants felt email-based communication sufficiently meets the Program's operational needs at this time, they noted that it is labour intensive, and several respondents suggested that this may be an area for future modernization and automation. For example, when a sick traveller is required to undergo medical examination to determine if they have a communicable disease, as defined in the *Quarantine Act*, PHAC must collaborate with many partners, and nearly all information is shared via phone, email, or fax; see Case Study: Requiring a traveller to undergo a medical examination. Similarly, when adding a traveller to the PHTRL, all information is shared with airline operators, border security, and other partners manually through emails. Due to privacy restrictions, Canada does not have a system to automatically share information with partners like airlines and US border counterparts, while there is such a system in place in the United States.

Case Study: Requiring a traveller to undergo a medical examination

Managing a sick traveller at the border requires extensive coordination among multiple partners, often relying on manual communication methods such as phone, email, and fax. A "Requirement to undergo a medical examination order", in accordance with section 22 of the *Quarantine Act*, allows a quarantine officer (QO) to require a traveller to undergo a medical examination when there are reasonable grounds to believe they may have a serious illness that may require quarantine.

CBSA Border Services Officers, acting as screening officers under the *Quarantine Act*, play a front-line role by identifying travellers who may exhibit signs or symptoms of illness and referring them to a PHAC QO for assessment. If a communicable disease is suspected by the PHAC QO, a "Requirement to undergo a medical examination" order is issued and the traveller is referred into the Canadian health care system for medical evaluation. This process involves coordination between QOs, provincial and local public health authorities, hospitals, and medical professionals, with information frequently shared across organizations through phone calls, emails, and faxed documentation. The PHAC National Microbiology Laboratory Branch may also be engaged to provide confirmatory laboratory testing.

PHAC staff felt the process was effective; however, the need to coordinate between multiple partners using largely manual

communication channels can create inefficiency and delays, highlighting an area where modernization and automation could improve timeliness, information sharing, and overall response effectiveness.

Communication between partner agencies could be further streamlined, as the process relies heavily on manual information exchange, including email correspondence, to coordinate actions and share case information with involved partners. While leveraging partners for service delivery promotes efficiency by minimizing the need for human resources to implement the Program, it also presents limitations. For example, internal and external key informants reported that CBSA's Border Services Officers (BSOs) receive only minimal training to act as screening officers, and must carry out this work in addition to their regular duties. Competing priorities among delivery partners will likely become a greater challenge in periods of fiscal restraint.

Maintaining readiness

Key Takeaways: PHAC and external bodies have conducted reviews of COVID-19 lessons learned and work has been initiated to implement changes to better prepare for future public health events of international concern.

Maintaining readiness will require different approaches, such as a reservist model to quickly increase capacity during a public health event. Furthermore, PHAC could improve efficiency in future events by focusing on core activities and outsourcing other activities, such as managing quarantine facilities and test procurement.

During the evaluation period, PHAC had to radically expand and contract its operations to support response to public health risks at the border during and after the COVID-19 pandemic. A variety of lessons learned, audits, and after-action reviews were conducted during and after the COVID-19 response, many of which included or focused on border and travel health activities.

Financial and FTE data show a significant expansion in program expenditures and human resources during the COVID-19 pandemic, followed by a response demobilization to reach a minimal viable baseline for day-to-day program delivery. See Appendix C for more detail. During this period, the Program received additional spending authority and expanded to support the implementation of border measures. In 2020-2021, actual spending ($106.0M) greatly exceeded planned funding ($7.8M), and expenditures peaked in 2021-2022 at $227.9M, when pandemic measures were most resource intensive. Planned funding declined in 2022-2023; however, actual expenditures remained elevated at $148.7M

during the transition period. By 2023-2024 and 2024-2025, both spending and variances had decreased as pandemic-related activities were scaled back and the Program moved toward a steady funding state at pre-pandemic levels.

The COVID-19 pandemic response required PHAC to expand into areas that were outside its regular scope of work and posed significant challenges for staff. For example, management of designated quarantine facilities, management of government-authorized accommodations for quarantining travellers, and management of procurement for testing by NMLB were all identified as challenging. According to internal key informants, even with significant workforce expansion, increased expenditure, and additional budgetary inflow, this work overwhelmed Agency resources. While specific after-event reviews highlight strengths and limitations of these various activities, PHAC representatives agreed that PHAC does not have experienced, nor a local or regional on-the-ground presence that is sufficient to sustain long-term management of hotels or residences across Canada. While NMLB has expertise in the genomic sequencing necessary to inform the purchasing of testing supplies, internal interviewees felt that there were other departments better positioned to handle procurement and logistics, and that this function falls outside NMLB's core mandate. By outsourcing these functions, PHAC could better focus resources on implementing its core mandate related to border health measures in future public health events.

Internal interviewees emphasized that, in the future, border activations in response to public health events of international concern should be implemented quickly and be time limited. As surge capacity would likely be needed in future border measures, a reservist approach like the model used by the Canadian Forces could help address the need to maintain a capacity level of trained staff like nurses for screening at points of entry. According to these interviewees, work is already underway to establish this model by leveraging casual (90-day) on-demand contracts and providing training to nurses who would be able to work as QOs during a time-limited border activation.

During COVID-19, communicable disease preparedness at points of entry was embedded inconsistently within broader emergency plans from partners like CBSA and airport authorities. PHAC internal reviews identified this fragmentation as a barrier to effective response. Furthermore, the Office of the Auditor General's (OAG) *Audit of Pandemic Preparedness, Surveillance, and Border Control Measures* recommended that PHAC work with its partners to evaluate all plans and assess whether emergency response activities during the COVID-19 pandemic were carried out as intended and met objectives.[15] To address this gap, PHAC began developing a national, multi-partner Communicable Disease Response Plan Guideline in spring 2023. These guidelines align with federal

emergency frameworks, including the F/P/T *Public Health Response Plan for Biological Events*, and supports PHAC's regulatory obligations under the QA. The resulting guideline is intended to standardize readiness across points of entry by air, land, and marine modes into a consistent national approach.

Conclusions and recommendations

Conclusions

Achievement of results:

Through the Travel Health Program, PHAC shares information about emerging and ongoing travel health issues and is increasingly implementing proactive and tailored communications. They have maintained this effectiveness despite declining interest in travel health information following COVID-19, as suggested by public opinion research (POR), as well as the fact that audiences are now spread across many different platforms, also known as audience fragmentation, and the increase in mis- and disinformation. The Program relies on government and industry partners to voluntarily disseminate messages.The additional capacity for risk communications at CPAB established following COVID-19 supports effective communications, but is currently staffed on a temporary basis with the goal of increasing the risk communications capacity and expertise within the organization through tools, training, and knowledge transfer exercises.

While border measures cannot prevent the spread of all communicable diseases, PHAC's Quarantine Program and CEPHS applied appropriate steps to detect and respond to travel health issues, facilitated by strong relationships with partners. PHAC consistently met the highest response capacity at points of entry according to the IHR. As delivery partners, such as the Canadian Border Services Agency (CBSA), modernize their processes for screening international travellers to shift towards more virtual and pre-border approaches, there will be fewer opportunities for in-person screening for public health reasons.

There is a high level of voluntary compliance with regulations from conveyance operators. PHAC's CEPHS maintains high levels of compliance among regulated parties; however, it has limited enforcement options to address non-compliance when it occurs. Expanding available tools would enhance regulatory flexibility while building on an already effective program. In cases of non-compliance, PHAC can inform operators of issues, but if operators do not voluntarily come into compliance, the only corrective action available is to go to court. Applicable regulations do not provide a broad range of enforcement tools. For example, administrative monetary penalties are available under other regulatory regimes

targeting conveyance operators and travellers, and administered by CFIA, Transport Canada, and CBSA.

Processes and resources to support readiness:

PHAC has established strong collaborative relationships to support the implementation of the Border Travel Health Program. Since the COVID-19 pandemic, efforts have focused on strengthening internal processes, improving tools and guidance, and incorporating lessons learned in the preparation for future public health responses.

Strong relationships and good collaboration among partners are key to the success of PHAC's Border and Travel Health Program. PHAC relies on partners like airports to voluntarily disseminate public health information, and on delivery partners like CBSA and Transport Canada to implement program elements on PHAC's behalf, despite these partners having competing priorities and limited resources.

The Program identified and is implementing opportunities for standardization of operational guidance to support nationally consistent implementation of the *Quarantine Act*, and for tool modernization. As the Program continues to mature, ongoing efforts will help support a standardized interpretation of the *Quarantine Act*. Continued modernization of tools and legislation is essential to reduce reliance on manual processes and improve standardization. The reliance on emails as an information management tool is not efficient and limits the scalability of a response.

Recommendations

Recommendation 1: Examine applicable legislation, regulations, and tools to explore options to implement modernized approaches to program delivery, including updated screening options, in alignment with delivery partners.

As delivery partners modernize their processes for screening international travellers to shift towards more virtual and pre-border approaches, it will be important for PHAC to operate in alignment to protect public health and mitigate economic and social disruption caused by travel restrictions.

Recommendation 2: Explore legislative authorities to enable the use of a broader range of enforcement options, and develop an operational framework to support their effective implementation.

There is a limited range of enforcement options for non-compliance with legislation for conveyance operators. A broader range of tools could give PHAC more flexibility to match its response to the severity, context, and risk of the non-compliance.

Recommendation 3: As the Program continues to implement technological innovation and automation in its processes, ensure it is accompanied by appropriate training and periodic review.

There is a high reliance on manual processes for sharing information with a broad range of partners involved in delivering the Border and Travel Health Program, which is resource intensive and may increase risk of error and limit scalability of response.

While the Program is moving to more automated systems, it will be important to ensure that these new platforms, integrate lessons learned from previous platforms, enable data integration, support front line operations, reporting and decision making, respect information sharing best practices and principles, and are supported with sufficient time and resources for training, change management, and future routine maintenance or upgrades to systems.

Appendix A: Intended outcomes

The expected outcomes of the Border and Travel Health Program are as follows.

Long-term outcome:

- Canadians are protected from the public health risks associated with international travel.

Medium-term outcomes:

- Public health risks from international travellers are identified and mitigated.
- Public health risks on federally regulated conveyances are identified and mitigated.
- Travellers and conveyance operators are aware and informed of the public health risk environment.

Short-term outcomes:

- Travellers comply with public health legislative requirements.
- Public health risks among international travellers are detected and response plans are in place.
- International conveyance operators comply with public health requirements.
- Public health risks among inbound and outbound conveyances in Canada are detected.
- Conveyance operators have sound knowledge of how to prevent and handle public health risks and their legal related obligations.
- Travellers, operators, and partners have the information they need to understand travel health policies and comply with legislative requirements

Appendix B: Methodology

Scope and evaluation questions

This evaluation focused on the performance and efficiency of PHAC's Border and Travel Health Program over the 2020-2021 to 2025-2026 period.

The evaluation was guided by the following questions:

1. **Achievement of results:** Have the Program's activities and their supporting legislative and regulatory tools contributed towards the effective reduction of travel health risks on conveyances and response to travel health threats, in terms of:
    a) providing timely advice on issues or events outside of Canada that may have an impact on the health of travellers, including through travel health notices and advisories;
    b) mitigating the importation and exportation of communicable diseases into, and out of, Canada; and
    c) protecting travellers through the reduction of public health risks associated with water, food, or sanitary conditions on passenger conveyances and ancillary services?
2. **Processes and resources to support readiness:** To what extent is the Program well-prepared to respond to public health events or emergencies?
    a) What processes, systems, and operational approaches are currently in place to support scalable and efficient responses? What areas require improvement?
    b) How effectively does the Program coordinate with internal partners and external (domestic and international) stakeholders to support preparedness and rapid response?
    c) How have resources been planned and used to build and maintain readiness, including the incorporation of lessons learned from the COVID-19 response?

Data collection methods

To address the evaluation questions, the evaluation team collected and analyzed multiple lines of evidence that were triangulated to improve the reliability and credibility of evaluation findings and conclusions. The following lines of evidence were used:

Document review

OAE collected and reviewed approximately 271 documents provided by PHAC's Border and Travel Health Program.

Interviews

OAE conducted key informant interviews with 31 respondents from PHAC and program delivery partners. In total, OAE interviewed:

- employees working with PHAC: 17
- program delivery partners: 14
    - airport authorities: 1
    - CATMAT representatives: 2
    - CBSA representatives: 7
    - GAC representatives: 3
    - Transport Canada representatives: 1

Interviews were coded and summarized using NVIVO qualitative data analysis software.

Performance data review

The Centre for Border and Travel Health aggregated and provided performance data related to key performance indicators identified in their program Performance Information Profile. OAE used this data to analyze trends in outcome achievement for three activity streams: the Travel Health Program, the Quarantine Program and Conveyances and Environmental Public Health Services.

Literature review

A comprehensive literature review was conducted using a structured approach to address two primary research questions on border and travel health measures. The search strategy used two databases, PubMed and Scopus, and also included grey literature sources. After applying inclusion and exclusion criteria, a set of full-text articles and grey literature resources was included. Articles were reviewed by two analysts for inclusion and exclusion, and an annotated bibliography was prepared. Summaries of key findings and themes were then generated using Google NotebookLM, an AI tool, and validated by analysts.

Process mapping

We used process mapping to help us understand how the Program's processes work and to identify potential areas for improvement. The Program selected two Standards of

Operation for the process mapping exercise. Microsoft Visio, a diagramming and graphics application, was used to draw the two processes. After mapping the processes, the evaluation team held an assessment session to identify:

- Bottlenecks
- Sources of delay
- Duplications
- Unnecessary steps
- Value-added from user point of view
- Potential opportunities to streamline processes.

Findings were validated by program representatives.

Financial data review

Financial data was provided by Financial Management Analysts for the Centre of Border and Travel Health, including planned and actual expenditures for each year (2020-2021 to 2025-2026) and planned and actual human resources (FTEs) for the same period. Explanations were provided for planned and actual expenditures.

Case studies

To illustrate the broad variety of program activities outside of pandemic response, the evaluation team and Program selected four “cases”: 2 situation-specific responses, and 2 general processes. The cases selected for this line of evidence were:

Situational cases:

- Case of Hepatitis A on a cruise ship.
- Rodent infestation on a cargo ship.

Process cases:

- Process for addition to the public health travel restriction list.
- Process to require a traveller to undergo a medical examination.

Using documents, interviews, and literature where available, the evaluation team described the case process or situation, identifying what worked well, challenges, and improvement opportunities.

Limitations

The evaluation team used triangulation to analyze data collected by these various methods in order to increase the reliability and credibility of the evaluation findings and conclusions. Still, most evaluations face constraints that may affect the validity and reliability of findings. The table below outlines the limitations encountered during evaluation, and the mitigation strategies that were put in place.

Table 7: Limitations, impacts and approach for addressing them

Limitation	Impact on the evaluation	Approach for addressing the limitation
Limited performance data as per Performance Information Profile	The Program Information Profile (PIP) was most recently updated in 2023, therefore several indicators had only 1 or 2 years of performance data. Limited annual data was available.	Where possible, the evaluation team sought alternative indicators using administrative data, web analytics, and academic or grey literature.
Financial data coding during COVID-19	Issues with financial data coding during the COVID-19 pandemic made it difficult to separate Border and Travel Health spending from other pandemic response activities.	Program financial managers in the undertook a thorough review of financial records and validated with program management to ensure that data was correct, rather than relying on GCInfobase exclusively.

Evaluation lenses

The evaluation applied an SGBA Plus lens to its assessment of the Program. Although official languages were not specifically examined, they were not found to be an issue for the Program's activities.

The Border Travel Health Program responds to two United Nations Sustainable Development Goals (SDGs): specifically, SDG 3: Good Health and Well-being, and SDG 6: Clean Water and Sanitation. With respect to SDG 3, the evaluation examined how border related activities strengthen Canada's ability to detect and mitigate the transfer of communicable diseases across international borders, contributing to enhanced response capacity, early warning, and risk reduction. These activities support

PHAC's broader efforts to protect public health and reduce the impact of health crises on communities, consistent with the global agenda of promoting well-being for all.

The evaluation also considered contributions to SDG 6: Clean Water and Sanitation through PHAC's administration of the *Potable Water on Board Trains, Vessels, Aircraft and Buses Regulations*. This included reviewing how inspections ensure that transportation operators provide safe drinking water to the travelling public and address any required actions in a timely manner. Both the Border Travel Program and potable water oversight functions were assessed within the effectiveness section to determine how well PHAC's activities advance these SDG-related outcomes.

Evaluation governance

The Office of Audit and Evaluation (OAE) worked closely throughout the evaluation with a program contact in the Centre for Border and Travel Health (CBTH), the National Microbiology Laboratory Branch (NMLB), and the Communications and Public Affairs Branch (CPAB) to access documents and performance data, and to identify stakeholder groups. The scope for this evaluation was shared secretarially with the PHAC Performance Measurement and Evaluation Committee (PMEC) in October 2025 to receive input and guidance on the evaluation questions. The preliminary findings were presented to PMEC in March 2026, and the final report and Management Response and Action Plan developed by CBTH were also presented to PMEC in June 2026.

Appendix C: Financial Data

Please note: This financial data was compiled from publicly reported sources, including the Departmental Plans and Departmental Results Reports, as presented on GCInfoBase.[16] Data were not available for 2025-26 at the time the report was written.

Table 8. Financial Data

Fiscal Year	Planned	Actual	Variance ($)	Variance (%)
2020-2021	$7.8M	$106.0 M	$98.2M	1353%
2021-2022	$190.7M	$227.9 M	$37.2M	146%
2022-2023	$75.3M	$148.7 M	$73.M	198%
2023-2024	$7.8M	$37.8	$30M	483%
2024-2025	$20.7 M	$26.5 M	$5.8 M	128%

Table 9. Full Time Equivalent (FTE) Data

Fiscal Year	Planned	Actual	Variance ($)	Variance (%)
2020-2021	56	201	145	359%
2021-2022	401	698	297	174%
2022-2023	374	555	181	148%
2023-2024	56	205	149	366%
2024-2025	105	170	65	162%

Explanation of variance:

Each year, actual program spending and human resource levels were higher than planned due to in-year adjustments with supplementary estimates. These adjustments were related to in-year adjustments due to new funding or reallocation for:

- Supporting the COVID-19 response
- Establishing establish an agile, resilient, and adaptive workforce
- Working on the electronic Traveller Health Information project (eTHI).

Between 2022-2021 and 2022-2023, actual full-time equivalents were higher than planned primarily, due to additional funding received during the fiscal year to support the COVID-19 response. This additional funding was used to increase the personnel necessary to support border testing and travel measures. Actual spending was higher than planned, primarily due to funding received and spent during the year to support the COVID-19 response, including testing for COVID-19 at Canada's borders.

In 2023-2024, Actual spending and full-time equivalents were higher than planned, primarily due to funding received during the fiscal year via supplementary estimates to establish an agile, resilient, and adaptive workforce.

Planned budgetary and human resource decline in 2024-2025 was due to the expiration of budget authorities for the Travelling Public Program. However, actual spending and human resources increased due to additional funding received in-year via Supplementary Estimates to establish an agile, resilient, and adaptive workforce.

In 2025-2026, planned amounts were lower due to expiring funding, including gradual decrease in funding to establish an agile, resilient, and adaptive workforce. Actual spending was higher than planned, primarily due to funding received during the fiscal year via Supplementary Estimates for the Travelling Public Program, and due to re-allocations of funds to support the electronic Traveller Health Information project (eTHI).

Data provided in our financial tables do not account for A-base funding provided by the Biosecurity Program, whose staff were mobilized to support Border and Travel Health activities during the COVID-19 pandemic. This funding amounted to $19 million, over three years, with most of the funding ($15 million) being used in the first year of the pandemic.

End Notes

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