

# Integrating Health into Tourism for Recovery and Resilience in the Caribbean

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## Introduction

Travel and tourism are crucial to the sustainability and resilience of Caribbean economies, as they drive revenue, employment and foreign exchange. However, travel and tourism can also be a source of disease introduction and spread, and consequently, have negative impacts on Caribbean health. The COVID-19 pandemic, catalyzed by travel, debilitated the Caribbean economies, caused significant illnesses, deaths, economic and job losses, disruptions of crucial services and threatened regional health security. The pandemic reiterated the need to include health as a critical part of the travel and tourism sector. Travelers are now prioritizing health when choosing a destination/service. The Caribbean Public Health Agency (CARPHA)'s regional Tourism and Health Program (THP) provides a comprehensive pathway for integrating health into tourism. The THP's approach of surveillance and response, guidelines, capacity building, setting health, safety and environmental standards, developing partnerships, creating the "healthier safer tourism recognition award" and introduction of the mobile app, improves the health and safety of Caribbean people and visitors. This contributes to recovery and strengthens resilience of Caribbean tourism and the sustainability of economies. Due to COVID-19, the THP has repurposed and expanded many of its tools for a more robust response, in order to boost travelers' confidence and re-establish a healthier, safer return to travel in the Caribbean.

## Tourism Dependency of Caribbean Economies and its Impact

The Caribbean region, renowned for its tropical weather, captivating beaches, vibrant cuisine and rich diverse culture, is a preferred travel destination for many tourists, especially for those who live in temperate climates. According to the World Travel & Tourism Council (WTTC) [1], the travel and tourism sector supported more than 2.7 million jobs and accounted for an estimated 14% (US\$61.5 billion) of the Caribbean's gross domestic product (GDP) in 2019 (pre-COVID-19), with direct and indirect contributions ranging from 25% to 74% in most countries of the Region [2]. The Inter-American Development Bank (IDB) reported that in 2019, 13 Caribbean countries were ranked in the top 30 countries globally on the Tourism Dependency Index [3-5]. Aruba topped the list with 79.8% dependence on tourism,

with Grenada (58.5%), Antigua and Barbuda (55.1%), The Bahamas (54.5%), St. Lucia (53.4%) and Dominica (42%) all within the top 10 of the Index [3-4]. The Economic Commission for Latin America and the Caribbean (ECLAC) noted that tourism's input toward GDP is much broader as tourism does not operate in a silo, but is connected to other divisions, such as food and beverage, entertainment and creative industry. Thus, the Caribbean's "tourism economy" is estimated to be about 2.5 times bigger than the sector itself, accounting for 26% of the region's total GDP [5]. Tourism also remains an essential source of foreign exchange.

## COVID-19 and other Health Threats affecting Tourism

Caribbean tourism, and by extension, its economic longevity is susceptible to health and environmental impacts. The health of Caribbean economies is inherently related to the health of its travel and tourism industry given its high number of visitors: population ratio, more than any other region in the world [6]. The Region remains vulnerable to outbreaks caused by Chikungunya, Zika, Dengue and Malaria due to its geographical location, tropical climate, the abundance of competent vectors and undefined pockets of susceptible populations. Travel, the islands' adjacency, porous borders, and interconnectedness, enable highly transmissible communicable diseases, such as COVID-19 and Norovirus, to surpass borders, disabling tourism and livelihoods. High and increasing levels of visitor arrivals, which is key for economic sustainability, also increase the potential risk for visitors and locals transmitting or acquiring diseases from each other. This is typified by the introduction and spread of new and re-emerging diseases, such as SARS, the H1N1 pandemic of 2009, Chikungunya in 2013 and Zika in 2015, Norovirus, and COVID-19 from 2020 to present. The most commonly reported illnesses among travelers include Foodborne diseases (e. g., *Norovirus*, *Salmonella*, *Shigella* *Staphylococcus*, *E. coli*, *Cholera*, *traveler's diarrhoea*), vector-borne diseases (*Dengue*, *Chikungunya*, *Yellow Fever*, *Zika Virus*), respiratory diseases (*Influenza*, *COVID-19 virus*) and Sexually Transmitted Infections (STIs) (7).

The COVID-19 pandemic has had the most profound impact on travel and tourism, causing widespread illnesses, and deaths [5,8,9]. The first case of COVID-19 in the Caribbean), and its variants, were imported via travel. As of

March 5, 2023, there were 60,721,138 confirmed cases and 6,805,474 deaths globally, and 4,466,469 cases and 36,974 deaths in the Caribbean [10,11]. The response to COVID-19 has now shifted from the initial national lockdowns, cessation of travel and closure of schools and businesses, to the present state where countries have now fully reopened with the removal of COVID-19 prevention and control measures [8]. Most Caribbean countries, like many other countries globally, are now in a post peak phase, experiencing community spread with the possibility of recurrent events, with the dominant variant of concern since June 2022 being Omicron [7]. While the number of reported deaths and hospitalizations is not as high as in previous years, cases and deaths are still occurring in our communities. COVID-19 can still lead to severe illness especially in the old, young, and other vulnerable groups, and in those who are unvaccinated. The continuation of celebrations and mass gathering events in the Caribbean, e.g., Carnival season, Easter, and cruise/tourism season, all pose increased risk for infection.

Travelers' diarrhea is one of the most common travel-related illnesses. In some Caribbean countries, the risk is intermediate, with attack rates of 8-20%. There have been over 30 large reported diarrheal/gastroenteritis (GI) outbreaks in the Caribbean in the last 10 years, with *Salmonella*, *Norovirus*, *E. coli* and *Staphylococcus* being the common causative agents. However, most outbreaks are not reported and many more go undetected because travel/tourism facilities do not routinely report their illnesses. Surveillance data collected at CARPHA indicate that between 2010 and 2021, over 300 gastroenteritis outbreaks were reported to CARPHA; of which one-third were travel-related [7]. *Norovirus*, first introduced to the Caribbean via travel, is now the most frequently reported cause of GI outbreaks in locals and visitors. Cases increased by 44% between 2005 and 2019, especially on cruise ships. One outbreak in 2012 caused 1,256 illnesses, closures of hotels, travel advisories and a 30% decline in arrivals for that country. Another outbreak in 2018 affected over 300 persons resulting in hotel closures as well. In 2022, there were 45 cases of travel-related *Salmonella* Enteritidis (SE) reported in one hotel and in 2012, a large multiple hotel outbreak (200 cases) of SE resulted in travel advisories. The region is a dominant cruise destination and during 2018-2022, over 3000 diarrheal cases were reported on Caribbean cruises [12]. CARPHA's tourism-based surveillance system captures visitors' illnesses in both accommodations and cruise ship settings and has reported over 4000 cases/incident, including 32 syndromic alerts in 2022. From October 2021 to February 2023, there were 1612 alerts of COVID-19 cases on ships. In December 2022, there was a multiple hotel outbreak of *Norovirus* and in January 2023, a dual outbreak of GI and COVID-19 on a cruise ship [13].

These outbreaks illustrate the vulnerability of the tourism sector to health threats and the necessity for early warning systems to inform prompt public health action and

minimize disease spread. Travel related illnesses are not only a health and security risk but contribute to reputational damage and economic instability in Caribbean economies. To guard against these health risks to Caribbean tourism, surveillance of visitor's illnesses and strengthening capacity to mitigate these risks and provide rapid response is critical [14].

### **Economic Impact of COVID-19 on Tourism**

The COVID-19 pandemic has evolved into one of the greatest threats to human society, resulting in a dramatic loss of human life as well as global economic and social disruption. Although the pandemic has impacted every industry, COVID-19 particularly devastated the economic sustainability of travel-dependent countries like that of the Caribbean. Global tourism suffered its worst year in 2020, resulting in a \$2.4 trillion loss [8]. The Caribbean experienced tremendously more negative effects, as its travel and tourism GDP fell by 58% and more than 70% in some countries in 2020 [15]. In 2020, air travel declined by >60% and cruise ship arrivals declined by 49% compared to 2019 [16]. With massive crowds in a confined space, cruise ships were a niche for the increased risk of infection and spread of COVID-19. During the period 2019-2020 international tourist arrivals to the Caribbean Community (CARICOM) region fell by 70%. The pandemic halted operations at ports and airports, reducing visitor arrivals which dropped close to zero in 2020. The Bahamas, Barbados and Jamaica visitor arrivals declined by 76%, 67% and 69%, respectively. The occupancy rate in the accommodation sector was at its lowest in June 2020 at 13.5% leading to closures of facilities with 14% of these businesses being viewed as likely to remain closed. The Caribbean region also faced an estimated 25% decline in the number of employees in the travel and tourism sector [17-23].

Caribbean tourism seems to have taken an upward trajectory in 2021 as the region documented the second-fastest comeback. The region is projected to have an increase of 47.3% year-on-year, leading toward an upsurge of almost US\$12 billion [24-27]. However, despite projections of an increase in arrivals, Caribbean tourism continues to be vulnerable to public health threats. As evidenced by COVID-19, travel can facilitate the rapid movement of communicable diseases and COVID-19 has aptly demonstrated the critical necessity for health in tourism. Safeguarding the health and safety of locals and visitors whilst advancing the resilient, sustainable resurgence of Caribbean tourism and its economies are of paramount importance.

### **Building Caribbean Resilience and Recovery through the Regional Tourism and Health Program**

CARPHA's THP was developed out of the necessity to address health, and safety among visitors in the Caribbean toward improving regional health and tourism resiliency. It is to be noted that the Region (i) depends on visitor arriv-

als more than any other region in the world (ii) had its first cases of new and re-emerging illnesses imported by virtue of travel, e.g., COVID-19 (iii) the incidence of travel related illnesses and outbreaks in the Caribbean (iv) suffered from the lack of visitor-based surveillance to rapidly detect public health threats and trigger measures to reduce or stop the spread of disease (v) had insufficient knowledge and capacity in tourism to mitigate, control and prevent public health threats (vi) lacked cumulative hospitality health, safety and environmental sanitation (HSE) standards, and (vii) needed health and tourism collaborations to address health threats. Before the THP, health monitoring systems were primarily focused on local populations.

The THP is addressing HSE threats to tourism in a comprehensive manner through surveillance, response, guidelines, capacity building, standards, policy, partnerships, and the incentive of a travellers health award. The aim is to strengthen countries' capacities to prepare and respond to public health threats to enhance the health of visitors and locals and thereby improve regional health security and the quality, sustainability and resilience of Caribbean tourism through the following regional public health goods [28-30]:

- Tourism and Health Information System and Caribbean Vessel Surveillance System. These are two real-time, electronic surveillance systems for monitoring and responding to public health illnesses in tourist establishments and services and cruise ships respectively.
- Regional Guidelines for Managing Public Health Illness in Accommodations and Ship Settings
- Capacity Building in COVID-19 Health Guidance, Food Safety and Sanitation
- Caribbean Travelers Health Assurance Stamp for Healthier, Safer Tourism and the Travelers Health Mobile App
- CARICOM-approved Hospitality Health, Safety and Environmental Sanitation Standards
- Health and Tourism Public and Private Partnerships
- Regional Mandates and Policy

The THP is elevating Caribbean tourism by contributing to establishing healthier, safer travel to the Caribbean especially during the COVID-19 pandemic. With the advent of COVID-19, the THP quickly expanded its tools for more rapid and relevant response to the pandemic. Implementing countries have enhanced capacity to mitigate COVID-19 and other HSE threats, leading toward sustainable tourism. The THP is currently operating at varying levels in 13 Caribbean countries. Its visitor-based surveillance systems have identified many health threats and allowed for countries to implement timely measures to reduce introduction and spread. It has built capacity for response, prevention and control of COVID-19 and other infectious diseases, provided scientific guidelines for response to illnesses and awards tourism facilities for implementing health and safety measures all leading to tourism recovery and resilience.

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