DIAGNOSIS
# BIOSAFETY
PROTOCOLS
IN THE TOURISM
SECTOR

I ♥ CARIBBEAN

I ♥ Latin America

Document prepared for the Inter-American Development Bank (IDB) by the Institute for Spanish Tourist Quality.

April 2021
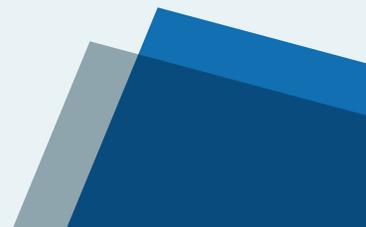
INTRODUCTION

This diagnosis identifies an **action framework** to contribute to the recovery of the tourism in Latin America and the Caribbean (LAC). This action framework includes:

(i) The **adaptation of biosafety protocols** to face SARS-CoV-2, **reinforcing the real and perceived safety** in tourist organizations and destinations.

(ii) The identification of a **management framework,** which establishes the **basis** to respond in an agile and effective way to **future sanitary crises.**

Summary

An analysis on the adequacy of existing biosafety tourism protocols in Latin America and the Caribbean (LAC) was developed, detecting gaps and concluding that:

• **LAC** region has extensively developed protocols to face COVID19, but there is a **lack of harmonization in measures and in their level of specificity that negatively affects user's perception on safety and that must be corrected.**
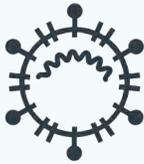
• **In LAC protocols, there is a high level of coverage of those points identified by health experts as of higher risk of contagion (Risk Nodes RN),** compared to the coverage of protocols in other regions.

Even so, the research concludes that there is a **lack of concrete measures for some risk nodes** in the protocols, especially in local transportation, ports and airports, as well as for the **transmission mode by aerosols.** There is also a **lack of definition** regarding the **contingency plans** to be deployed by tourist organizations, when needed. The coverage of risk nodes (RN) that are not yet covered is required.

• After a year of pandemic, new researches on the transmission of the virus, the beginning and consolidation of the vaccination process, and given that the **risk is not static,** the inclusion of the **variability of the risk is needed,** an issue that has so far not been addressed in the protocols analyzed.

Secondly, **the management framework for these protocols in terms of implementation, communication and control shall be revised,** in order to ensure their effectiveness. The following conclusions were drawn:

There are **decisive factors that influence the effectiveness and compliance of the protocols** and that should be considered in the management framework, such as the **level of mandatory compliance** of protocols and the **contribution of the different public-private agents** of the destination in the implementation, communication and control processes.

Lack of **measures** related to the **implementation, communication and control** generates **distrust, confusion, as well as a perception of improvisation and lack of coordination.** It is necessary to make an effort in this area to regain confidence and reactivate the tourism sector, especially with regard to **control measures,** since it is observed that most of them do not exist or, having been defined, have not been put into practice. Although there is no "ideal" control system, there are some alternatives based on self-evaluation, public-private collaboration and other cost-effective measures that allow effective monitoring of compliance

Contents

PROJECT JUSTIFICATION

Tourism:
- **Key activity in generating GDP,** employment and investments in LAC
- **One of the sectors most affected by COVID-19** (restrictions, mobility, lockdowns)
- Multiplier effect of the **tourism impact**

May-August 2020:
- **Biosafety protocols** in the tourism industry

2021:
- **Vaccination** (logistic and supply problems, new variations of the virus, side effects, uneven administration)
- **Knowledge** of virus and its different transmission modes
- **Experience** in the implementation of protocols

COVID-19 IMPACT

−61% tourism Jobs and −62% tourism GDP

Caribbean

−44% tourism Jobs and −44% tourism GDP

Latin America

WTTC estimations for 2020

Biosafety protocols are still crucial and **indispensable** to guarantee the **highest levels of safety** for users and employees of the tourism sector **to generate confidence and promote the reactivation of the sector.**

CONSIDER LEARNED LESSONS

ESTABLISH THE BASIS TO MANAGE FUTURE CRISES

OBJECTIVE

Make a diagnosis on the adaptation of current biosafety tourism protocols to generate safer tourist spaces and services in LAC and recover the confidence of the user.

ACCOMMODATION

RESTAURANTS

LOCAL TRANSPORTATION

BEACHES

AIRPORTS

PORTS

Specific objectives

•**Identify Risk Nodes (RN) that should be covered in protocols considering the transmission modes of the SARS-CoV-2.**

•**Identify needed implementation, communication and control mechanisms.**

SCOPE OF THE DIAGNOSIS

Geographic

Countries in Latin America and the Caribbean (LAC) and in another world regions

Sectorial

Hospitality (accommodation and restaurants), local transportation and tourist areas (ports, airports and beaches)

Time period

Documents published until January 2021

Sources of information

Secondary sources

150
Revised
protocols

Public / private
International, national,
regional and subregional

Primary sources

467
Surveys
(23 Countries)

1
focus group
to final users

4
Webinar
workshops
with tourism
authorities and
services
providers in
LAC

43
Interviews
to authorities,
experts,
service providers,
consumers
associations

Revised protocols

LAC region:

- Argentina
- Brazil
- Chile
- Colombia
- Costa Rica
- Jamaica
- Mexico
- Panama
- Peru
- Dominican Republic

Other regions:

- Australia
- Spain
- Hong Kong (China)
- Israel
- New Zealand
- Portugal
- Seychelles

In addition:

Caribbean Public Health Agency (CARPHA), Brazilian support service for Micro and Medium Business (SEBRAE), Pacific Asia Travel Association (PATA), World Travel and Tourism Council (WTTC), International Civil Aviation Organization (ICAO) and the World Health Organization (WHO)

Interviewed entities

- The Civil Aviation Authority of Colombia
- Airports of Peru
- Sodis Alliance
- AMResorts
- European Association of Consumers for Standardization(ANEC)
- Municipality of Aracatí(Brazil)
- Association of the Gastronomic Industry(ACODRES)
- Association of Hotels, Restaurants and Cafes of Europe(HOTREC)
- Associations of Hotels, Restaurants and Casinos of Peru (AHORA)
- Tourism Authority of Panama (ATP)
- Municipality of Maceió (Brazil)
- Caribe Hospitality
- Casa Andina Hotels
- Centre for Tourism training (CENFOTUR)
- National Council of Ground transportation of Peru
- Argentine Consumers
- National Corporation of Consumers and users of Chile (CONADECUS)
- Cruise Lines International Association (CLIA)
- Decameron Hotels
- Despegar.com

- Gastronomic Business Federation of the Republic of Argentina (FEHGRA)
- GHL Hotels
- Punta Cana Group
- Hilton Hotels
- Libertador Hotels
- Costa Rica Tourism Board
- Keteka
- Meliá Hotels International
- Ministry of Foreign Trade and Tourism of Peru
- Ministry of Tourism of Argentina
- Ministry of Tourism of Belize
- Ministry of Tourism of Brazil
- Ministry of Tourism of Paraguay
- Bahamas Ministry of Tourism and Aviation
- Organization of Brazilian World Heritage Cities
- Municipality of Salvador de Bahia
- Municipality of Santa Marta
- Tourism Secretary of Mexico
- National Tourism Service of Chile (SERNATUR)
- National Union of Consumers and Users of the Republic of Panama (UNCUREPA)

METHODOLOGY

1) Risk maps:

Objective:

Identify **risk nodes (RN)** where it is necessary to define measures to minimize the transmission risk.

Transmission Modes

Identification of transmission modes

Airborne transmission through aerosols
Drops of 5 microns or smaller size can remain suspended in air for a variable time, and reach distances longer than 2m.

Droplet transmission
Produced when the infected person coughs, sneezes or talks. These drops reach trajectories of up to 2m.

Contact transmission
When touching contaminated surfaces with secretions from infected people and then putting hands on the oral, nasal or conjunctival mucosa.

The risk is NOT STATIC (it is variable)

Safety distance
(<2m)

Ventilation
natural, forced interior/external)

Time of exposure
(> 15 min.)

Relative humidity
(<40%)

Respiratory protection

The combination of these factors increases or reduces the risk of transmission

RISK VARIABILITY

(-)
LESS
RISK

(+)
MORE
RISK

RISK MODULATING FACTORS:

LESS RISK	RISK MODULATING FACTOR	MORE RISK
LESS SAFETY DISTANCE BETWEEN USERS	SAFETY DISTANCE	MORE SAFETY DISTANCE BETWEEN USERS
CLOSED SPACES AND NOT WELL VENTILATED	VENTILATION	OUTDOORS SPACES
LONG TIME OF EXPOSURE	TIME OF EXPOSURE	REDUCED TIME OF EXPOSURE
WITHOUT FACE MASK	RESPIRATORY PROTECTION	WITH AN APPROPRIATE FACE MASK
HUMIDITY <40%	RELATIVE HUMIDITY	HUMIDITY BETWEEN 40% – 60%

THE RISK ALSO INCREASES WHEN PEOPLE SPEAK, SHOUT OR SING AND DECREASES IF THEY ARE IN SILENCE.
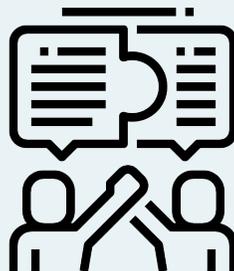
2) Determination of variables

Objective:

Identify critical management variables to evaluate their coverage degree in current protocols and find best practices.

VARISK

- These are the **Va**riables related to the management of the **Risk** Nodes (RN) that are identified in the risk maps.
- They vary depending on each subsector/tourist area

Analysis of the coverage degree in analyzed protocols:

<50% of protocols

50% < º > 75% of protocols

>75% of protocols

VICC

- These are the **V**ariables related to the **I**mplementation, **C**ommunication and **C**ontrol in the tourist organizations and destinations.

Implementation • Communication • Control

*VARISK= Variables Related to the Management of Risk Nodes.
*VICC= Variables Related to the Implementation, Communication and Control.

# Critical management variables (VARISK and VICC)

Secondary sources

Protocols

Evaluate the coverage degree of risk nodes (RN) on the current protocols.
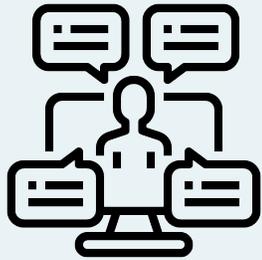
VARISK

Identify **contents related to implementation, communication and control of protocols.**
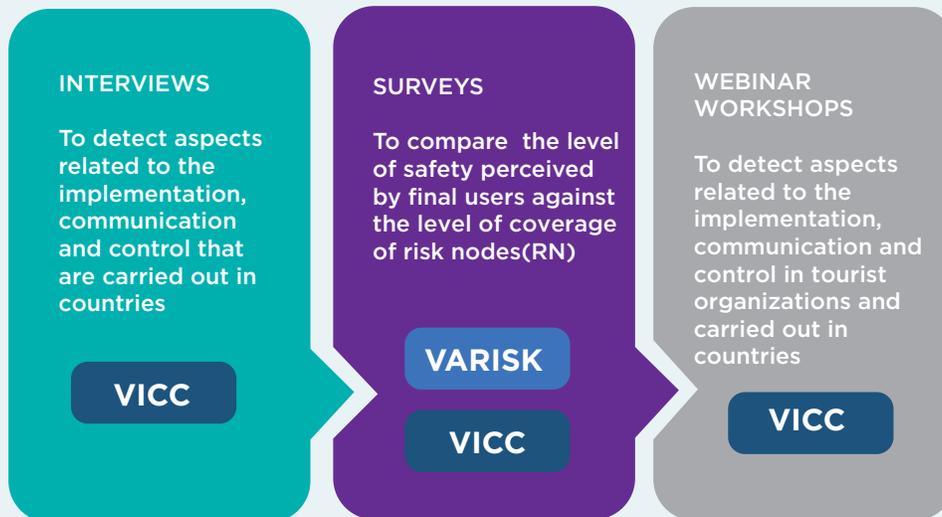
VICC

Primary sources

INTERVIEWS

To detect aspects related to the implementation, communication and control that are carried out in countries

VICC

SURVEYS

To compare the level of safety perceived by final users against the level of coverage of risk nodes(RN)

VARISK

VICC

WEBINAR WORKSHOPS

To detect aspects related to the implementation, communication and control in tourist organizations and carried out in countries

VICC

*VARISK= Variables Related to the Management of Risk Nodes.
*VICC= Variables Related to the Implementation, Communication and Control.

Scope and Specificity
of Reviewed Protocols

More developed

H
- Accommodation protocols in general
- Specific protocols (for instance, categorized hotels, hostels or campsites).

- Protocols for all types of food and beverage establishments including bars, restaurants, take away services and delivery, among others.

- Measures for transport operators or infrastructure managers.
- Transport vehicles: tourist buses, public and private transport, rental vehicles and shuttles operated by hotels, among others.

- Specific protocols for beaches (maritime, fluvial and lacustrine).
- General protocols for outdoor and entertainment spaces (applicable to beaches).

- National protocols and for airport concessions or management companies.
- Some protocols refer to International Civil Aviation Organization (ICAO), World Health Organization (WHO) and guidelines provided by the authorities.

- Protocols for cruise ports, marinas and tourist piers (maritime, fluvial and lacustrine), private management or concessions.
- Most of them have not been able to be widely implemented.

Less developed
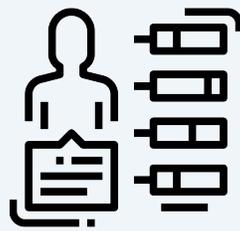
Results of Variables
of Risk Management (VARISK)
and User's Perceptions

Risk Nodes (RN) map and coverage level in LAC

Check-in and payment

Key/card delivery

Catering Service

Waste management

Ventilation

Relative Humidity

Common areas

Lifts

Rooms

Shared Cleaning Equipment

Staff areas I

Supplier management

The coverage of Risk Nodes (RN) in lodging protocols is HIGH.

	Low
	Medium
	High
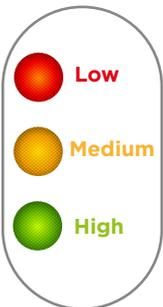
Included in protocols

VARISK - Risk Nodes (RN)		Total	LAC region
Check-in and check out	Check-in	🟢	🟢
	Key/card delivery	🟠	🟠
	Payment	🟠	🟢
Stay	Use of lifts	🟢	🟢
	Use of common spaces	🟢	🟢
	Rooms	🟢	🟢
	Catering service	🟢	🟢
Ventilation	Ventilation: indoor spaces	🟢	🟢

					Included in protocols		
Low		**VARISK - Risk Nodes (RN)**				**Total**	**LAC region**
Medium	**Relative humidity**	Relative humidity				🔴	🔴
High	**Operational support processes**	Use of shared equipment of cleaning				🟢	🟢
		Staff areas (canteens, rest areas, dressing rooms and toilets)				🟠	🟠
		Supplier management				🟠	🟢
		Waste management				🟠	🟠

ACCOMMODATION Ⓗ

User's Perceptions

51%

of users perceive accommodations as unsafe spaces

It is necessary to reinforce the **communication** of protocols and**, to a lesser extent,** improve risk nodes (RN) with lower coverage.

Risk Nodes (RN) map and coverage level in LAC

The coverage of Risk Nodes (RN) in restaurants´ protocols is
MEDIUM-HIGH.

		Low
		Medium
		High
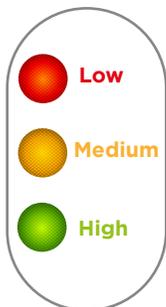
VARISK - Risk Nodes (RN)		Included in revised protocols	
		Total	LAC region
Welcome	Preparation of the space	High	High
	Accommodation and allocation	High	High
	Tables mounting and dismantling	High	High
Order	Menu	High	High
	Order	Medium	Medium
Service	Bar service	Medium	Medium
	Table service	High	High
	Take away / Delivery	High	High
	Toilets	High	High
Billing/Exit	Payment	High	High
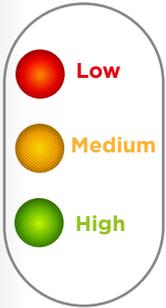
VARISK - Risk Nodes (RN)

		Included in revised protocols	
		Total	**LAC region**
Kitchen	Menu preparation	🟠	🟢
Ventilation	Ventilation	🟠	🟠
Relative humidity	Relative humidity	🔴	🔴
	Use of shared cleaning equipment	🟢	🟢
Operational Support processes	Staff areas (canteens, dressing areas and rest areas)	🔴	🟠
	Supplier management	🟠	🟢
	Waste management	🔴	🔴

🔴 Low
🟠 Medium
🟢 High

RESTAURANTS

User's Perceptions

50%

of users perceive a HIGH level of safety

It is **perceived as the safest subsector.** It is a subsector with a high level of exposition to the virus due to the characteristics of its spaces *.

It is necessary to reinforce the coverage of Risk Nodes (RN) in the protocols with specific measures and improve communication.

Real risk is different from perceived risk

* In general, they are closed spaces, with poor ventilation at times, with users without a mask and in social activity – eating and talking.

Risk Nodes (RN) map and coverage level in LAC

The coverage of Risk Nodes (RN) in local transportation's protocols is MEDIUM-LOW.
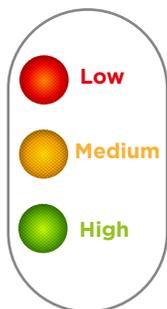
	VARISK - Risk Nodes (RN)	Included in revised protocols	
		Total	LAC region
Terminal	Customer service area	🟠	🟠
	Ticket sales area	🔴	🟠
	Waiting area	🔴	🔴
Vehicle	Boarding	🟢	🟢
	Luggage handling	🔴	🟠
	Landing	🟠	🟠
	Inside the vehicle	🟢	🟢
Ventilation	Ventilation	🟢	🟢

Legend:
- 🔴 Low
- 🟠 Medium
- 🟢 High
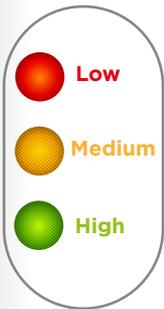
VARISK - Risk Nodes (RN)		Included in revised protocols	
		Total	LAC region
Relative humidity	Relative humidity	🔴	🔴
Operational support processes	Shared cleaning equipment	🟠	🟠
	Staff areas (canteens, dressing rooms and rest areas)	🟠	🟠
	Supplier management	🟠	🟠
	Waste management	🟠	🟠
	Informal economy	🔴	🔴

🔴 **Low**
🟠 **Medium**
🟢 **High**

LOCAL TRANSPORTATION

User's Perceptions

84%

of users perceive this subsector as unsafe.

It is necessary to check that all risk nodes (RN) are covered with safety measures that are properly **communicated.**

The inside of the vehicle is perceived as unsafe, although the coverage level is HIGH

Risk Nodes (RN) map and coverage level in LAC

Shared cleaning tools
Parking
Play and recreational areas
Dressing rooms
First aid and rescue services
Toilets
Access points
Showers and footbaths
Waste management
Access walkway
Relative humidity
Concessionaires
Seashore
Users/rest areas
Swimming area
Informal economy

The coverage of Risk Nodes (RN) in local beaches protocols is MEDIUM.

	VARISK - Risk Nodes (RN)	Included in revised protocols	
		Total	LAC region
Accesses	Users flows (capacity control)	🟢	🟢
	Parking	🔴	🔴
Sand area	Play and recreational areas	🟢	🟠
	Access walkway	🔴	🔴
	Toilets and dressing rooms	🟠	🟠
	Showers and footbaths	🟠	🟠
	Users/rest areas	🟢	🟢
	Concessionaires	🟠	🟠
	First aid and rescue services	🟠	🟠
	Informal economy	🟠	🟠

🔴 Low
🟠 Medium
🟢 High

Legend

- 🔴 **Low**
- 🟡 **Medium**
- 🟢 **High**

VARISK - Risk Nodes (RN)		Included in revised protocols	
		Total	**LAC region**
Wet area	Seashore	🟡	🟡
	Swimming area	🟡	🟡
Humidity	Relative humidity	🔴	🔴
Operational support	Use of shared cleaning equipment	🔴	🔴
	Waste management	🟢	🟢

BEACHES

User's Perceptions

70%

of users perceive beaches as unsafe spaces.

It is necessary to increase the coverage of risk nodes (RN) with **specific measures.**

AIRPORTS / PORTS

- **Current protocols focus** more **on strategic** and transversal aspects than risk nodes (RN), **such as the conditions of entry and exit** during the pandemic, required tests, necessary forms to be completed by the travellers or quarantine indications.

- Several risk nodes(RN) present a low coverage, as the protocols do not **include specific measures .**

- Some of the protocols refer to the recommendations of the **International Civil Aviation Organization (ICAO),** a specialized organization of the United Nations (UN) that promotes safe development of international civil aviation. These recommendations cover practically all risk nodes (RN); therefore, the detailed coverage analysis of ICAO's protocol is included.

Risk Nodes (RN) map and coverage level in LAC

Recreational area · Shared cleaning equipment · Access and exit walkways · Toilets · Commercial area · Catering services · Ventilation · Relative humidity · Waste management · Suppliers management · Boarding / landing · Scanner /Trays · Check-in / Documentation · Waiting area · Control and customs · Access · Luggage handling · Luggage handling (staff) · Vending machines · Smoking areas · Auto check-in · Trolleys · Informal Economy · Staff areas · Bus transfer · Baggage claim area

The Risk Nodes (RN) coverage in airports' protocols is MEDIUM-LOW

VARISK - Risk Nodes (RN)		Included in revised protocols		
		Total protocolos	LAC region	ICAO
Access	Access	🟢	🟢	🟢
	Trolleys and luggage	🟠	🟠	🟢
Check-in area	Check-in / Documentation	🟢	🟢	🟢
	Luggage handling	🔴	🟠	🟢
	Auto Check-in	🟠	🟢	🟢
Inspection and control	Scanner / Trays	🔴	🔴	🟢
	Control / Customs	🟠	🟠	🟢
Departure terminal	Vending machines	🔴	🔴	🟢
	Toilets	🟢	🟠	🟢
	Commercial areas	🔴	🟠	🟢
	Catering services	🔴	🟠	🟢
	Waiting areas	🔴	🟠	🟢
	Recreational areas	🔴	🔴	🟢
	Smoking areas	🔴	🔴	🟢

Legend:
🔴 Low
🟠 Medium
🟢 High

VARISK - Risk Nodes (RN)

Legend:
- 🔴 Low
- 🟡 Medium
- 🟢 High
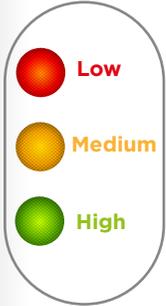
Category	Risk Node	Included in revised protocols		
		Total	LAC region	ICAO
Boarding /disembarkation	Boarding / disembarking process	🟢	🟢	🟢
	Bus transfer	🟡	🟢	🟢
	Access and exit walkways	🟡	🟡	🟢
Baggage claim area	Luggage handling by staff	🔴	🔴	🟢
	Baggage claim areas	🟡	🟡	🟢
Ventilation	Ventilation	🟡	🟡	🟢
Relative humidity	Relative humidity	🔴	🔴	🔴
Operational support processes	Use of share cleaning equipment	🔴	🔴	🔴
	Staff areas (dressing rooms, canteens and toilets)	🟡	🟡	🟢
	Suppliers management	🟡	🟡	🟢
	Waste management	🟡	🟡	🟢
	Informal Economy	🔴	🔴	🔴

AIRPORTS

User's Perceptions

73%

Of users perceive airports as unsafe spaces.

It is necessary to establish specific measures for risk nodes **with lower** coverage.*

*The survey to users about airports and ports spaces was developed together since these spaces share travelers' itinerary and therefore, risk nodes.

Risk Nodes (RN) map and coverage level in LAC

Recreational area

Access and exit walkways

Boarding /Disembarkation

Ventilation

Relative humidity

Waiting area

Baggage claim area

Waste management

Manipulación de equipaje

Shared Cleaning equipment

Catering services

Control / Customs

Vending machines

Scanner / Trays

Check-In / Documentation

Commercial area

Access

Trolleys

Luggage handling

Auto check-in

Bus transfer

Staff areas

Toilets

Smoking area

Suppliers management

Informal Economy

The Risk Nodes (RN) coverage in ports' protocols is LOW
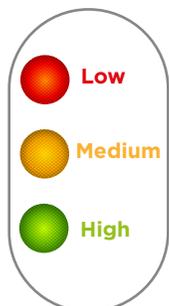
Legend:
- 🔴 Low
- 🟠 Medium
- 🟢 High

VARISK - Risk nodes (RN)		Included in revised protocols LAC region
Access	Access	🟢
	Trolleys and luggage	🔴
Check-in area	Check-in / Documentation	🔴
	Luggage handling	🔴
	Auto Check-in	🔴
Inspection and control	Scanner / Trays	🔴
	Control / Customs	🔴
Departure terminal	Vending machines	🔴
	Toilets	🟠
	Commercial area	🔴
	Catering services	🟠
	Waiting area	🟠
	Recreational area	🔴
	Smoking area	🔴

VARISK - Risk nodes (RN)
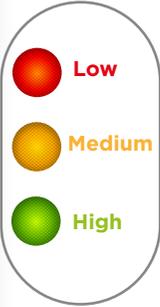
	Risk node	Included in revised protocols LAC region
Boarding /disembarkation	Boarding /Disembarkation	🟢
	Bus transfer	🔴
	Access and exit walkways	🔴
Baggage claim area	Luggage handling by staff	🔴
	Baggage claim area	🔴
Ventilation	Ventilation	🟢
Relative humidity	Relative humidity	🔴
Operational support processes	Share and cleaning equipment	🔴
	Staff areas (dressing rooms, canteens and toilets)	🔴
	Suppliers management	🟠
	Waste management	🟠
	Informal Economy	🔴

🔴 Low
🟠 Medium
🟢 High

PORTS

User's Perceptions

73%

Of users perceive ports as unsafe spaces.

It is necessary to establish specific measures for risk nodes **with lower** coverage.*

*The survey to users about airports and ports spaces was developed together since these spaces share travelers' itinerary and therefore, risk nodes

# Strategies to improve coverage and user's perceptions on safety

	Subsector	RN Coverage	Main perception	Action
H	ACCOMMODATION	High	Unsafe space	
	RESTAURANTS	Medium-high	Safe space	Reinforce Risk Nodes` (RN)coverage with specific measures and improve communication
	LOCAL TRANSPORTATION	Medium-low	Unsafe space	
	BEACHES	Medium	Unsafe space	
	AIRPORTS	Medium-low	Unsafe space	
	PORTS	Low	Unsafe space	

⚠ UPDATE PROTOCOLS

Results of Variables related to Implementation, Communication and Control (VICC)
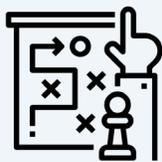
VICC VARIABLES

Implementation • Communication • Control
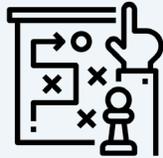
The diagnosis is complemented with the analysis of the implementation, communication and control measures that are carried out in the protocols through:

• Revision of the contents of protocols

• Interviews to key stakeholders

THE RESULTS OF THE DIAGNOSIS ARE KEY TO CREATE AN EFFICIENT MANAGEMENT FRAMEWORK OF PROTOCOLS

IMPLEMENTATION

COVERAGE IN REVISED PROTOCOLS

IMPLEMENTATION		Accommodation	Restaurants	Local transportation	Beaches	Airports	Ports
STAFF TRAINING	TOTAL	High	High	Medium	Medium	High	N/A
	LAC	High	High	Medium	Medium	High	Low
COORDINATION WITH OTHER PRIVATE STAKEHOLDERS	TOTAL	Low	Low	Low	Medium	Low	N/A
	LAC	Low	Low	Low	High	Low	Low
COORDINATION WITH AUTHORITIES (HEALTH, SAFETY, ETC.)	TOTAL	High	Medium	High	High	High	N/A
	LAC	High	High	High	High	High	Medium
MANAGEMENT OF RISK VARIABILITY	TOTAL	Low	Low	Low	Low	Low	N/A
	LAC	Low	Low	Low	Low	Low	Low

Legend:
- Low (red)
- Medium (orange)
- High (green)
- N/A* (gray)

*N/A: no protocols from countries outside LAC were included in the sample.

⚠ The variables with lowest coverage are the **management of risk variability and the coordination between private agents.**

👤 Users perceive differences and a lack of coordination in the implementation (between different organizations / destinations) because of the heterogeneity of measures, which generates **distrust.**

Required actions:

- To include the risk variability approach, since risk is not static (modulating factors/vaccines, incidence) and provide instruments for its analysis (risk management models or committees)

- To reinforce the coordination between private agents at the destination.

- To harmonize the implementation of protocols.

IMPLEMENTATION

In relation to factors that modulate the risk of contagion and affect its variability, these are referred to with different levels of detail, and therefore in some cases measures to reduce the risk are insufficient:

Safety distance: covered in protocols, although contemplating disparate distances, sometimes insufficient to prevent contagion.

Ventilation: it is necessary to prioritize natural aeration as much as possible and stipulate guidelines to reduce the likelihood of aerosol formation in indoor spaces (through filtration systems, CO_2 measurement, avoiding air recirculation, etc.)

Exposure time: it is covered indirectly in the protocols, although it is necessary to consider that a longer exposure time generates mayor probability of contagion.

Use of mask: the use of mask is contemplated in the protocols, although it does not specify the type of mask recommended.

Relative humidity: this factor is not directly covered by the protocols, although in some cases the temperature is mentioned, which directly affects the percentage of relative humidity.

COMMUNICATION
within the organization and at the destination

COVERAGE IN REVISED PROTOCOLS

COMMUNICATION		Accommodation	Restaurants	Local transportation	Beaches	Airports	Ports
INTERNAL COMMUNICATION OF MEASURES (TO STAFF AND USERS)	TOTAL	High	Medium	High	Medium	High	N/A
	LAC	Medium	Medium	Medium	Medium	Medium	High
EXTERNAL COMMUNICATION (TO THE DESTINATION, OTHER PRIVATE AND PUBLIC AGENTS AND RESIDENTS)	TOTAL	Medium	Medium	High	Medium	High	N/A
	LAC	Medium	Medium	High	Medium	Medium	Medium

Low **Medium** **High** N/A*

*N/A: no protocols from countries outside LAC were included in the sample.

Low level of coverage of the communication variables in the protocols.

Users feel confusion and distrust when receiving **disparate information from various sources.**

Required actions:

•Efficiently manage varied and variable information, channels and coordination with all agents; update information and make it accessible and understandable to the user (for example, with "single window", apps, updated webs with consolidated information).

•Structure and systematize communication to support the adoption and management of protocols, as well as to involve all key agents.
(for instance, through risk management committees or regular meetings)

CONTROL

COVERAGE IN REVISED PROTOCOLS

CONTROL		Accommodation	Restaurants	Local transportation	Beaches	Airports	Ports
INTERNAL SUPERVISION OF COMPLIANCE WITH MEASURES	TOTAL	🟠	🟠	🟠	🔴	🟠	⚪
	LAC	🟠	🟢	🔴	🔴	🟠	🟠
PROTOCOLS UPDATE	TOTAL	🟠	🟠	🟠	🟠	🔴	⚪
	LAC	🟠	🟠	🟠	🔴	🔴	🔴
HEALTH CONTROL OF STAFF	TOTAL	🟢	🟠	🟢	🟠	🟢	⚪
	LAC	🟢	🟢	🟢	🟠	🟢	🟢
CONTINGENCY PLANS (MANAGMENT OF POSITIVE OR SYMPTOMATIC USER CASES)	TOTAL	🟢	🟠	🟠	🟠	🟢	⚪
	LAC	🟢	🟠	🟢	🟠	🟢	🟢
CONTINGENCY PLANS (MANAGEMENT OF POSITIVE OR SYMPTOMATIC STAFF CASES)	TOTAL	🟢	🟠	🟠	🟠	🟠	⚪
	LAC	🟢	🟠	🟢	🟠	🟠	🟠

🔴 **Low** 🟠 **Medium** 🟢 **High** ⚪ **N/A***

*N/A: no protocols from countries outside LAC were included in the sample.

The internal supervision of measures, the **updating of protocols** as well as the contingency plans in some sectors are the **weaknesses** of the control variables.

Users perceive that there is no **appropiate control** (e.g. on-site control measures, user feedback), and a lack of coordination

Required actions:

• **Updating** the protocols is necessary to achieve effectiveness and validity of measures throughout the pandemic.

• Establish **suitable control mechanisms** for measures in the organization (for instance, checklists, records or internal documentation) and at the destination (for instance, observatories, on-site inspections, self-declarations, or monitoring groups) **to regain users`confidence.**

• Deploy control/performance indicators.

Key factors for interviewed experts

Beyond the specific processes of implementation, communication and control, there are transversal factors that impact on the performance (efficiency and effectiveness) of the protocols that should be considered in any future update of biosafety measures in the tourism sector.

Regulatory framework and degree of compulsory nature:

Current regulation (labour, food safety, health safety)

ESTABLISHES

REINFORCES

Anti-COVID **protocols**

Management framework for future sanitary crises

Degree of compulsory nature of protocols as a condition for an effective management

• Harmonizes the implementation of measures
• Favours their compliance
• Determines the existence of a control

It is necessary to have **cost-effective control** measures

self-declaration with complementary supervision measures, public-private coordination and use of digital channels.

Learned lessons in this crisis will reinforce the management structures of both destinations and tourist organizations, laying the bases for future sanitary crises.

The public-private co-implementation favours:

• Greater adoption, dissemination and continuity of measures

• Greater control of measures

• Union and creation of associations in a highly atomized sector (sector strengthening)

• Greater commitment of involved agents

However, we find:

• Development and implementation of disparate protocols.

• Different level of representativeness and participation of key agents (for example, low representation of workers, which is reflected in protocols).

It is necessary to promote public-private co-implementation (e.g. crisis committees in destinations and tourist organizations) and establish mechanisms for their formalization and operation when required.

Strategies to improve implementation, communication and control

	Variable	Analysis	User's Perceptions	Action
	IMPLEMENTATION	Heterogeneity on implementation	Distrust	Harmonization of implementation and formalization mechanisms
	COMMUNICATION	Dispersion in measures	Distrust	Revision of communication at the destination
		Low coverage in protocols	Confusion	Inclusion of communication measures in protocols
	CONTROL	Lack of control (no measures or indicators)	Lack of control	Establishment of cost-effective control mechanisms: public-private coordination, self-control, digital channels, and performance indicators.
		Lack of definition of contingency plans	Improvisation and chaos	Definition and specification of contingency plans

UPDATE PROTOCOLS AND REINFORCE VICC

CHALLENGES

1. Update current biosafety protocols considering learned lessons and new researches (VARISK)

- Include risk **variability approach: mechanisms to evaluate the risk of contagion according to modulating factors.**
- **Harmonize biosafety measures and their level of granularity in each Risk Node (RN), to facilitate their implementation and inspire confidence to the user.**
- Include measures **for key Risk Nodes (RN) and not currently** included in the analyzed protocols.
- Include **internal management and self-control measures for tourism organizations and destinations.**

2. **Define measures for the management of protocols' implementation, communication and control (VICC)**

Establish permanent structures based on learned lessons to face future sanitary crises

- Consider a **collaborative approach and participation** of all key agents of the destination's value chain.
- **Determine and communicate** the degree of obligation to comply with the   established protocols.
- **Update information** (RN coverage according to new science discoveries).
- Establish coordinated and agile **communication channels and structures between key agents of the tourist value chain** (public-public, private-public, private-private).
- Define and **implement systematic and cost-effective control mechanisms that guarantee compliance with measures.**

CHALLENGES

3. **Promote compliance with protocols by fostering their convergence with the current legal framework (occupational health, food hygiene, safety, etc.) as a basis for the construction of a management framework.**

• **Facilitate harmonization and self-control measures**, improving the perception of the user and regaining market confidence.

• Identify **touchpoints with legal framework** to design biosafety measures and their management structure. The use of **the existing regulatory framework accelerates the design and implementation of measures** and, in turn, values and reinforces the legal framework, **contributing to the professionalization of the sector and the consolidation of management structures for future health crises.**

NEXT STEPS

- **Development of recommendations** to be considered in any **biosafety** tourism **protocol** in LAC.

- **Identify the content that should be revised and updated** according to challenges pointed out in the diagnosis.
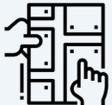
- **Define processes for the implementation, communication and control** of protocols that ensure their harmonization, effectiveness and validity.

RETRIEVE THE CONFIDENCE OF USERS, REACTIVATE TOURISM ACTIVITY AND LAY OUT THE BASIS FOR FUTURE CRISES.