# **COVID-19 Regional Safety Assessment**

Tier-2 and Tier-3
Methodology Framework

### **Tier-2 Regions COVID-19 Safety Ranking**



#21	KUWAIT	633
#22	ICELAND	600
#23	BAHRAIN	592
#24	FINLAND	584
#25	LUXEMBOURG	576
#26	QATAR	575
#27	LIECHTENSTEIN	572
#28	POLAND	570
#29	LITHUANIA	566
#30	MALAYSIA	565

#31		LATVIA	564
#32		SLOVENIA	564
#33		OMAN	562
#34		GREECE	560
#35		ESTONIA	556
#36		CROATIA	556
#37		TURKEY	556
#38		IRELAND	551
#39		GEORGIA	550
#40	San , ends	CYPRUS	550

### **Tier-3 COVID-19 Ranking of 60 Countries and Regions**

Rank	Region	Score
41	Chile	549
42	Montenegro	548
43	Czech Republic	545
44	Malta	544
45	Spain	543
46	Portugal	542
47	Thailand	541
48	Bulgaria	541
49	Greenland	538
50	Mexico	537
51	Uruguay	536
52	Vatican City	535
53	Italy	533
54	Serbia	532
55	Philippines	532
56	India	532
57	Romania	531
58	United States	530
59	Slovak Republic	530
60	France	529

Rank	Region	Score
61	Russia	525
62	Argentina	524
63	Belarus	523
64	Monaco	523
65	Sweden	522
66	Ukraine	520
67	Gibraltar	518
68	United Kingdom	513
69	South Africa	512
70	San Marino	509
71	Kazakhstan	508
72	Bosnia and Herzegovina	508
73	Iran	505
74	Ecuador	505
75	Azerbaijan	499
76	Mongolia	499
77	Lebanon	499
78	Belgium	498
79	Andorra	498
80	Cayman Islands	491

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Rank	Region	Score
81	Armenia	484
82	Moldova	483
83	Myanmar	482
84	Bangladesh	482
85	Sri Lanka	482
86	Egypt	480
87	Tunisia	478
88	Albania	476
89	Jordan	475
90	Panama	471
91	Brazil	470
92	Morocco	465
93	Algeria	461
94	Honduras	457
95	Paraguay	455
96	Peru	453
97	Indonesia	450
98	Cambodia	448
99	Laos	442
100	Bahamas	440

#### COVID-19 Regional Safety Index: Tier-2 and 3 Methodology Framework

Tier 2 consists of 20 regions which scored exceptionally well in terms of regional safety and stability according to the first-stage analysis utilizing 20 parameters, but not as high as those located in Tier 1. After being positioned in Tier 2, all 20 territories were then assigned cumulative and category-specific rankings using a subset of 60 parameters aggregated from each of the index's 6 categories.

Meanwhile, the 60 regions located in Tier 3 (33% Europe, 16% Asia PAcific, 8.3% Central America, and 1.6% Sub-Saharan Africa, 13% Middle East & North Africa, 3.3% North America, 11.6% Eastern Europe and Central Asia, 11.6% South America) were selected based on having achieved cumulative regional safety scores (according to the stage 1 analysis described above) that were significantly lower than what one would have expected according to their pre-pandemic level of healthcare readiness, emergency preparedness and governmental management efficiency. In other words, Tier 3 consists of territories that *should* have ranked higher in terms of regional COVID-19 safety and stability, but which for one or another reason did not. Both cumulative and category-specific rankings were performed for Tier 3 using a subset of 60 parameters aggregated from each of the index's 6 categories.

The regions included in Tier 3 are, therefore, outliers, and to some extent anomalies, and demonstrate that one of the most critical factors impacting regional safety and stability is not the general level of healthcare sophistication in non-pandemic times, but the specific governmental strategies used to combat pandemics. The Unites States and United Kingdom, for example, have high degrees of healthcare sophistication, and yet have some of the most severe COVID-19 growth rates and mortality rates internationally, which represents a surprising result that can only be explained by specific inefficiencies relating to governmental policy, emergency preparedness and crisis management. The regions included in Tier 3 are prime targets for follow-up special analytical case studies that apply a deeper and more comprehensive, targeted, and case-by-case analytical methodologies and frameworks for identifying the specific factors behind these regions' surprisingly low comparative scores, and which utilize the results of tis analysis to provide key recommendations across all six categories of Deep Knowledge Group's Regional Safety Index.

Nº	Parameter Name		
1	Population Density	People per km <sup>2</sup>	
2	Does the region have "hotspots" (high density of cases in one specific area)?	yes=1, no=0	
3	Number of cases	per million individuals	
4	Scale and scope of region-wide lockdown	full = 1, partial = 0.5 non-existing = 0	
5	What is the length of quarantine?	14 days = 0.5, more than 14 = 1, no quarantine length = 0	
6	Did the region impose quarantine measures early in the timeline of viral spread?	yes=1, no=0	
7	Quantity of law enforcement officers.	number per capita	
8	Criminal penalties for violating quarantine.	Number of months in incarceration.	
9	Fines.	In USD	
10	Economic support to citizens.	In USD	

Nº	Parameter Name		
11	Economic support to SMEs.	In USD	
12	Does the region have an absence of large supply shortages?	number of tourists per year	
13	Quantity of automotive vehicles.	number per 1000 people	
14	Average level of touristic flow.	yes=1, no=0	
15	Does the region have dedicated military chemical and biological warfare divisions and forces?	EIU Score	
16	Are there government-startups cooperation?	yes=1, no=0	
17	Government effectiveness (EIU score).	yes=1, no=0	
18	E-Government Development Index	EGDI score	
19	Number of internet users per 1000 individuals.	number per 1000 people	
20	State of emergency readiness	yes=1, no=0	

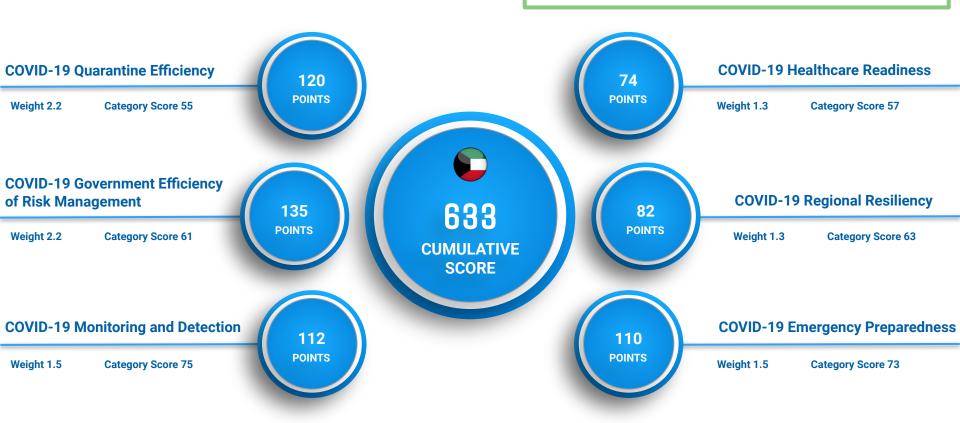
Nº	Parameter Name	
21	Does the region have national laboratories available for COVID-19 testing?	Numeric
22	Number of COVID-19 tests conducted per day.	yes=0, no=1
23	Does the region have a significant shortage of COVID-19 tests?	yes=0, no=1
24	Quantity of Ventilator Stockpile	Numeric
25	Number of hospital beds	per 1000 people
26	Number of doctors.	per 1000 people
27	Healthcare Development Index score.	Index
28	HAQ (The Healthcare Access and Quality Index) - 2016.	Index
29	Does the region have access to basic sanitation facilities?	yes=1, no=0
30	Size of Elderly Population	% of total population

Nº	Parameter Name	
31	Is the region currently experiencing a political or election-based crisis?	yes=0, no=1
32	Does the region's military have pre-existing plans and policies in place in the event of a biological or chemical attack?	yes=1, no=0
33	Number of deaths per mln	Numeric
34	Economic support to citizens	in USD
35	Tax reliefs	in USD
36	Are there any shortages in protective equipment?	yes=0, no=1
37	EGDI.	EGDI score
38	Does the region utilize Electronic Health Records?	yes=1, no=0
39	Regional economic debt (number).	% of GDP
40	Functioning of Government (Index)	HDI Index

Nº	Parameter Name	
41	Does the region have the necessary infrastructure for surplus ventilator production?	yes=1, no=0
42	Global Health Security Index	GHS index score
43	Total transportation network size.	km
44	Literacy rate.	%
45	Proportion of population with tertiary education.	number per capita
46	Poverty rate.	Population living below national poverty line (%)
47	Does the region have religious or cultural practices that increase chances of infection risk or quarantine non-compliance?	yes=0, no=1
48	Human Development Index 2016.	Index
49	Prevalence of diabetes.	% of population ages 20 to 79
50	Death rate due to endocrine disorder.	per 100,000 people

Nº	Parameter Name	
51	Prevalence of mental health and substance use disorders as a share of total disease burden, 2017.	Percent of total disease burden, 2017.
52	Incidence of tuberculosis.	per 100,000 people
53	Incidence of cancer.	per 100,000 people
54	Obesity	% of total population
55	Is there a majoritively positive public sentiment regarding government COVID-19 strategy?	yes=1, no=0
56	Proprietary metric #1	Not publicly disclosed.
57	Proprietary metric #2	Not publicly disclosed.
58	Proprietary metric #3	Not publicly disclosed.
59	Proprietary metric #4	Not publicly disclosed.
60	Proprietary metric #5	Not publicly disclosed.

### **Kuwait: #21 Region by COVID-19 Safety Ranking**



### Iceland: #22 Region by COVID-19 Safety Ranking



### **Bahrain: #23 Region by COVID-19 Safety Ranking**



### Finland: #24 Region by COVID-19 Safety Ranking



### **Luxembourg: #25 Region by COVID-19 Safety Ranking**



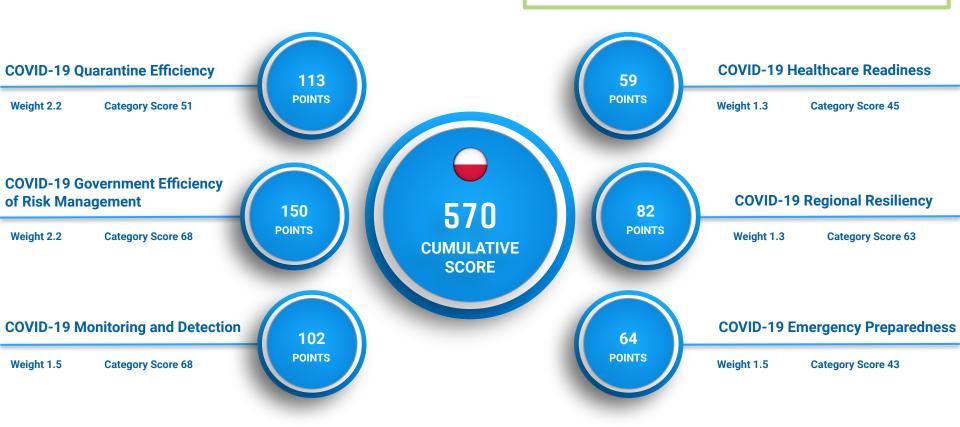
### Qatar: #26 Region by COVID-19 Safety Ranking



# **Liechtenstein: #27 Region by COVID-19 Safety Ranking**



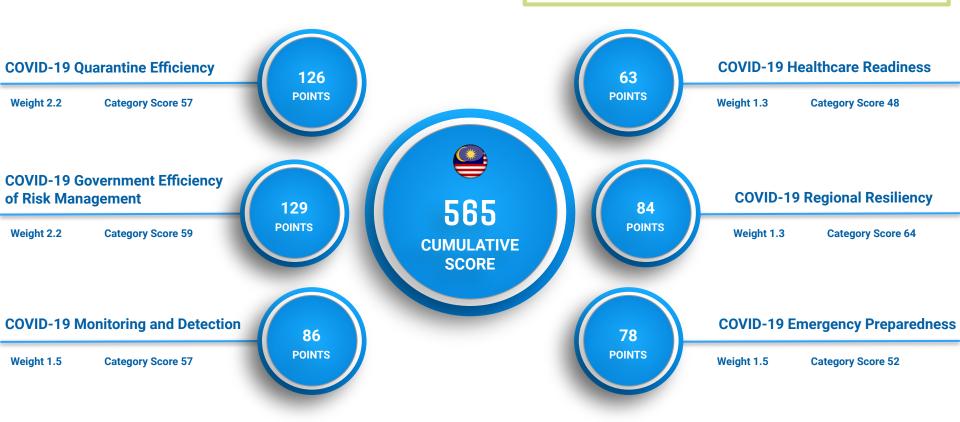
### Poland: #28 Region by COVID-19 Safety Ranking



### Lithuania: #29 Region by COVID-19 Safety Ranking



### Malaysia: #30 Region by COVID-19 Safety Ranking



### Latvia: #31 Region by COVID-19 Safety Ranking



### Slovenia: #32 Region by COVID-19 Safety Ranking



### Oman: #33 Region by COVID-19 Safety Ranking



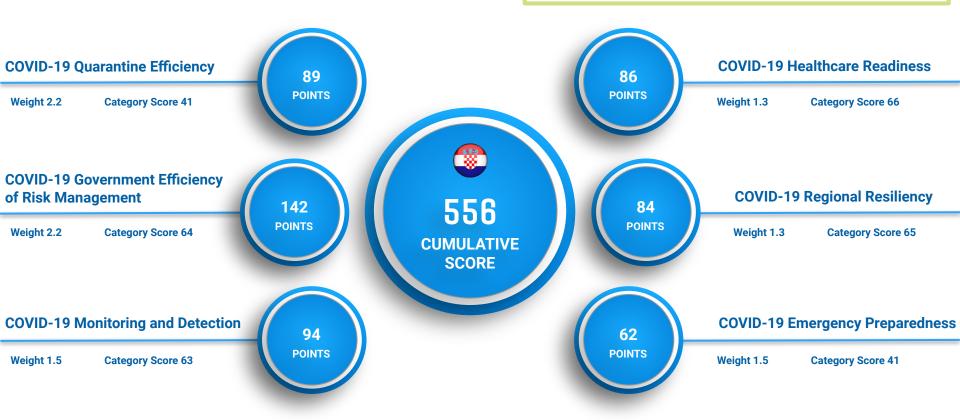
### **Greece: #34 Region by COVID-19 Safety Ranking**



### Estonia: #35 Region by COVID-19 Safety Ranking



### **Croatia: #36 Region by COVID-19 Safety Ranking**



### **Turkey: #37 Region by COVID-19 Safety Ranking**



### Ireland: #38 Region by COVID-19 Safety Ranking



### **Georgia: #39 Region by COVID-19 Safety Ranking**



### **Cyprus: #40 Region by COVID-19 Safety Ranking**



### **Chile: #41 Region by COVID-19 Safety Ranking**



### Montenegro: #42 Region by COVID-19 Safety Ranking



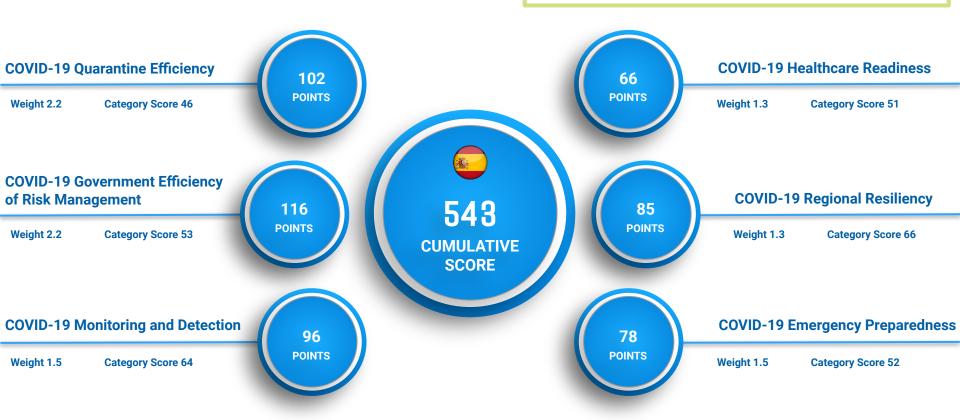
### **Czech Republic: #43 Region by COVID-19 Safety Ranking**



### Malta: #44 Region by COVID-19 Safety Ranking



### **Spain: #45 Region by COVID-19 Safety Ranking**



### Portugal: #46 Region by COVID-19 Safety Ranking



# **Thailand: #47 Region by COVID-19 Safety Ranking**



# **Bulgaria: #48 Region by COVID-19 Safety Ranking**



# **Greenland: #49 Region by COVID-19 Safety Ranking**



### Mexico: #50 Region by COVID-19 Safety Ranking



# **Uruguay: #51 Region by COVID-19 Safety Ranking**



# Vatican City: #52 Region by COVID-19 Safety Ranking



### Italy: #53 Region by COVID-19 Safety Ranking



# Serbia: #54 Region by COVID-19 Safety Ranking



# Philippines: #55 Region by COVID-19 Safety Ranking



# India: #56 Region by COVID-19 Safety Ranking



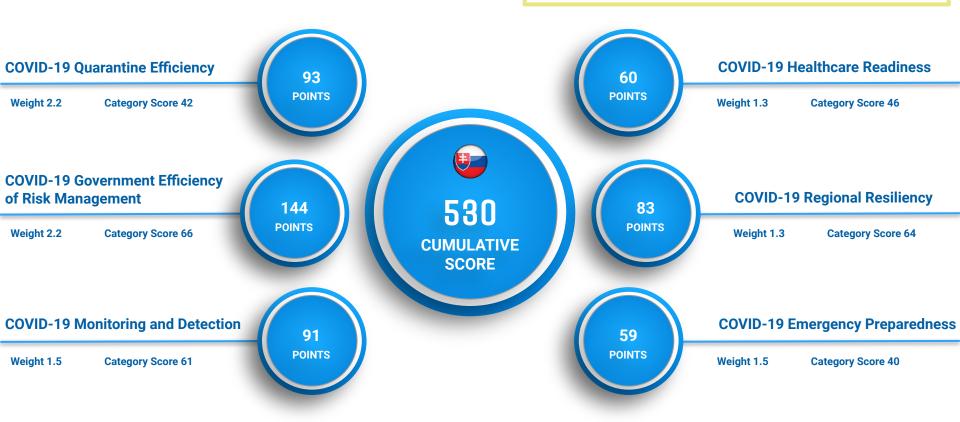
# Romania: #57 Region by COVID-19 Safety Ranking



# **United States: #58 Region by COVID-19 Safety Ranking**



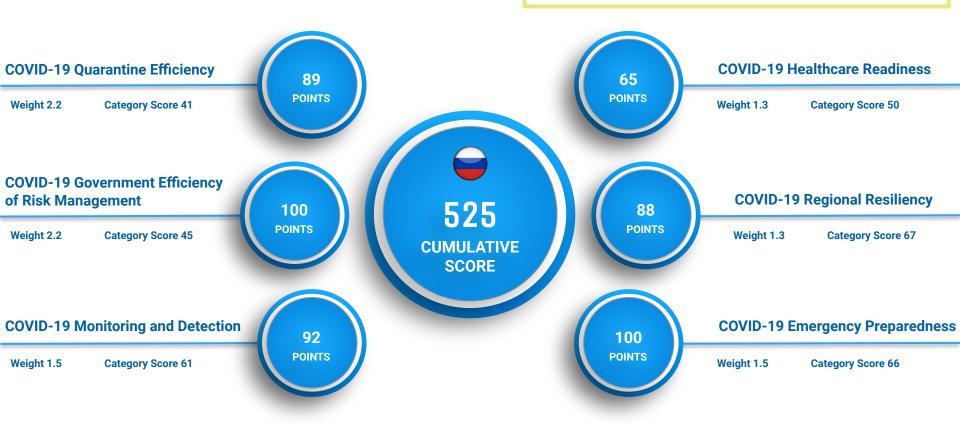
# **Slovak Republic: #59 Region by COVID-19 Safety Ranking**



### France: #60 Region by COVID-19 Safety Ranking



### Russia: #61 Region by COVID-19 Safety Ranking



# **Argentina: #62 Region by COVID-19 Safety Ranking**



# **Belarus: #63 Region by COVID-19 Safety Ranking**



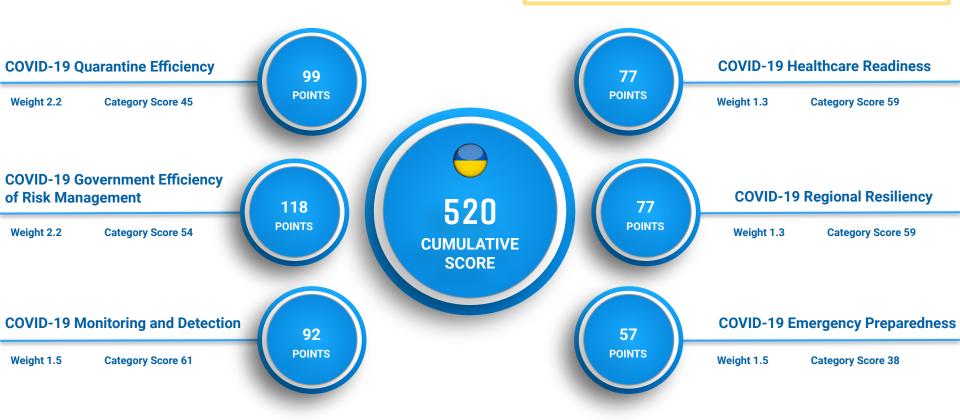
### Monaco: #64 Region by COVID-19 Safety Ranking



# Sweden: #65 Region by COVID-19 Safety Ranking



# **Ukraine: #66 Region by COVID-19 Safety Ranking**



# **Gibraltar: #67 Region by COVID-19 Safety Ranking**



# **United Kingdom: #68 Region by COVID-19 Safety Ranking**



# South Africa: #69 Region by COVID-19 Safety Ranking



# San Marino: #70 Region by COVID-19 Safety Ranking



# **Kazakhstan: #71 Region by COVID-19 Safety Ranking**



### **Bosnia and Herzegovina: #72 Region by COVID-19 Safety Ranking**



### Iran: #73 Region by COVID-19 Safety Ranking



# **Ecuador: #74 Region by COVID-19 Safety Ranking**



# **Azerbaijan: #75 Region by COVID-19 Safety Ranking**



# Mongolia: #76 Region by COVID-19 Safety Ranking



# **Lebanon: #77 Region by COVID-19 Safety Ranking**



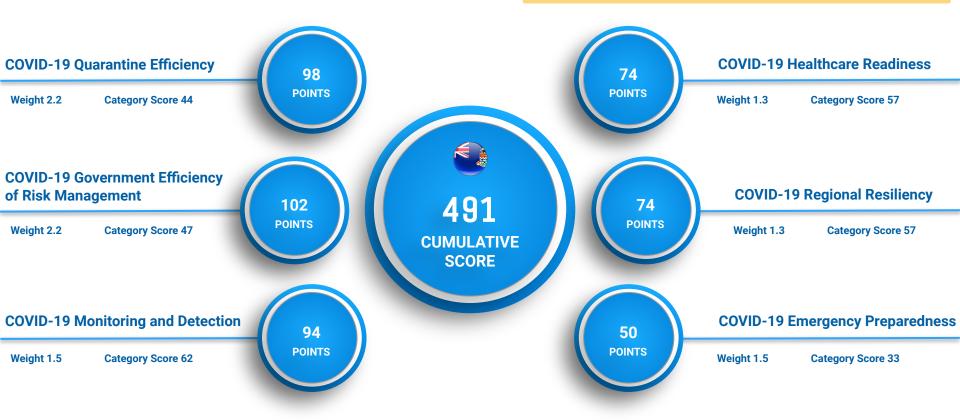
# **Belgium: #78 Region by COVID-19 Safety Ranking**



# **Andorra: #79 Region by COVID-19 Safety Ranking**



# **Cayman Islands: #80 Region by COVID-19 Safety Ranking**



# **Armenia: #81 Region by COVID-19 Safety Ranking**



### Moldova: #82 Region by COVID-19 Safety Ranking



## Myanmar: #83 Region by COVID-19 Safety Ranking



# **Bangladesh: #84 Region by COVID-19 Safety Ranking**



# Sri Lanka: #85 Region by COVID-19 Safety Ranking



## **Egypt: #86 Region by COVID-19 Safety Ranking**



# **Tunisia: #87 Region by COVID-19 Safety Ranking**



# Albania: #88 Region by COVID-19 Safety Ranking



## Jordan: #89 Region by COVID-19 Safety Ranking



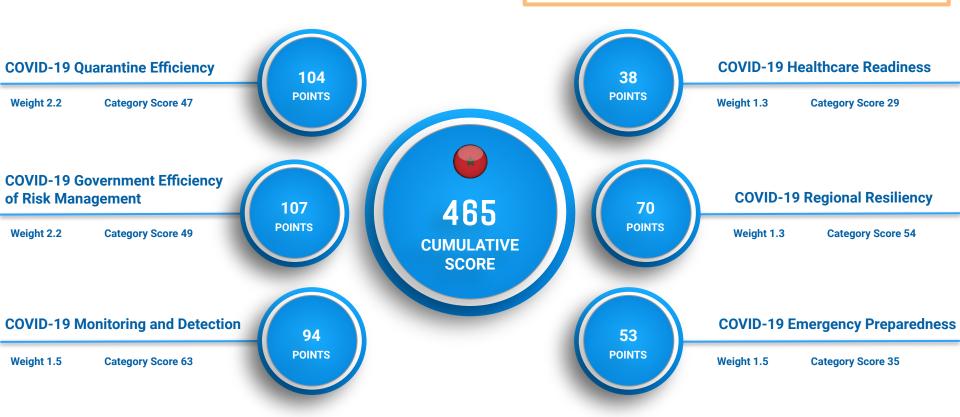
### Panama: #90 Region by COVID-19 Safety Ranking



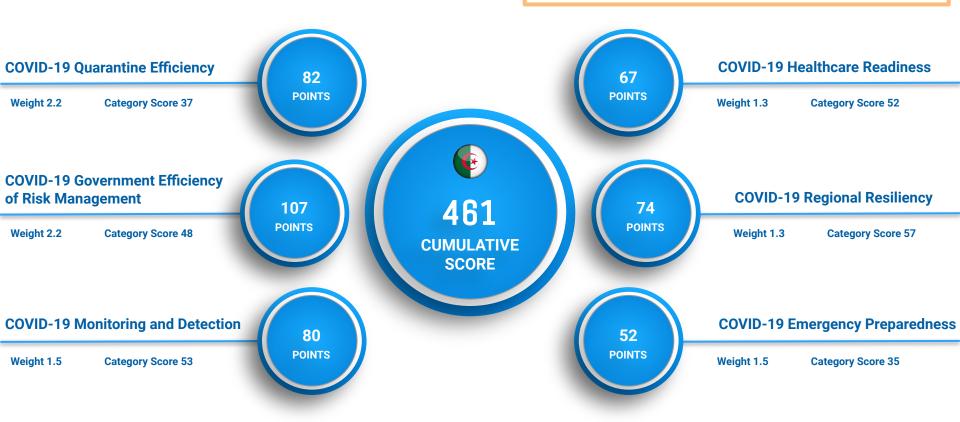
### **Brazil: #91 Region by COVID-19 Safety Ranking**



### Morocco: #92 Region by COVID-19 Safety Ranking



# Algeria: #93 Region by COVID-19 Safety Ranking



### Honduras: #94 Region by COVID-19 Safety Ranking



## Paraguay: #95 Region by COVID-19 Safety Ranking



### Peru: #96 Region by COVID-19 Safety Ranking



# **Indonesia: #97 Region by COVID-19 Safety Ranking**



# Cambodia: #98 Region by COVID-19 Safety Ranking



## Laos: #99 Region by COVID-19 Safety Ranking



## **Bahamas: #100 Region by COVID-19 Safety Ranking**



#### DISCLAIMER



Deep Knowledge Group is using its best efforts to continuously update its COVID-19 analytics based on dynamic, publicly available metrics deemed reliable, such as <u>World Health Organization</u>, <u>Worldometers</u>, <u>CDC</u>, <u>Johns Hopkins University</u>, and other publicly available sources.

Certain metrics used for advanced and qualitative assessment were formulated by Deep Knowledge Group analysts in coordination with specific experts and consultants using proprietary sources and techniques. Therefore, such rankings may be adjusted over time depending on the corresponding underlying information and in coordination with ongoing enhancements to our underlying analytical methodologies.

Information provided herein is intended for indicative and informational purposes only. Opinions, estimates and analysis represented constitute the current judgment and opinion of the author.

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Knowledge is Power
Deep Knowledge is Transcendent Power

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