



Israel

Special Case Study

Covid-19 Safety Assessment

Israel: #1 Region by COVID-19 Safety Ranking

COVID-19 Quarantine Efficiency

Weight 2.2 Category Score 55.41

- Scale of Quarantine 10.10
- Quarantine Timeline 10.63
- Criminal Penalties for Violating Quarantine 7.67
- Economic Support for Quarantined Citizens 6.30
- Economic and Supply Chain Freezing 12.4
- Travel Restrictions 8.30

122
POINTS

COVID-19 Government Efficiency of Risk Management

Weight 2.2 Category Score 86.66

- Level of Security and Defense Advancement 17.00
- Rapid Emergency Mobilization 16.00
- Efficiency of Government Structure 13.69
- Economic Sustainability 11.31
- Legislative Efficiency 16.00
- Political Stability 12.66

191
POINTS

COVID-19 Monitoring and Detection

Weight 1.5 Category Score 95.38

- Monitoring Systems and Disaster Management 18.00
- Scope of Diagnostic Methods 15.00
- Testing Efficiency 14.40
- AI for Diagnostics and Prognostics 15.00
- Government Surveillance Technology for Monitoring 15.98
- Reliability and Transparency of Data 17.00

143
POINTS

751
CUMULATIVE
SCORE



COVID-19 Healthcare Readiness

Weight 1.3 Category Score 65.38

- COVID-19 Equipment Availability 11.12
- Mobilization of New Healthcare Resources 17.50
- Quantity and Quality of Medical Staff 11.38
- Level of Healthcare Progressiveness 9.67
- Level of Technological Advancement 7.90
- Epidemiology System Level of Development 7.80

85
POINTS

COVID-19 Regional Resiliency

Weight 1.3 Category Score 68.63

- Infection Spread Risk 13.21
- Culture Specifics and Societal Discipline 13.50
- Level of Modern Sanitization Methods 15.00
- Demography 11.19
- Chronic Diseases 7.93
- Societal Risks 7.80

89
POINTS

COVID-19 Emergency Preparedness

Weight 1.5 Category Score 80.83

- Societal Emergency Resilience 27.00
- Emergency Military Mobilization Experience 15.33
- Surveillance Capabilities (Scale, Scope and Technological Sophistication) 27.00
- Previous National Emergency Experience 11.50

121
POINTS

COVID-19: SWOT Analysis of Israel



STRENGTHS

- State readiness due to permanent attention to the possibility of armed conflicts. Advanced surveillance technology converted into epidemiological surveillance and monitoring technology.
- Anti-COVID-19 measures were introduced quite early in the overall pandemic timeline. Israel banned all air communications with Asia.
- Primary care is closely connected with preventive medicine.



WEAKNESSES

- Healthcare expenditure in Israel is lower than the OECD average. It was 7.6% of GDP in 2019. Also, there is a relatively high dependency on imports of medical goods.
- Quarantine efficiency does not have a remarkable performance due to implementation of partial rather than full lockdown.
- Presence of religious groups that refuse to obey mandatory quarantine measures present issues with quarantine compliance.



OPPORTUNITIES

- Uses of advanced healthcare technologies in Israel can consolidate the healthcare format of the future.
- Integration of digital health to the healthcare system would make it easier for people to achieve equal health and welfare.
- Adoption of P4 Medicine will increase healthcare system efficiency. P4 Medicine will use systems medicine to bring all 90-years-olds to a state of full mental and physical function.



THREATS

- Population aging arises the growing demand on the healthcare services, and there are also high rates of chronic diseases related to old age in non-aging populations, a key risk factor.
- The government acceptance rate has decreased a few points due to the 2019-20 electoral crisis.
- Easing the quarantine will cause more cases, as in Germany.

Israel: COVID-19 Quarantine Efficiency

Israel has a relatively high population density (416 people per square kilometer), which is exceeded only by Singapore for all regions included in the present analysis. This fact naturally and immediately hampers any quarantine efforts that the region puts into place.

However, in terms of actual quarantine measures implemented, Israel fares quite well. It imposed a partial quarantine (similar to Germany) quite early in the overall pandemic timeline, which is one of the most important factors impacting the overall effectiveness of quarantines in neutralizing infection spread. For example, Israel banned all air communications with Asia very early in the timeline of the pandemic. Israel also has a comparatively small state debt (26% of GDP), with further served to increase its score in this specific category.

These positive factors, however, are somewhat offset by a number of parameters where the region scores less favourably than other regions. Among these factors are the modest maximum fine in place for violating quarantine, the fact that Israel's government does not have total control over the entire region (a situation further hampered by the presence of religious groups that did not wish to obey mandatory quarantine measures), and due to the fact that Israel is a relatively export-oriented region (which in practice means that we can expect economic recovery and stabilization efforts to be more difficult than other regions that are less export-oriented).

Indicators	Points
Scale of Quarantine	10.10
Quarantine Timeline	10.63
Criminal Penalties for Violating Quarantine	7.67
Economic Support for Quarantined Citizens	6.30
Economic and Supply Chain Freezing	12.40
Travel Restrictions	8.30
Final Score	55.41
Weight	2.2
Final Points	122

Israel: COVID-19 Government Risk Management Efficiency

Israel has achieved a comparatively high score in this category specifically because it is in a constant state of readiness and preparedness for emergency situations due to regional geopolitical tensions and the region's nearly constant readiness for potential war and attack. This includes a high degree of emergency situation readiness both on the part of the military, and on the part of the general population.

In terms of the specifics of the current COVID-19 pandemic, Israel's history of prior attacks in particular has caused its government to have very practical, pragmatic and up-to-date policies and emergency action plans in place for chemical and biological warfare situations. Thus, what is presented in the previous paragraph is particularly suited to the case of Israel and in very few other regions of the world.

Israel has the legislative power to coordinate rapid nation-wide disaster mobilization efforts, in part due to previous military conflicts, which has helped in executing very swift and comprehensive emergency responses to the current COVID-19 pandemic. The region is a great model of what governmental action plans should be for rapid resources mobilization, and also about legislations and regulations for the cross-border screening of potentially pandemic pathogens, as well as biological and chemical weapons in general.

Indicators	Points
Level of Security and Defense Advancement	17.00
Rapid Emergency Mobilization	16.00
Efficiency of Government Structure	13.69
Economic Sustainability	11.31
Legislative Efficiency	16.00
Political Stability	12.66
Final Score	86.66
Weight	2.2
Final Points	191

Israel: COVID-19 Monitoring and Detection

Israel is suffering a shortage of tests, which is the case for many other regions. However, the region does score better than others in this specific category due to its abundance and diversity of tools for monitoring, including: face recognition tech, use of mobile surveillance, military assistance in conducting monitoring and detection, and its use of drones. Israel shows the best values for the category in question, with Singapore just behind and Germany in third place.

One of the aspects in which Israel stands out the best from the rest of the regions, in terms of monitoring and detection, is the high value that testing efficiency sub-indicators take due to the battery of methods previously mentioned. On the other hand, Israel is one step behind China, Canada, Hong Kong and Netherlands regarding government surveillance technologies for monitoring, but this may be due to the difficulty in finding records about the number of cameras per capita, which affects the indicator value.

Epidemiological surveillance is one of the most determining factors in the efficiency of the government response to health outbreaks, and in Israel we find an optimal management model that should be imitated by the rest of the regions in the fight against this emerging pathology. Lacking a vaccine or efficient treatments for emerging infectious diseases, the only cure that exists is epidemiological prevention.

Indicators	Points
Monitoring Systems & Disaster Management	18.00
Scope of Diagnostic Methods	15.00
Testing Efficiency	14.40
AI for Diagnostics and Prognostics	15.00
Government Surveillance Technology for Monitoring	15.98
Reliability and Transparency of Data	17.00
Final Score	95.38
Weight	1.5
Final Points	143

Israel: COVID-19 Healthcare Readiness

Israel scores are fairly low in this specific category, compared to the other regions included in the analysis. This is, in part, due to the fact that the region has a lower Global Health Security Index than others (metric that tries to represent the health security status of a region against epidemic scenarios), and because the size of Israel's ventilator stockpile is comparatively low. An increase in the per capita budget linked to health care and aimed at increasing the availability of health resources and equipment could be an opportunity for Israel to be in a more optimal position to face future potential resurgences of COVID-19 infection, which will almost certainly occur, although the specific size and intensity of such resurgences remain to be seen.

Similarly, an increase in the expenses allocated for importing medical professionals could be, although not yet a requirement or necessity, a proactive measure that would allow the region to optimize its response to future outbreaks of COVID-19. Israel presents a good supply of doctors in relation to the number of inhabitants, but it is the region with the lowest number of nursing personnel in the pool evaluated, being only ahead of Vietnam. The same is true of the HAQ (Healthcare Access and Quality Index), which is based on death rates from multiple causes that could be avoided by timely and effective medical care. A greater number of nursing personnel and a moderate increase in the percentage expenditure of GDP in health could improve the early response to health emergencies and thus significantly strengthen the region's position to resist eventualities.

Indicators	Points
COVID 19 Equipment Availability	11.12
Mobilization of New Healthcare Resources	17.50
Quantity and Quality of Medical Staff	11.38
Level of Healthcare Progressiveness	9.67
Level of Technological Advancement	7.90
Epidemiology System Level of Development	7.80
Final Score	65.38
Weight	1.3
Final Points	85

Israel: COVID-19 Region Resiliency

Israel scores comparatively well in the “Regional Resiliency” category for a number of reasons. Firstly, its overall level of touristic flow is low, which puts the region in a more optimal position in terms of the number of cases present at the start of the pandemic. Secondly, a high proportion of its population has attained tertiary education, which predisposes its population to understand and follow imposed guidelines. However, the latter is in part hampered by the prevalence of religious groups, which creates a factor of opposition to guidelines in cases where those mandates conflict with these groups’ religious and cultural practices and beliefs.

The region’s elderly population is quite small (12% of the general population), which puts it at a lower risk of massive deaths due to increased elderly vulnerability to COVID-19. However, the region also has a mid-level prevalence of diabetes and mortality due to endocrine disorders, which slightly lowered its score in this category.

However, Israel’s ultimate score was somewhat lowered by the current political and election crisis occurring in the region, as well as the generally low government acceptance/approval rate of the public, which is in part due to the recent resignation of Israel’s Minister of Health. In this study we observe that Israel requires greater government consolidation, and greater social legitimization of its current political program, which is a direct consequence of the successive pressures that the region has been experiencing in recent years.

Indicators	Points
Infection Spread Risk	13.21
Culture Specifics and Societal Discipline	13.50
Level of Modern Sanitization Methods	15.00
Demography	11.19
Chronic Diseases	7.93
Societal Risks	7.80
Final Score	68.63
Weight	1.3
Final Points	89

Israel: COVID-19 Emergency Preparedness

Our assessment of Israel's readiness to tolerate the impact of health emergencies analogous to that caused by COVID-19 yields highly positive values, and its score is among the most remarkable of the 20 regions.

The societal emergency resilience is at the maximum point reached by the set of regions. We consider this to be a consequence of an optimal combination related to: psychological preparation of the community in cases of humanitarian adversities that involve a broad mobilization of the national security forces; a good adaptability of the citizens to cope with the consequences of changing and dangerous situations, as well as to cooperate with government provisions related to national security; a systemic resilience to protracted or medium-term crises.

Israel demonstrates substantial experience in relation to military mobilization for emergencies, and pre-existing plans, policies and experience against chemical and biological attacks due to the constant geopolitical tensions to which they are subjected, as well as exposure to circumstances that have compromised its military forces in the past.

These are all scenarios that put the region in a state of constant preparedness that is very favorable and definitely an opportunity to respond more efficiently to the consequences of COVID-19 and achieve a prompt recovery.

Indicators	Points
Societal Emergency Resilience	27.00
Surveillance Capabilities (Scale, Scope and Technological Sophistication)	15.33
Emergency Military Mobilization Experience	27.00
Previous National Emergency Experience	11.50
Final Score	80.83
Weight	1.5
Final Points	121

Israel: COVID-19 Recommendations

- A phenomenon that powerfully calls attention regarding the global economic and health crisis generated by COVID-19 is the reorientation of governmental and private capital efforts towards technological and scientific R&D for the health industry, particularly of those interests that were previously focused on the military defense industry.
- Israel is a clear example in this regard, although we consider that this strategic positioning should not be only conjunctural and temporary, but a process that must be deepened in the months to come.
- The gradual loss of funds from its single health care payer insurance program, smaller number of nurses and doctors per capita than most developed regions, and shortages of hospital beds (in which 100 percent were occupied in most hospitals at the beginning of the quarantine), are problems that can be addressed in the short term.
- One of Israel's central weaknesses is the fact that, despite not having a heavily aging population, there is a serious underlying epidemiology of chronic pathologies associated with aging, such as diabetes or endocrine disorders, which predisposes to higher morbidity and mortality rates product of COVID-19.
- As previously stated, the strategies for defense and national security are rapidly changing in this new geopolitical panorama, and the boundaries between the military and health industries are beginning to blur. Those governments that fork their military development towards this new category of safety-related challenges will have more efficient outcomes.

Index Categories: All Scores	Points
Quarantine Efficiency	122
Government Efficiency of Risk Management	191
Monitoring and Detection	143
Healthcare Readiness	85
Regional Resiliency	89
Emergency Preparedness	121
Cumulative Score	751

Israel: COVID-19 Conclusions

- One of the most positive factors that we have observed in the pool of regions analyzed, but that takes even greater dimensions in Israel, has been the political will and government capacity to develop specific mechanisms for engagement between the public and private sectors in general terms, and with the tech sector in particular. Although the primary reason has been the production of emergency medical equipment, GovTech solutions and surveillance solutions to contain the infection spread, as already mentioned, we believe that this modality may progressively extend to other challenges, such as global coordination for development of a vaccine; a central element that has not yet been achieved.
- A peculiarity that strongly draws attention with respect to Israel is the strong redirection of governmental and private capital efforts that has occurred during the last months, from the military and security industry to the scientific and technological discovery and development for the healthcare industry. This trend may be signaling a new format for building national security and defense strategies, which will gradually deepen into the future.
- Israel's high ranking reflects, in large part, its practical experience and preparedness in rapidly mobilizing resources for national and regional emergencies, and the preparatory infrastructure (in terms of both policy and planning, as well as tangible resources). Israel denotes a very well established experience in managing this type of resources and in terms of military mobilization for emergencies. Its pre-existing plans, policies and experience against chemical and biological warfare due to constant geopolitical tension put the region in a state of readiness that is highly favorable to respond more efficiently to the unexpected consequences of COVID-19.
- It is important to mention that Israel is relatively isolated from the outside world with Ben Gurion being its sole major international airport: with a single airport destined for international flights, much greater efficiency and capacity to monitor incoming flights can be achieved. Israel can take advantage of this when it considers easing restrictions in the future.

Israel: COVID-19 Conclusions

- While Israel's universal health system is among the most prestigious in the world, and the quality of its medical staff is enviable, there has been a gradual loss of funds from the single health care payer insurance program in Israel, a lower number of nurses and doctors per capita than most developed regions included in our study, as well as a comparatively low size of ventilator stockpile, and Israel experienced a shortage of hospital beds in which 100 percent were occupied in most hospitals at the beginning of the quarantine. An increase in the percentage expenditure of Israel's GDP on health could markedly improve the region's early response to health emergencies and associated economic emergencies. These issues could be addressed in the short term.
- Primary care is closely connected with preventive medicine in Israel, and the easy access to patient data as well as the prevalence of highly qualified and educated doctors results in better monitoring and detection, and better health outcomes.
- Although Israel does not have a marked level of population aging, which is an advantage over many other European countries, its relatively high prevalence of certain chronic pathologies generally present in old age draws attention. This is a risk factor that compromises the younger sectors of the population, which would not be classified within the age group at risk.
- The efficiency of the quarantine in Israel has allowed for a recovery of two thirds in the number of cases per day, and this led the government to relax its restriction measures on May 5th, 2020. Theoretically, return flights to Israel would be allowed for citizens and residents; despite that, most of those flights are canceled. At the same time, easing of restrictions would again allow social gatherings of up to 20 people in public spaces, and the reopening of libraries, gyms, malls, zoos, hotels, guest houses, kindergartens, and national parks. The easing of restrictions taken in early May could be Israel's biggest risk, and will cause more cases as in all the regions where social conglomerations have occurred.



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 [World Health Organization](#), [Worldometers](#), [CDC](#), [Johns Hopkins University](#), 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.

CONTACT US

*Knowledge is Power
Deep Knowledge is Transcendent Power*

www.dkv.global/covid
info@dkv.global