



COVID-19 MORBIDITY AND MORTALITY IN ISRAEL

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Introduction

The novel coronavirus SARS-CoV-2 was identified as the causative agent for a series of atypical respiratory diseases in the Hubei Province of Wuhan, China in December of 2019. The disease SARS-CoV-2, termed COVID-19, was officially declared a pandemic by the World Health Organization on March 11, 2020. In Israel the first confirmed case of COVID-19 was reported on 21 February 2020 and the first death – on 20 March 2020. The first emergency restrictions were put in place by March 2020.

Keywords

COVID-19, outbreak, mortality, Israel.

Purpose

To analyze the of COVID-19 morbidity and mortality in Israeli population during the pandemic.

Material and methods

Data on COVID-19 morbidity and mortality were retrieved from the Ministry of Health of Israel and WHO databases, and officially published reports and scientific articles in English and Hebrew.

Results

COVID-19 data suggest that about half (4.6 million) of the nearly 8.9 million of Israeli population had a confirmed COVID-19 infection over the six waves of outbreak (Fig. 1).

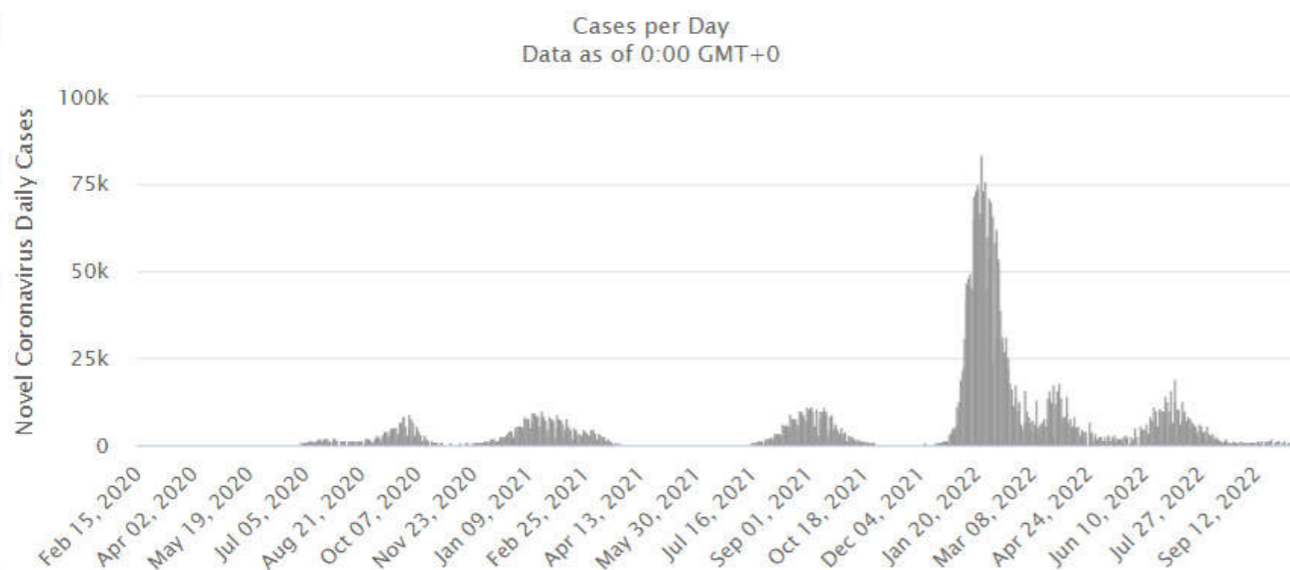


Fig. 1. Daily new cases of COVID-19 [Woldometer’s COVID-19 data].

The highest mortality rate was registered during the third (10.87 new deaths per million, January 2021) and fifth (13.88 new deaths per million, February 2022) waves of the outbreak. Case-fatality rate of COVID-19 was the highest (1.69%) in the earliest stage (May-June 2020) of the outbreak, and declined as treatment improved and response changed, reaching 0.26% in May 2022. Vaccination started in December 2020, nearly 75% of population being vaccinated by March 2022.

All the waves had a predictive pattern of subsiding with more restrictions, and emerging again when the said restrictions were removed. Stringency Index – a composite measure based on nine response indicators including school closures, workplace closures, travel bans, stay-at-home requirements, face covering, contact tracing, testing policy and public information campaigns, rescaled to a value from 0 to 100 (100 = strictest) was used as a Government response tracker (Fig. 2).

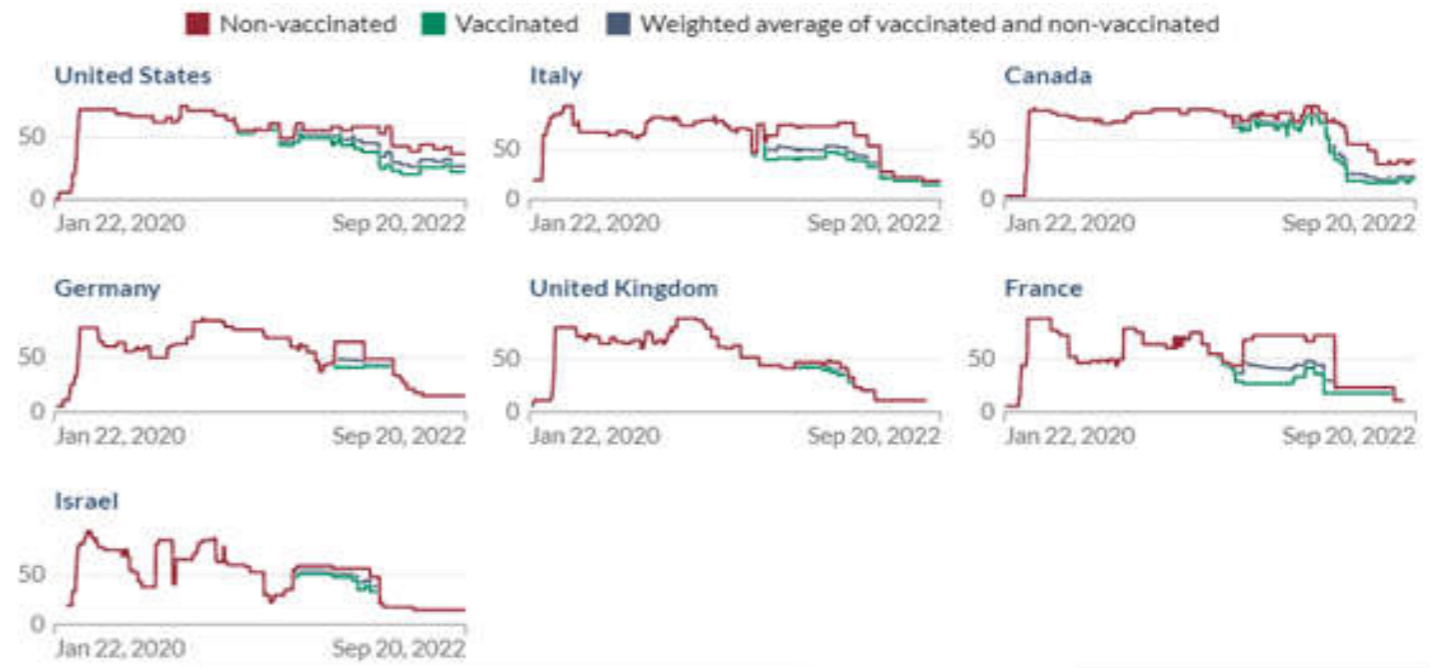


Fig. 2. COVID-19: Stringency index [Oxford COVID-19 Government Response Tracker].

Conclusions

Six waves were registered during the COVID-19 outbreak in Israel. Vaccination and government’s response policies, limiting possible contacts and corona virus spread, and early detection by testing on a large scale, played an essential role in determining the direction of the outbreak.