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Social Activities Impact and Covid 19 Second Wave: the Case of Thessaloniki, Greece

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FIG e-Working Week 2021

Smart Surveyors for Land and Water Management - Challenges in a New Reality

Virtual, 21–25 June 2021

SARS - CoV-2 & COVID-19 first wave, Spring 2020

SARS - CoV-2 & COVID-19 global pandemic forced governments all around the world to take strict measures to reduce the spread of the virus from early 2020

Suspension of all face-to-face educational activities in Greece on 10 March 2020

On 22 March 2020 Greece was in total lockdown and all non-essential activities e.g. retail, entertainment, sports, religion activities were suspended along with suspensions to travels, travels between prefectures and travels for visits to family/ friends houses.

For emergency purposes – daily shopping, doctor – visits, help to elders – and for personal training or dog walk, travels were allowed (first a text message ought to be sent or a personal declaration statement should be carried out and demonstrated in case of authorities control).

From early March Greece's authorities gradually suspended international air-flights. Strict border controls at border crossing took place as there was also suspension of international road travels. Only commercial international travels were permitted after justification to the authorities.

Greece's March 2020 total lockdown shielded the Country from SARS - CoV-2 & COVID-19. By early May 2020 total Covid-19 deaths were less than 150 (143 according to National Public Health Organization)

May 2020 lifting of lockdown measures

On 4 May 2020 gradual lift of lockdown measures began. Between 4-11 May 2020 all retail activities began operating again

On 11 May high-school senior classes were again face-to-face so as to be prepared for the National Exams

By May 18th 2020 secondary schools reopened, along with museums, travels between prefectures were freely allowed, with strict hygiene measures in case of public transport means (busses, trains, boats, airplanes). Maritime travel restrictions continued (exempt Crete and Euboea islands)

On May 25th 2020 all cafes and restaurants re-opened, but only for outdoor seating and with strict distance measures between seating and tables

On June 1st 2020 nursery schools, kindergartens and primary schools re-opened, along with hotels, open-air cinemas and outdoors athletic activities.

By mid – June restriction to international air-flights and road travels were lifted but passengers had to demonstrate negative Covid-19 tests

Thessaloniki prefecture main characteristics

Thessaloniki prefecture covers almost 3.800.000 km²

Population of 1.110.000 (2011 National Census)

Capital: Thessaloniki City (pop: aprox. 150.000 2011 National Census)

GEODATA.gov.gr - Maps

Thessaloniki City



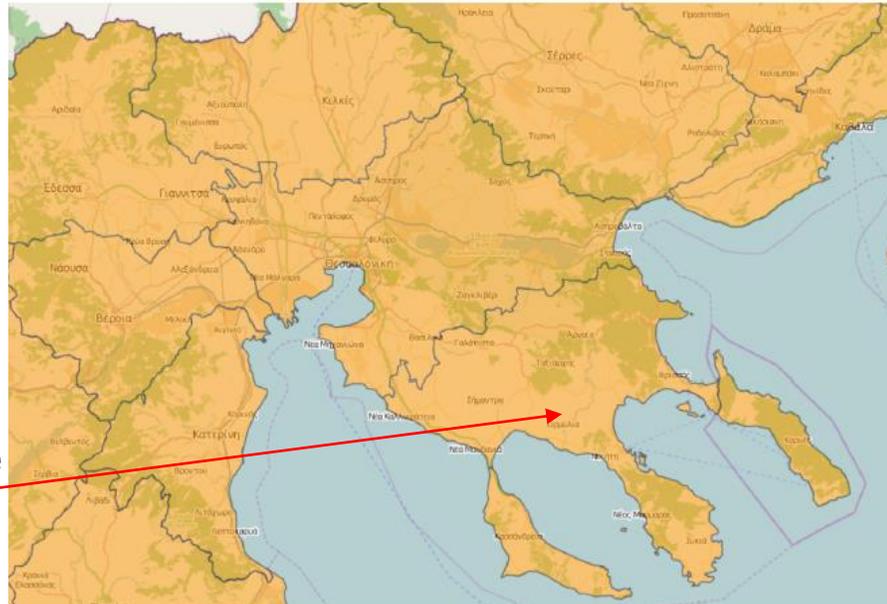
Thessaloniki prefecture main characteristics 2/2

Is the administrative, educational, cultural, commercial center of Northern Greece

Has 3 universities, 4 main hospitals, one ministry

Neighboring prefecture is Halkidiki Prefecture that is major touristic destination for Northern Greece residents and for tourists, especially from the Balkans and Russia

GEODATA.gov.gr - Maps



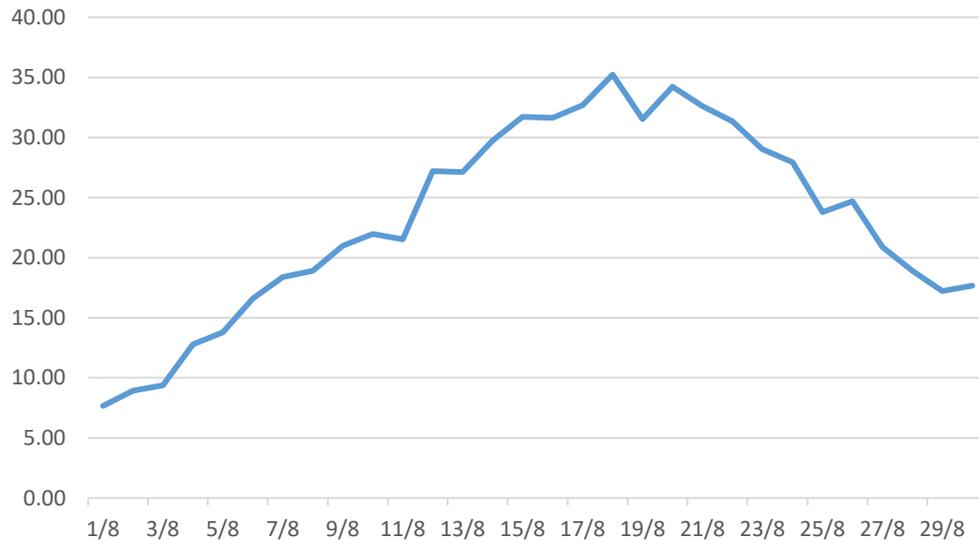
Halkidiki Prefecture

Covid 19 Second Wave early signs for Thessaloniki Prefecture

By mid August 2020 early signs for Thessaloniki Prefecture Covid-19 second wave were in sight.

While in July seven-days confirmed Covid-19 cases were below 5/100.000 persons, on August there was a significant increase

The neighbor Prefecture of Halkidiki, where many Thessaloniki residents have vacations homes and many more spent their summer vacations was under mini lockdown as Covid-19 new reported cases arose.



On 21 August 2020 the government launched restriction like: ban of all outdoor mass activities (parties, festivities etc.), ban of all gatherings over 9 persons, mandatory use of face masks indoors and outdoors, up to 4 persons per table in outdoor seats of cafes and restaurants while their closing time is on 12 in the evening and their opening time could not be earlier that 7 in the morning.

Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons
(source National Public Health Organization, writers process)

Thessaloniki Prefecture Social Activities September 2020

Even though Halkidiki Prefecture was under strict measures so as to restrict Covid-19 spread from 21 August, in Thessaloniki Prefecture and Thessaloniki City there was no restriction in activities during September 2020.

By early September Thessaloniki Universities were under partial re-open for some face-to-face activities, like exams or laboratory courses. University students from all over Greece, that were studying at Thessaloniki, returned to the City.

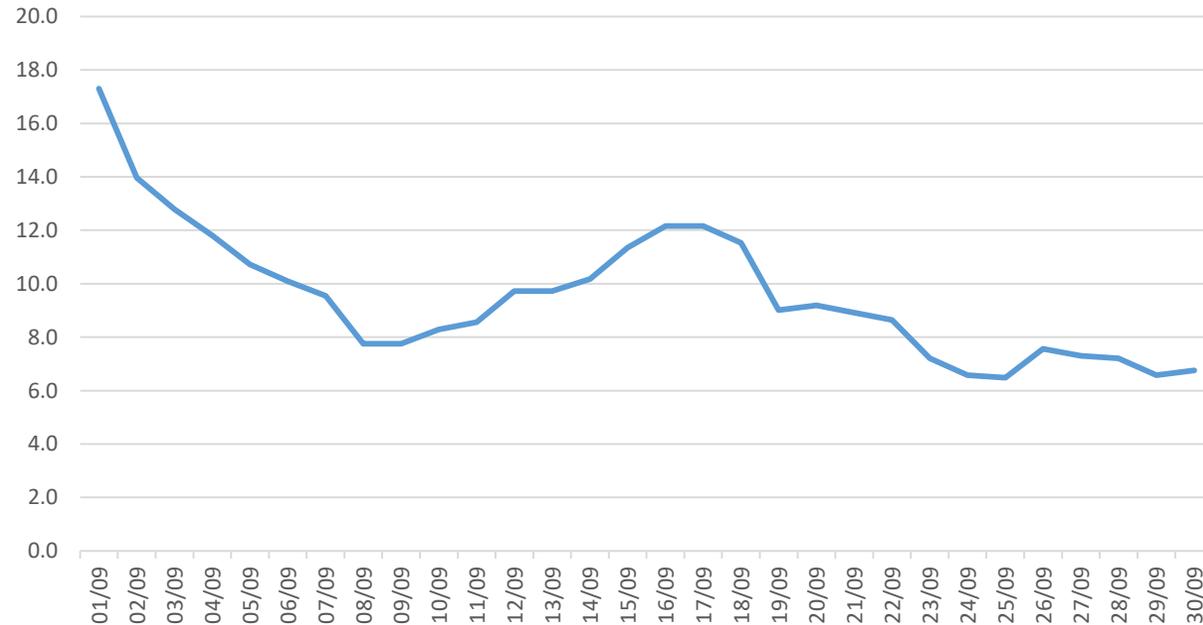
According to daily media reports youngsters and students were not implementing social distancing especially during their presence in restaurants, cafes, bars and clubs, which were fully functional.

During September 2020:

- Over 80 mass gatherings were organized by various organizations – movements (Source kinimatorama.net, local press)
- 2 major protest with mass participation (6 September against the mandatory use of face masks in schools, and 11-12 September against the governmental policies)

Thessaloniki Prefecture confirmed Covid-19 cases per 100.000, September 2020 2/2

But still the daily rates of Covid – 19 confirmed cases per 100.000 were decreasing on September 2020 in Thessaloniki

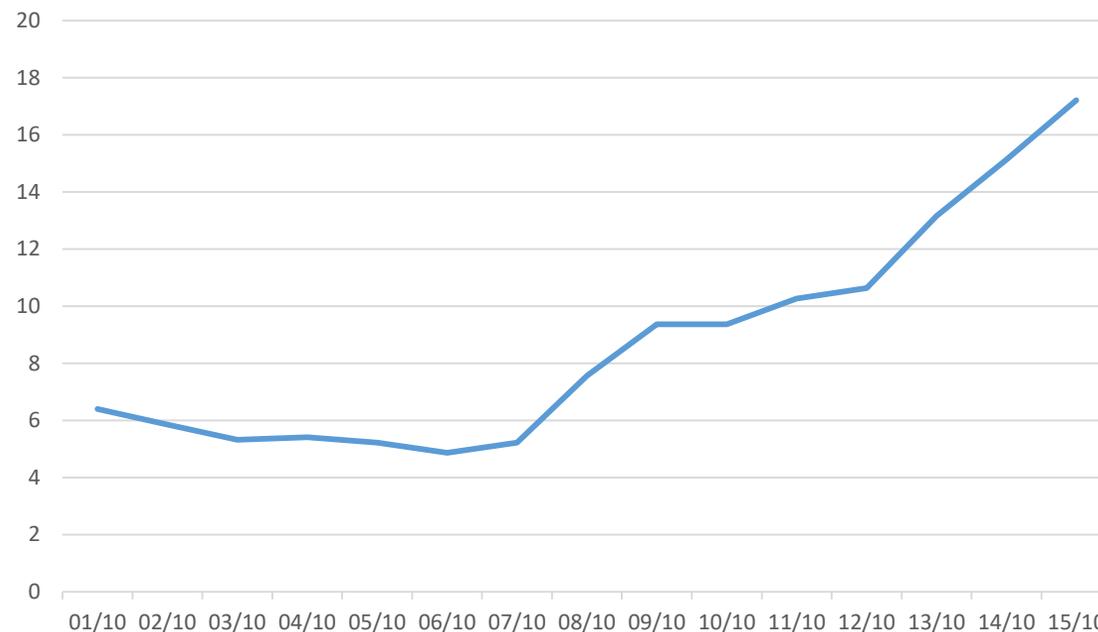


Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons, September 2020
(source National Public Health Organization, writers process)

Thus there was no consideration for any restriction measures, especially after mid September...

Thessaloniki Prefecture confirmed Covid-19 cases per 100.000, October 2020 1/2

On the first 15 days of October 2020 Covid – 19 confirmed cases per 100.000 in Thessaloniki were tripled

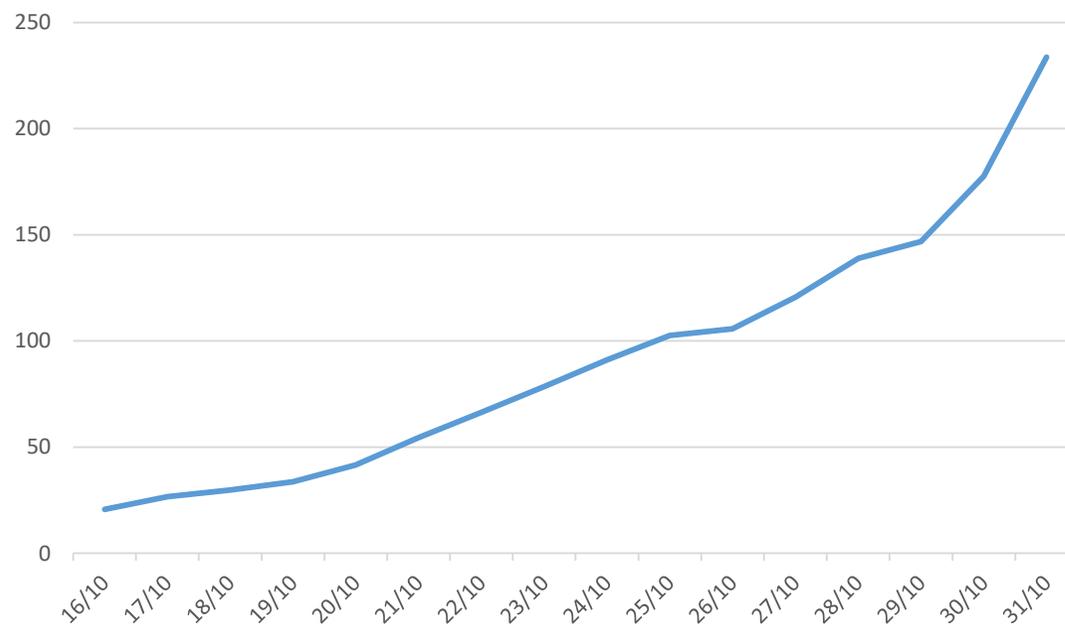


Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons 1-15/10/2020
(source National Public Health Organization, writers process)

... And that is consistent with the virus spread course, as symptoms of Covid -19 occur after 2 weeks of exposure and contamination...

Thessaloniki Prefecture confirmed Covid-19 cases per 100.000, October 2020 2/2

On the second 15 days of October 2020 Covid – 19 confirmed cases per 100.000 in Thessaloniki **were showing exponential growth**



Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons 16-30/10/2020
(source National Public Health Organization, writers process)

... And that is more consistent with the virus spread course, as symptoms of Covid -19 occur after 2 weeks of exposure and contamination...

Thessaloniki Prefecture Social Activities October 2020

no restriction measures were taken after the governmental conference with the local authorities, 19 October even though the confirmed cases were showing exponential growth in the first 15 days of October

During October 2020:

- Over 90 mass gatherings were organized by various organizations – movements (Source kinimatorama.net, local press)
- 2 major protest with mass participation (2 & 19 October)
- 2 - days festivities for Thessaloniki's liberation on 26th of October, Saint Demetrius festivities also 26th of October (25 & 26October took place)

Thessaloniki Prefecture lockdown November 2020

Restriction measures for Thessaloniki prefectures were taken only on 3 November 2020

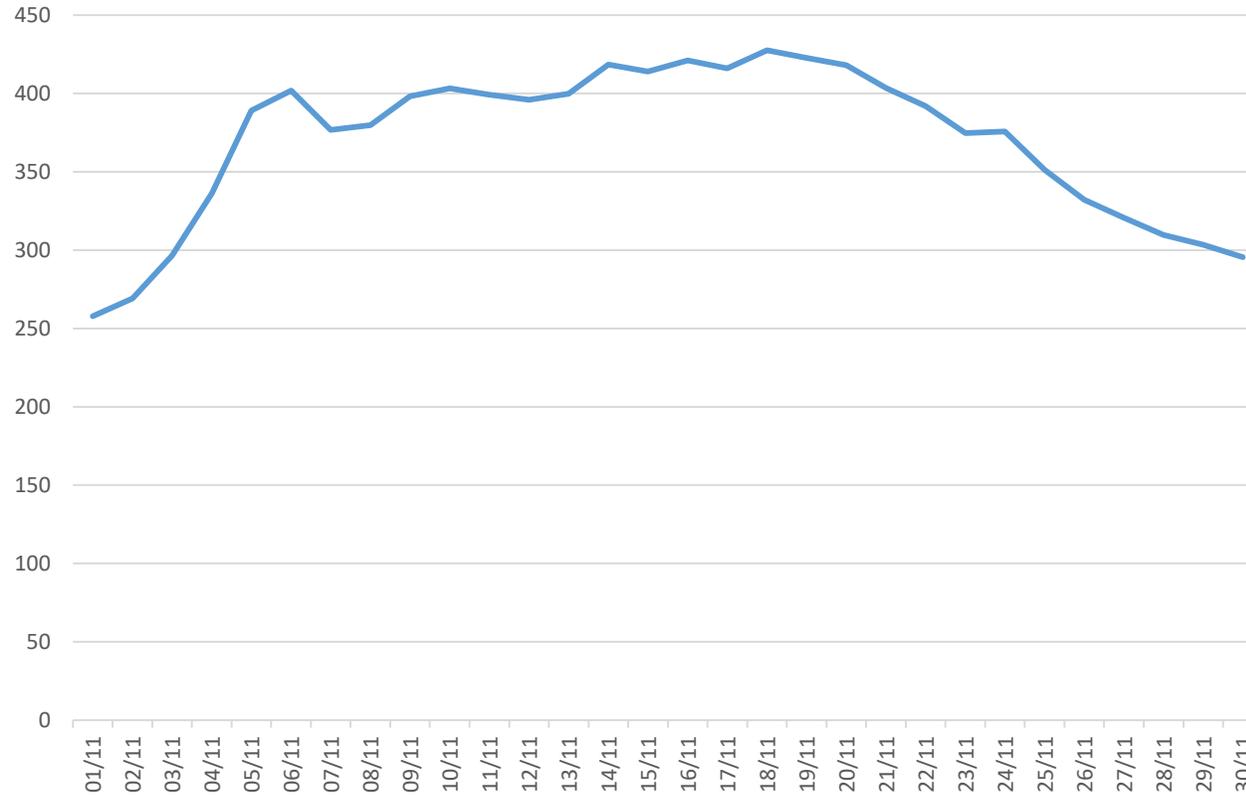
Measures were equivalent to March 2020 lockdown:

all non-essential activities e.g. retail, entertainment, sports, religion activities were suspended along with suspensions to travels, travels between prefectures and travels for visits to family/ friends houses.

For emergency purposes – daily shopping, doctor – visits, help to elders – and for personal training or dog walk, travels were allowed (first a text message ought to be sent or a personal declaration statement should be carried out and demonstrated in case of authorities control).

Thessaloniki Prefecture lockdown November 2020

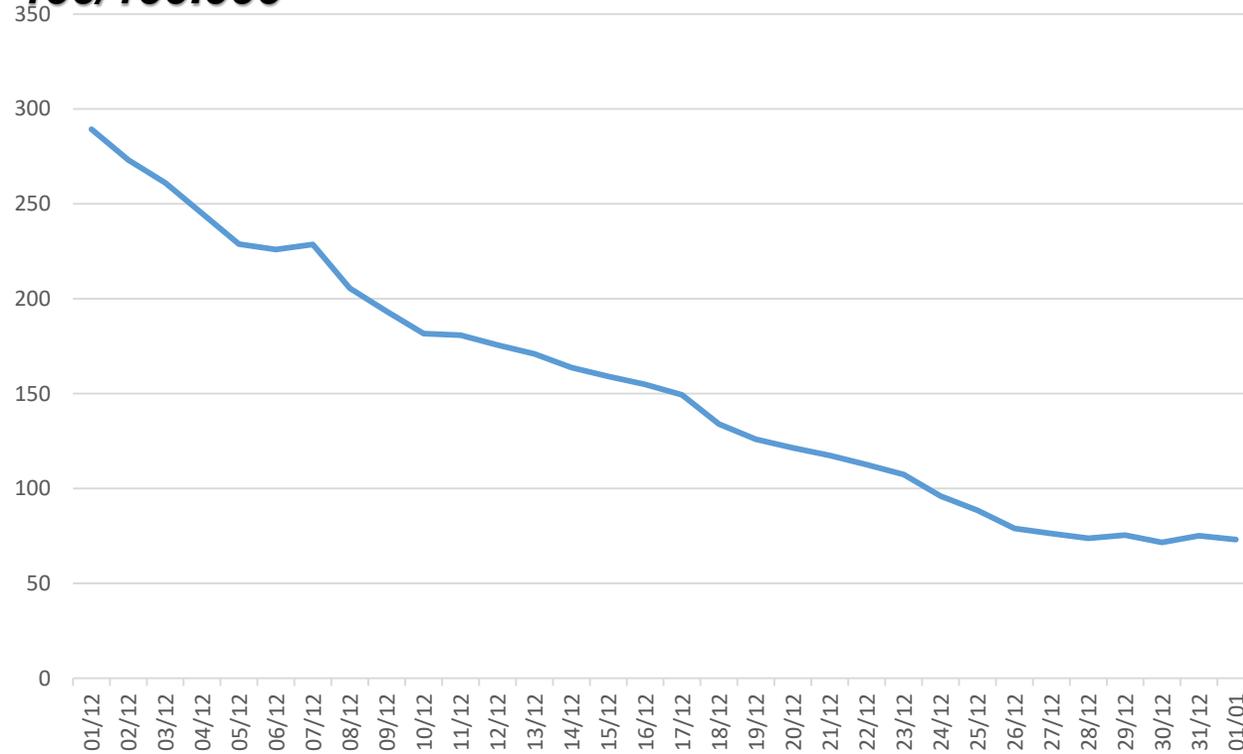
Confirmed Covid-19 cases per 100.000, November 2020



Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons November 2020
(source National Public Health Organization, writers process)

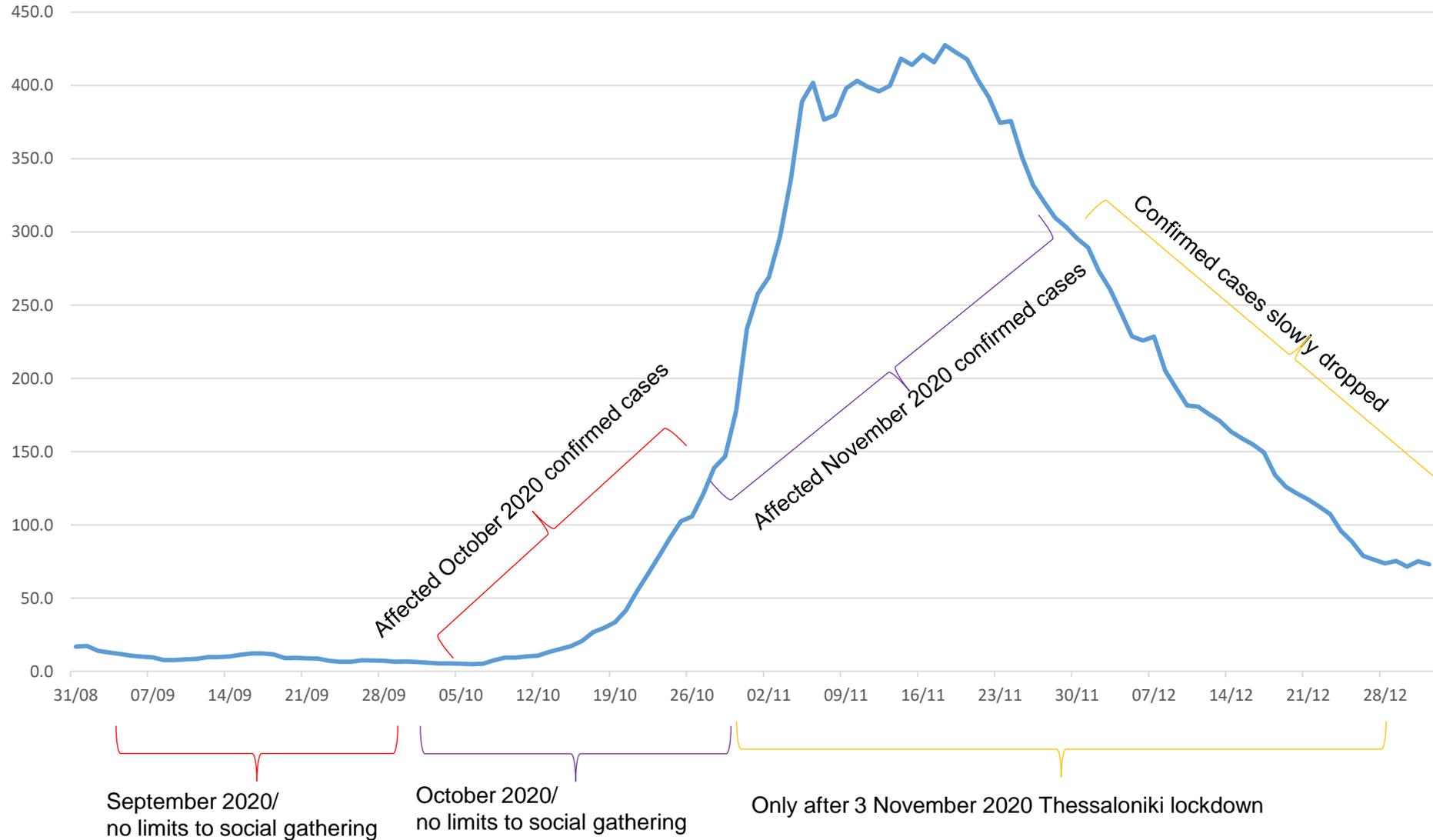
Thessaloniki Prefecture lockdown December 2020

Only after 24 December and after 40 days of strict lockdown Covid -19 reported cases decrease below 100/100.000



Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons December 2020
(source National Public Health Organization, writers process)

Thessaloniki Prefecture Covid-19 confirmed cases and social activities August – December 2020



Thessaloniki Prefecture 7th-days Covid -19 confirmed cases per 100.000 persons December 2020
(source National Public Health Organization, writers process)

Conclusions

- Covid -19 Second Wave hit hard Thessaloniki Prefecture
- The lack of restriction measures and social distancing on early September, where Covid-19 confirmed cases were low but showed increasing rate, led to an uncontrolled situation by late October 2020
- Major social gatherings like mass parties, mass protests, mass festivities, with no social distancing and no face masks are the fuel for SARS-Cov2 and consequently Covid-19 spread as there were no available vaccines at the time, while the cold temperatures facilitated the spread
- The impact of vaccines should be analyzed, in a next step, of how population vaccination limits spread of SARS-Cov2 and Covid-19 regardless of social activities or weather conditions

Thank you for your attention!