

#### **AUTHORS**





#### Aleksandar Stevanović<sup>1,2</sup>

Milena Šantrić-Milićević<sup>1,2</sup>
Jovana Todorović<sup>1,2</sup>
Stefan Mandić-Rajčević<sup>1,2</sup>
Nataša Rosić<sup>3</sup>
Gordana Bjelobrk<sup>4</sup>
Elena von der Lippe
Brecht Devleesschauwer<sup>6</sup>

<sup>1</sup>Institute of Social Medicine, Faculty of Medicine, University of Belgrade, Serbia

<sup>2</sup>Center – School of Public Health, Faculty of Medicine, University of Belgrade, Serbia

<sup>3</sup>City Institute of Public Health Belgrade, Belgrade, Serbia

<sup>4</sup>Statistical Office of the Republic of Serbia, Belgrade, Serbia

<sup>5</sup>5Department of Epidemiology and Health Monitoring, RKI, Berlin, Germany

<sup>6</sup>Department of Epidemiology and Public Health, Sciensano, Brussels, Belgium





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## **BACKGROUND**

### COVID-19 IN SERBIA





#### Official onset:

March 6, 2020

Up to December 31, 2022:

- 2,446,253 infection cases
- 17,519 death cases

(data published by IOPH Serbia)

Vital statistics are provided by the Statistical Office of the Republic of Serbia (SORS). This includes the mortality data disaggregated by cause of death.

## **METHODS**

### METHODS: DATA





# Disaggregated, anonymized information on individual **COVID-19 death cases:**

- U07.1 SARS-CoV-2 infection laboratory-confirmed
- **U07.2** SARS-CoV-2 infection clinically suspected

#### Sociodemographic characteristics of each case:

- Age
- Sex
- Time and place of death
- Residential Area
- Maritial Status
- Educational Attainment
- Activity



## УНИВЕРЗИТЕТ У БЕОГРАДУ МЕДИЦИНСКИ ФАКУЛТЕТ UNIVERSITY OF BELGRADE FACULTY OF MEDICINE



# METHODS: YLL

• **Years of Life Lost** (YLL) were calculated for each death case individually by assigning the life expectancy of a corresponding gender-age group

 For the remaining life expectancy, we used national values provided by the Statistical Office of the Republic of Serbia

All values were summed up to get the cumulative
 YLL number for each populational group of interest







### METHODS: ANALYSIS

 COVID-19YLL was described as absolute, average, and relative numbers (percent and rates per 100,000 population)

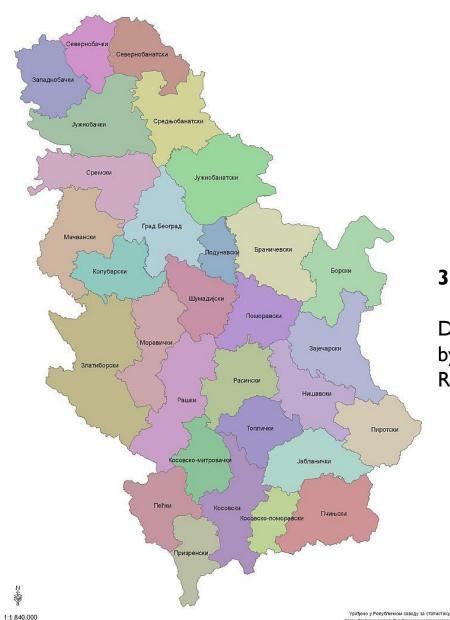
Pearson's χ2 test was used to explore
differences among different population groups
(men vs. women, urban vs. non-urban settlements,
and district-level)



### METHODS: ANALYSIS

Управни окрузи





**30 districts** in total (NUTS3)

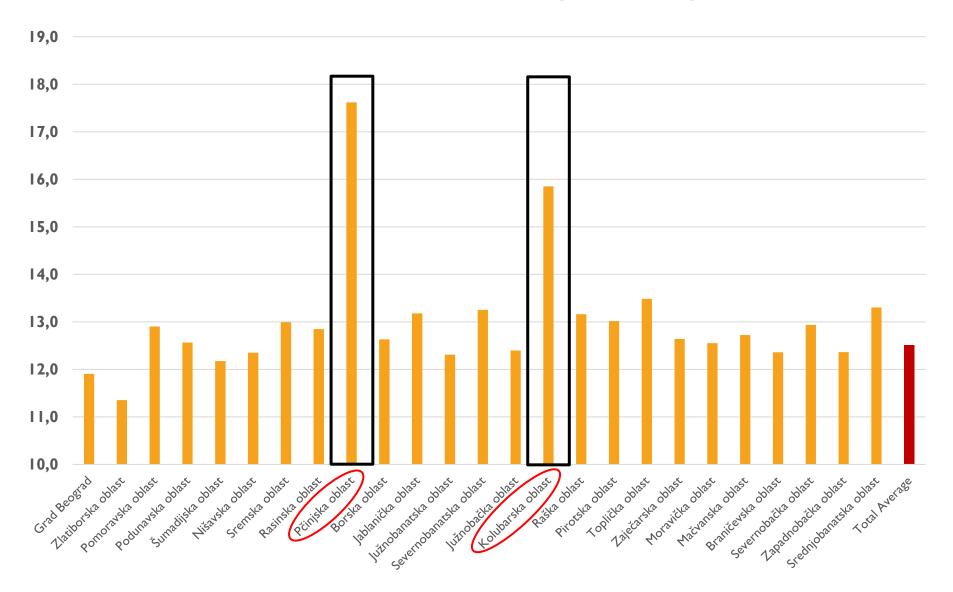
Data from **25 districts** provided by the Statistical Office of the Republic of Serbia



## **RESULTS**

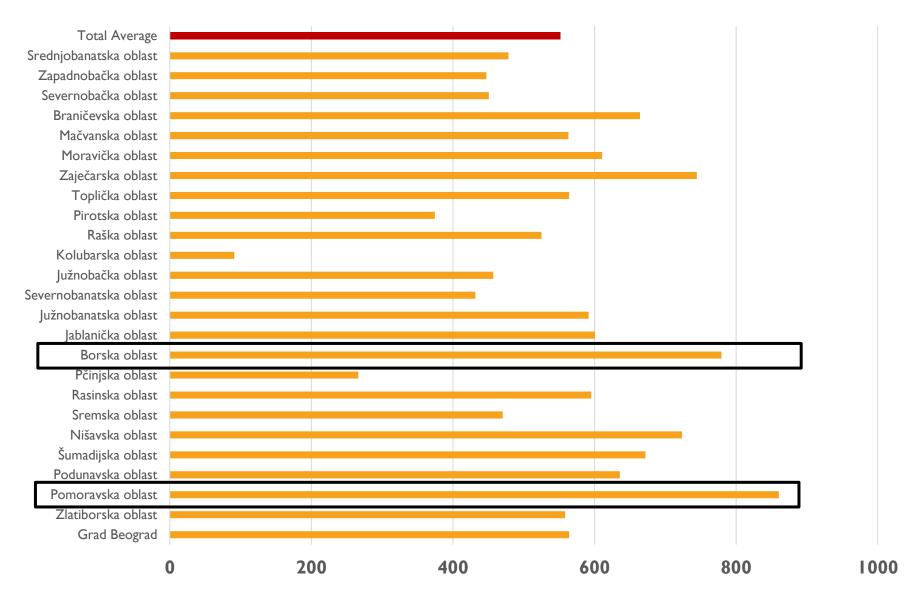
# Average number of YLLs per COVID-19 death case in districts of Serbia (2020-2021)





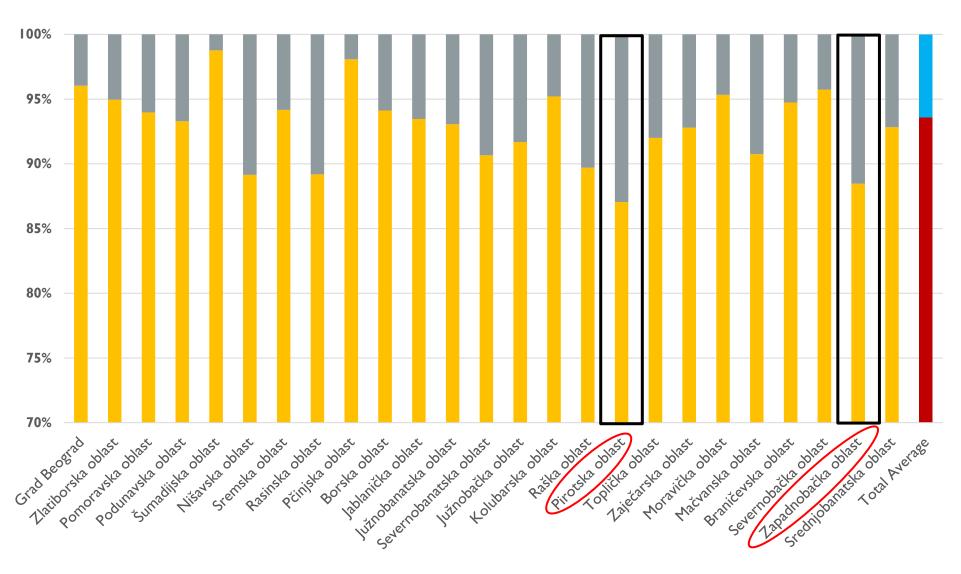
# COVID-19 YLLs rate for 2020 & 2021 (per 100,000 population)





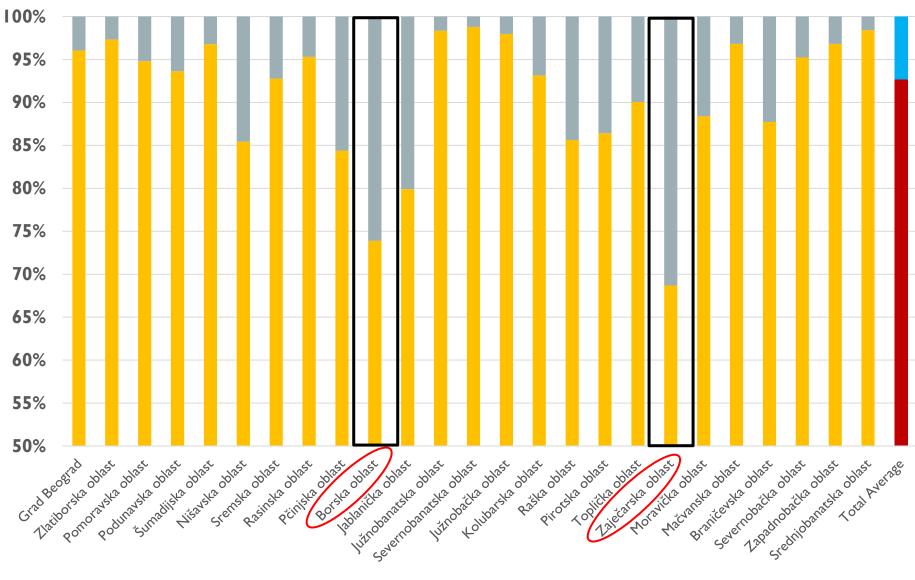
# Place of COVID-19 death cases (%)





### Confirmation of COVID-19 death cases (U07.1 vs U07.2)





## CONCLUSION





#### CONCLUSION

- A notable variance in premature mortality due to COVID-19 in Serbia has been registered at the district level
- Along with the average YLL number, there are significant disparities in the share of deaths that occur outside of hospitals or have no laboratory confirmation
- Additional analysis should try to explain these differences

# THANK YOU! @ QUESTIONS?