

Monitoring the incidence of COVID19 in the Metropolitan City of Naples

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Introduction & Aims

The COVID19 epidemic evolution has been extensively evaluated at national and regional level, but little has been studied and presented at local level, intended as large municipalities (metropolitan cities). **Aim** : to monitor the incidence of COVID19, by age group and District/Municipality, in the Metropolitan City of Naples.

Methods

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At the request of the City of Naples, a Task Force was set up to monitor the epidemiological trends of COVID19. The data were provided by ASL NA1 (about 1 million inhabitants). For each incident case of COVID19, information was collected on gender, age, address of residence, presence of symptoms, admission to hospital and/or intensive care, and date of death. The address of residence was used to geocoding the case and assign the neighbourhood/municipality to which it belonged. Weekly incidence rates per 100,000 inhabitants were calculated and further characterised by neighbourhood/municipality and age group. A comparison of incidence and mortality between the Municipality of Naples and the Campania Region (Campania Civil Protection data) was also carried out using time series graphs with a 7-day moving average.

Results

The analysis of the epidemiological trend of the second wave starts from 1 August 2020. As of 7 March 2021, the date of the last update, the total number of COVID19 infections in the city of Naples was 49,323, while the number of cases diagnosed in 2021 was 14,053. The evaluation of incidence rates showed significant differences in the epidemiological trend by age group and neighbourhood/municipality. The comparison between the City of Naples and Campania showed, especially in the first part of the second wave, a higher incidence of COVID19 in the City of Naples (**Figure 1A**), while in the last period it is the Campania Region that presents higher incidence values. The comparison of COVID19 mortality rates showed during the second wave a significantly higher mortality in Naples than in Campania (in some periods more than double), with a greater difference than expected due to the difference observed in the comparison of the incidence of cases (**Figure 1B**). Higher mortality in Naples is also observed in the current period. A short report was published weekly (monthly with information on Neighbourhood/Municipality) on the Naples Municipality website www.comune.napoli.it/emergenza-covid19.

Fig. 1A - Naples and Campania COVID 19 infection rate x 100,000 inhabitants.

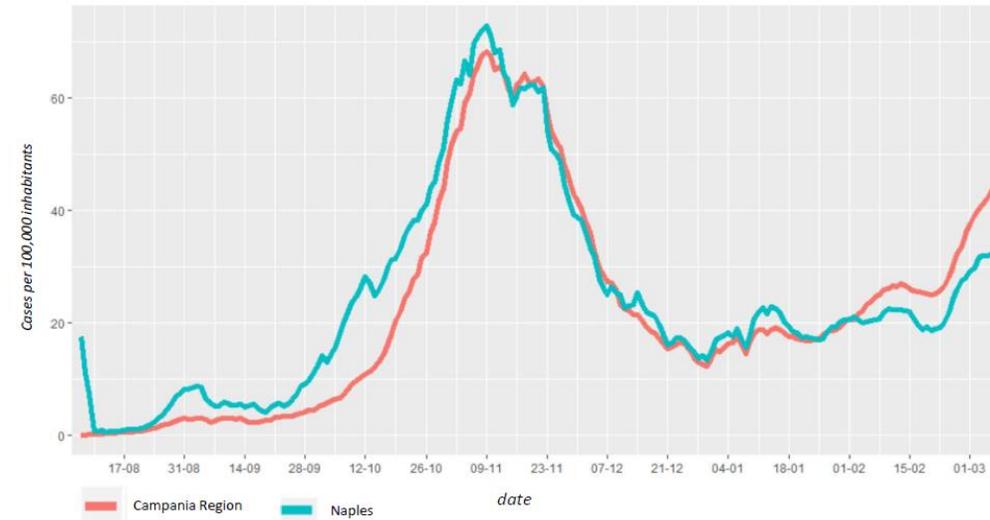


Fig 1B - Naples and Campania COVID 19 mortality rate x 1,000,000 inhabitants.

