

COVID-19: a territorial view on demographic context and territorial expression of the pandemic

- On 9 and 10 May, new confirmed cases of COVID-19 in the last seven days were the lowest since the beginning of 2021, corresponding to a daily average of 326 and 328 new cases, respectively. After the highest value reached on 27 January – a daily average of 12,891 new cases – this indicator generally declined, although with occasional increases between 16 March and 24 April. On 10 May 2021, the 14-day incidence rate of COVID-19 was 49 new cases per 100 thousand inhabitants.
 - On 5 May 2021, date of the last data update per municipality, there were 54 new confirmed cases of COVID-19 (last 14 days) per 100 thousand inhabitants in Portugal. Compared to the previous two weeks, the incidence rate declined, and the territorial concentration of new cases stabilised. The number of municipalities with 14-day cumulative incidence values below 120 new cases per 100 thousand inhabitants has been increasing overall since the beginning of February – there were 19 municipalities on 9 February and 272 on 5 May.
 - In 185 municipalities the number of deaths between 29 March and 25 April was equal to or lower than the corresponding reference period, four municipalities less than in the previous week.
 - At the regional level, it should be noted that in the four weeks ending on 25 April, only Região Autónoma dos Açores recorded a higher number of deaths than the same period in the previous year (+3.3%), while Norte (-6.6%) and Alentejo (-5.6%) regions recorded the largest reductions.
 - Within the framework of Statistics Portugal's Statslab, the data on population mobility indicates an overall increase in mobility levels from the second week of February onwards, which was accentuated following the gradual lifting of restrictive measures and the reopening of schools.
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With this press release, Statistics Portugal interrupts the biweekly dissemination of the analysis on demographic context indicators and territorial expression of the COVID-19 pandemic in Portugal. The indicators regarding the pandemic situation will continue to be updated in the [COVID-19 Dashboard](#) on Statistics Portugal's website, which includes a wider range of context and impact information at the local level. It remains open, however, the possibility of resuming this press release depending on the evolution of the pandemic situation in Portugal.

I. Demographic and territorial context indicators

Região Autónoma dos Açores was the only region with a higher number of deaths than the reference period

Figure 1 - Ratio between deaths in the last 4 weeks and deaths in the same reference period, Portugal, weekly

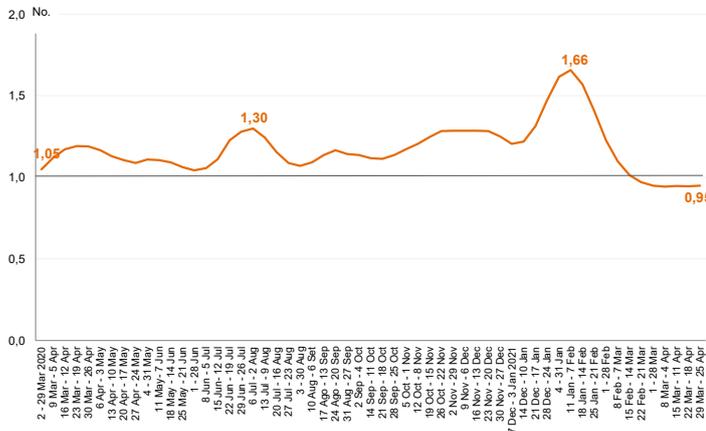
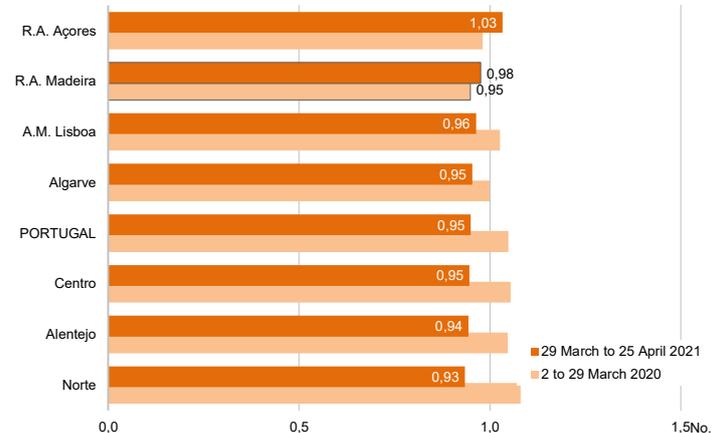


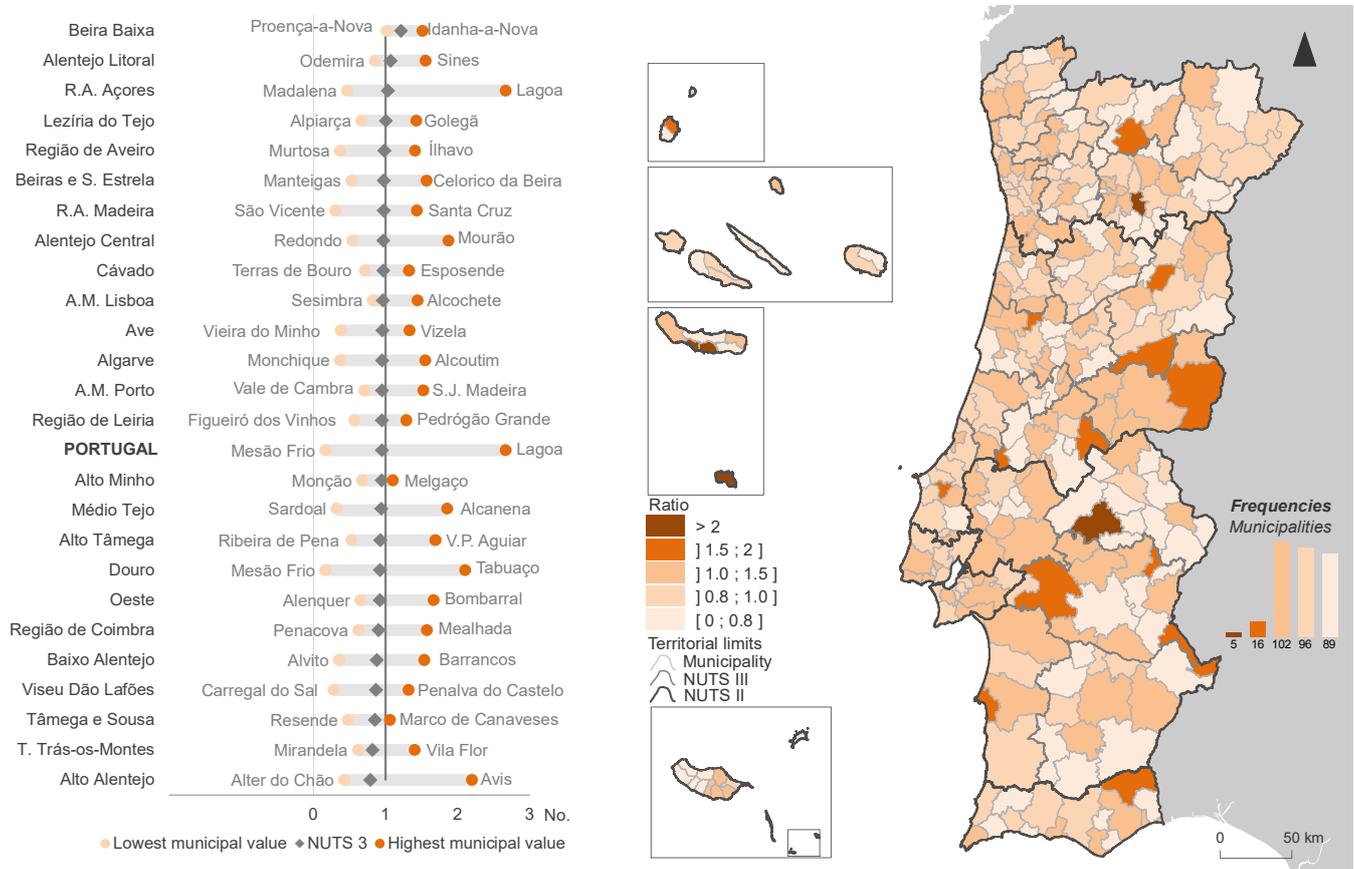
Figure 2 – Ratio between deaths in the last 4 weeks and deaths in the same reference period, Portugal and NUTS 2



Source: INE, I.P., Statistics on Deaths (Preliminary (2020 and 2021) and Final Results (2015 up to 2019)).

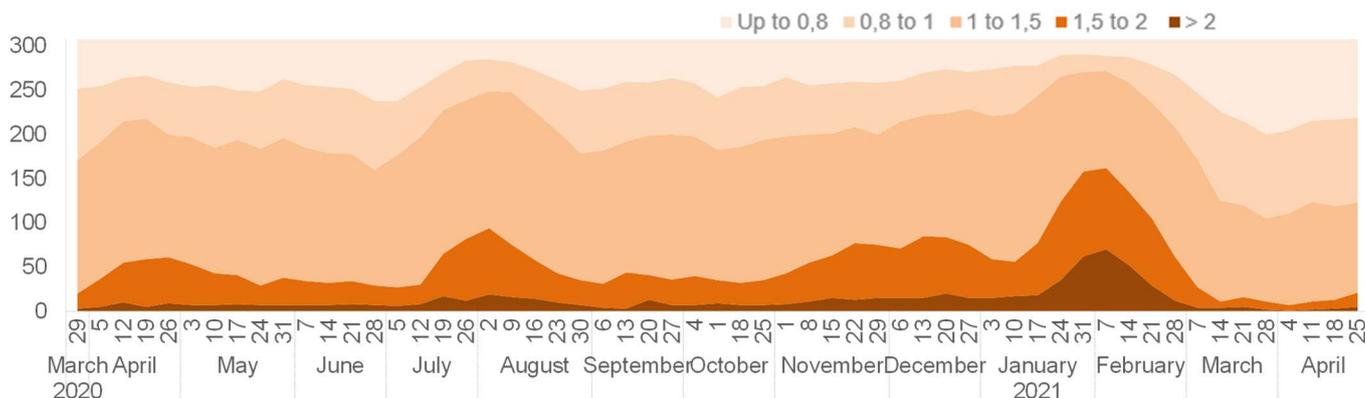
In 185 municipalities the number of deaths between 29 March and 25 April was equal or lower than in the same reference period

Figure 3 – Ratio between deaths in the last four weeks (25 April 2021) per deaths in the same period of reference, Portugal, NUTS 3 and municipality



Source: INE, I.P., Statistics on Deaths (Preliminary (2020 and 2021) and Final Results (2015 up to 2019)).

Figure 4 - Number of municipalities by class of the ratio of deaths in the last 4 weeks to deaths in the same reference period, weekly

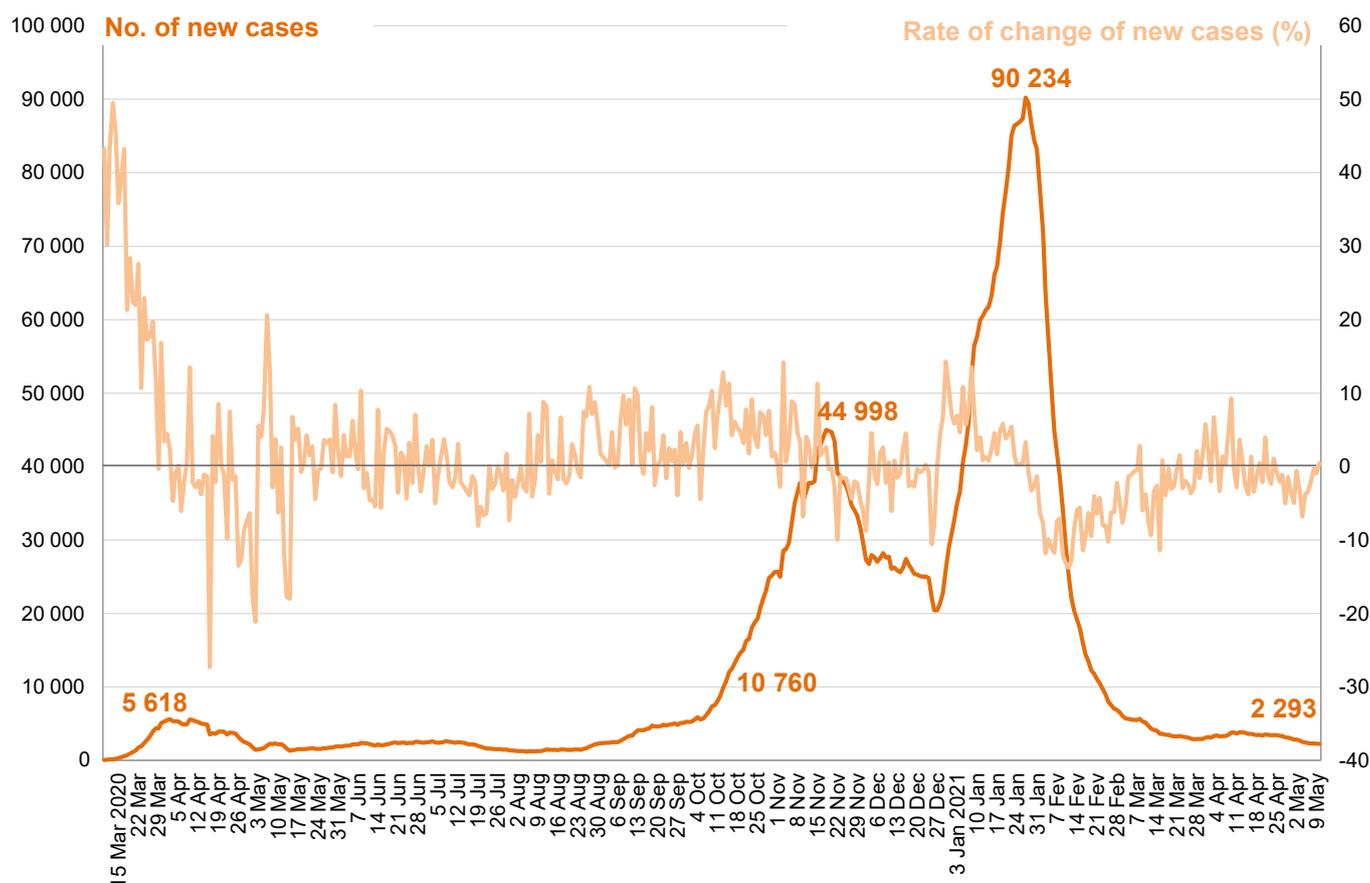


Source: INE, I.P., Statistics on Deaths (Preliminary (2020 and 2021) and Final Results (2015 up to 2019)).

II. The expression of the pandemic in the municipalities

On 9 and 10 May, new confirmed cases in the last 7 days were the lowest since the beginning of 2021

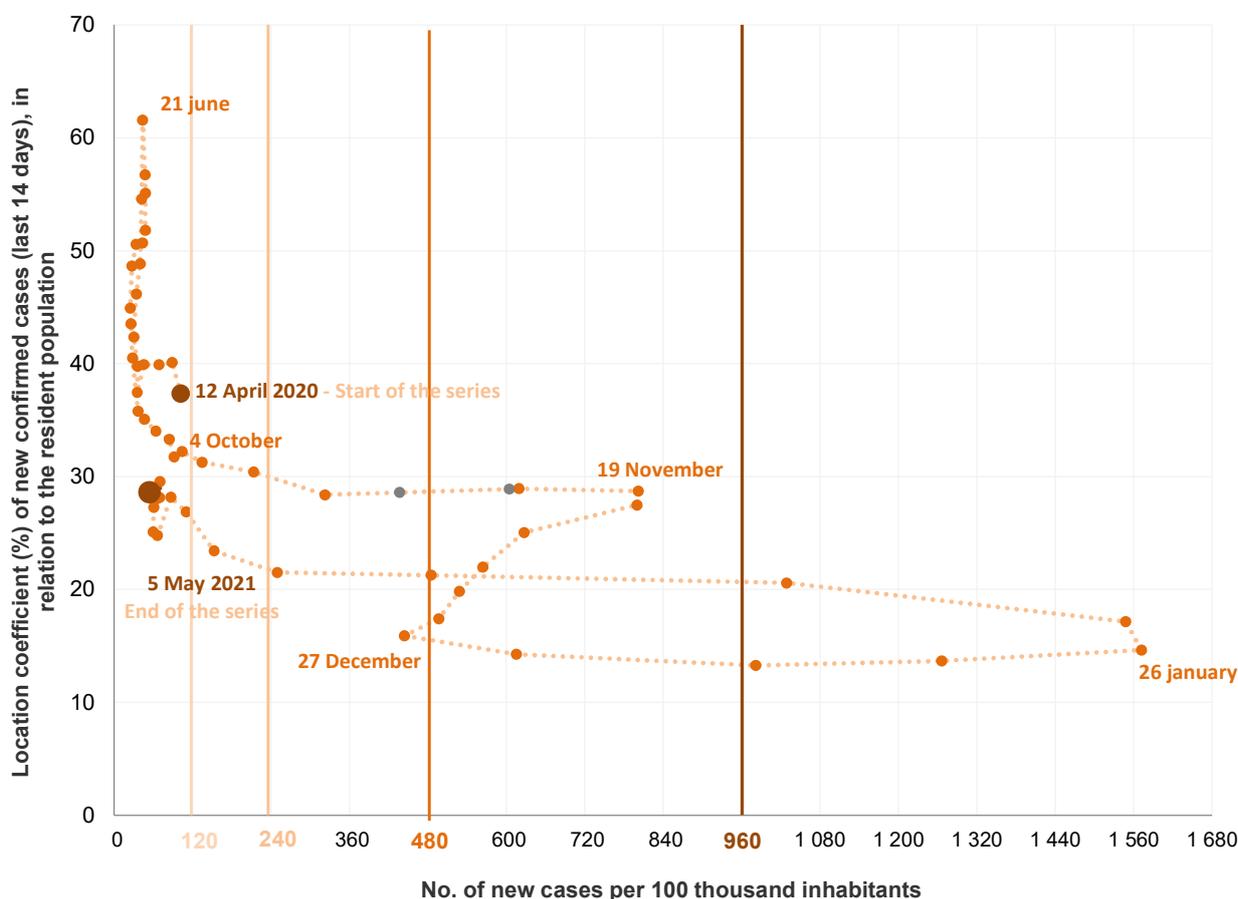
Figure 5- Number of new confirmed cases (last 7 days) of COVID-19 and respective rate of change, Portugal, per day (up to 10 May 2021)



Source: Directorate-General of Health, Daily COVID-19 Status Report (released up to May 11). Note: The number of new cases includes the +4,375 confirmed cases resulting from the historical update released by the Directorate-General of Health in the COVID-19 Status Report made available on 16 November (data on the situation up to 15 November) with impact on the new cases in the last 7 days for the period 15-21 November. The 599 new cases related to positive laboratory notifications reporting to the weekend of 3 and 4 April, disseminated by DGS in the Status Report of 6 April, were distributed over these two days according to the distribution of new cases that occurred in the previous four weekends. The dates marked on the graph axis correspond to Sundays.

In the last three weeks, there has been a stabilising trend in the territorial concentration of the number of new cases and a reduction in the incidence rate

Figure 6- Territorial concentration of new confirmed cases of COVID-19 (last 14 days), in relation to the resident population and 14-day cumulative incidence rate, Portugal

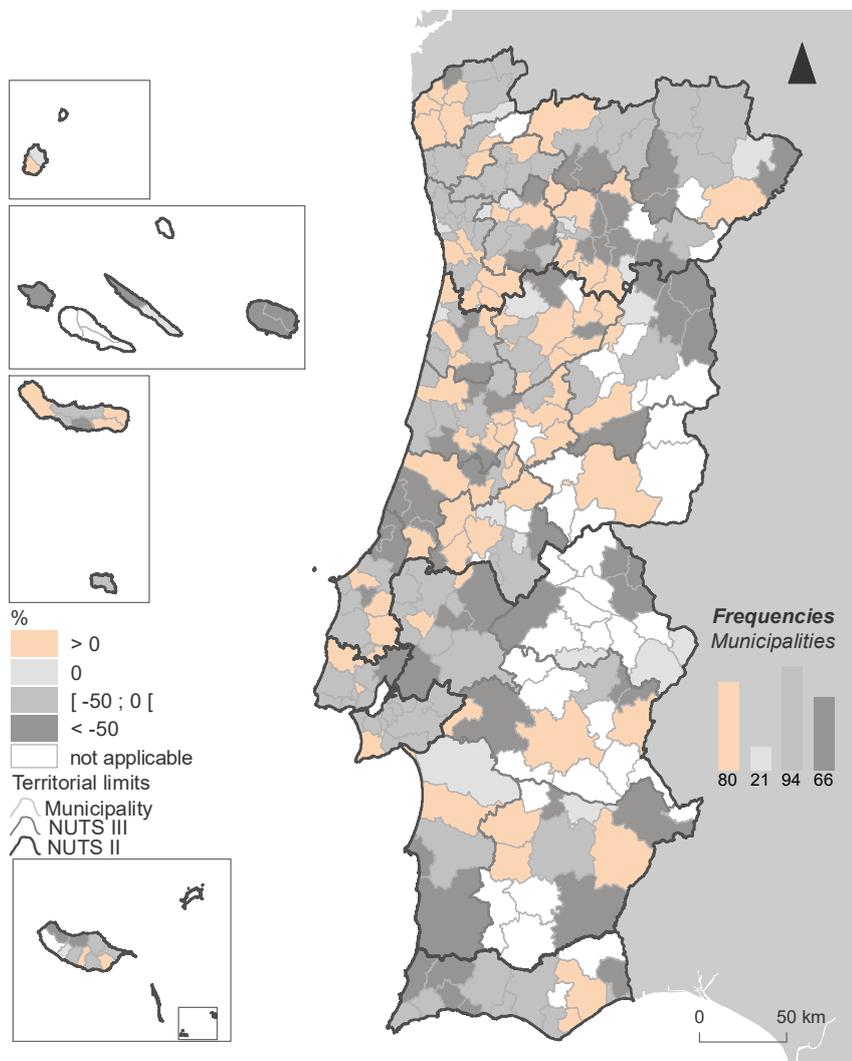


Source: Directorate-General of Health, Daily COVID-19 Status Report (released on May 7); INE, I.P., Annual estimates of resident population, 31 December 2019.
Note: For the calculation of the location coefficients zero cases were considered for the municipalities with no value in the Directorate-General of Health Status report (0 or < 3 cases).

On 5 May, 52% of municipalities recorded a decrease in the 14-day cumulative incidence rate, more 42 municipalities than in the previous week

Figure 7- Rate of change and territorial concentration of new confirmed cases of COVID-19 (last 14 days), in relation to the resident population

Rate of change (27 April / 5 May), by municipality



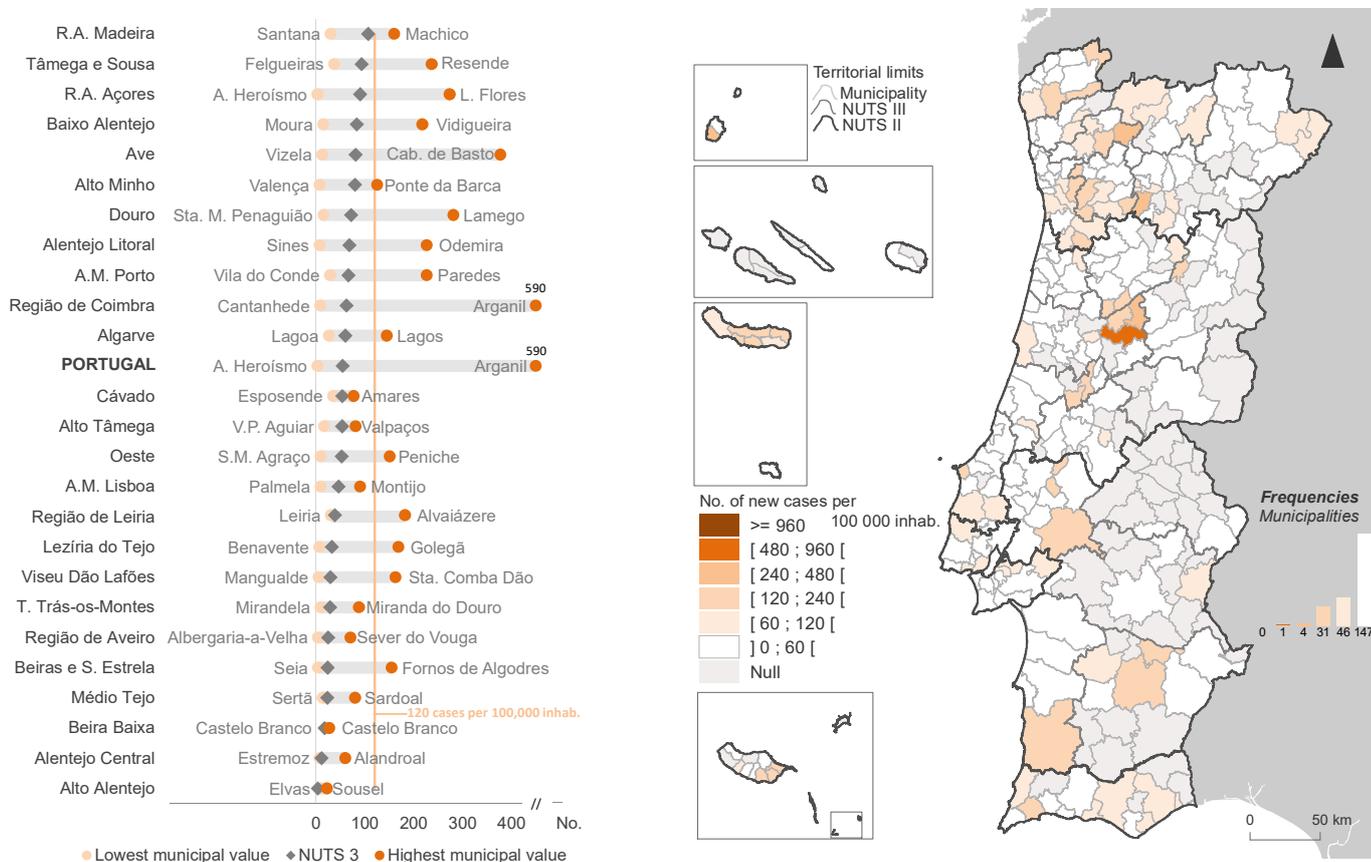
Location Coefficient, Portugal

	5 May – Wednesday	28.6
Tuesdays	27 April	28.1
	20 April	29.6
	13 April	28.2
	6 April	27.3
	30 March	25.1
	23 March	24.8
	16 March	28.2
	9 March	26.9
	2 March	23.4
	23 February	21.5
	16 February	21.3
	9 February	20.6
	2 February	17.2
	26 January	14.6
	18 January – Monday	13.7
	12 January – Tuesday	13.3
	5 January – Tuesday	14.3
	27 December – Sunday	15.9
	20 December – Sunday	17.4
	17 December – Thursday	19.8
	8 December – Tuesday	22.0
	2 December – Wednesday	25.1
	25 November – Wednesday	27.5
	19 November – Thursday	28.7
	10 November – Tuesday	28.9
Sundays	25 October	28.4
	18 October	30.4
	11 October	31.3
	4 October	32.2
	6 September	35.1
	9 August	44.9
	12 July	51.8
	21 June	61.6
	17 May	39.8
	19 April	40.1

Source: Directorate-General of Health, Daily COVID-19 Status Report (released up to May 7); INE, I.P., Annual estimates of resident population, 31 December 2019. Note: For the calculation of the location coefficients zero cases were considered for the municipalities with no value in the Directorate-General of Health Status report (0 or < 3 cases).

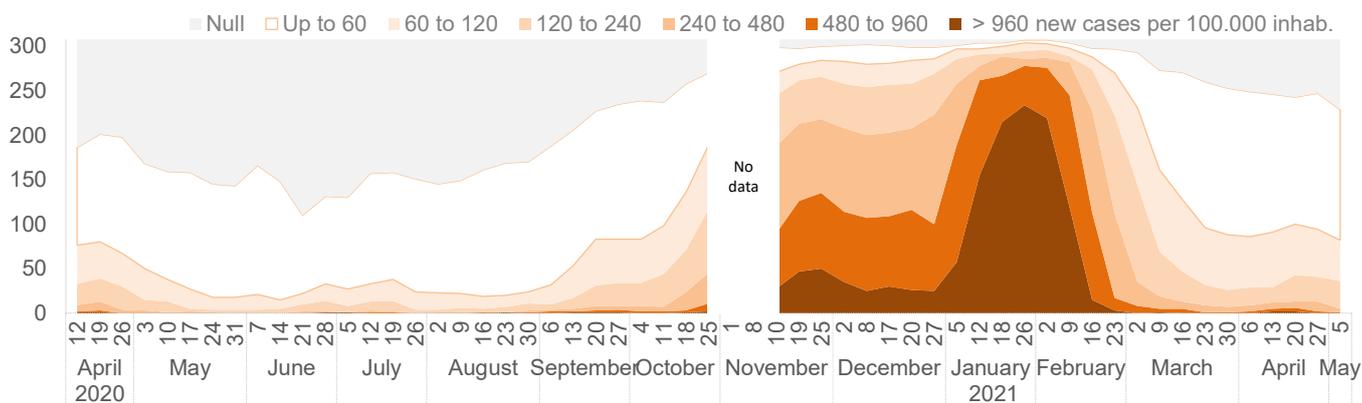
On 5 May 2021, 36 municipalities registered figures above the threshold of 120 new cases per 100,000 inhabitants

Figure 8 – 14-day cumulative incidence rate of COVID-19 on 16 March 2021, Portugal NUTS 3 and municipality



Source: Directorate-General of Health, Daily COVID-19 Status Report (released on May 7); INE, I.P., Annual estimates of resident population, 31 December 2019.
Note: In the graph, in NUTS 3 sub-regions with zero data status, the municipalities with the lowest value in the indicator are identified.

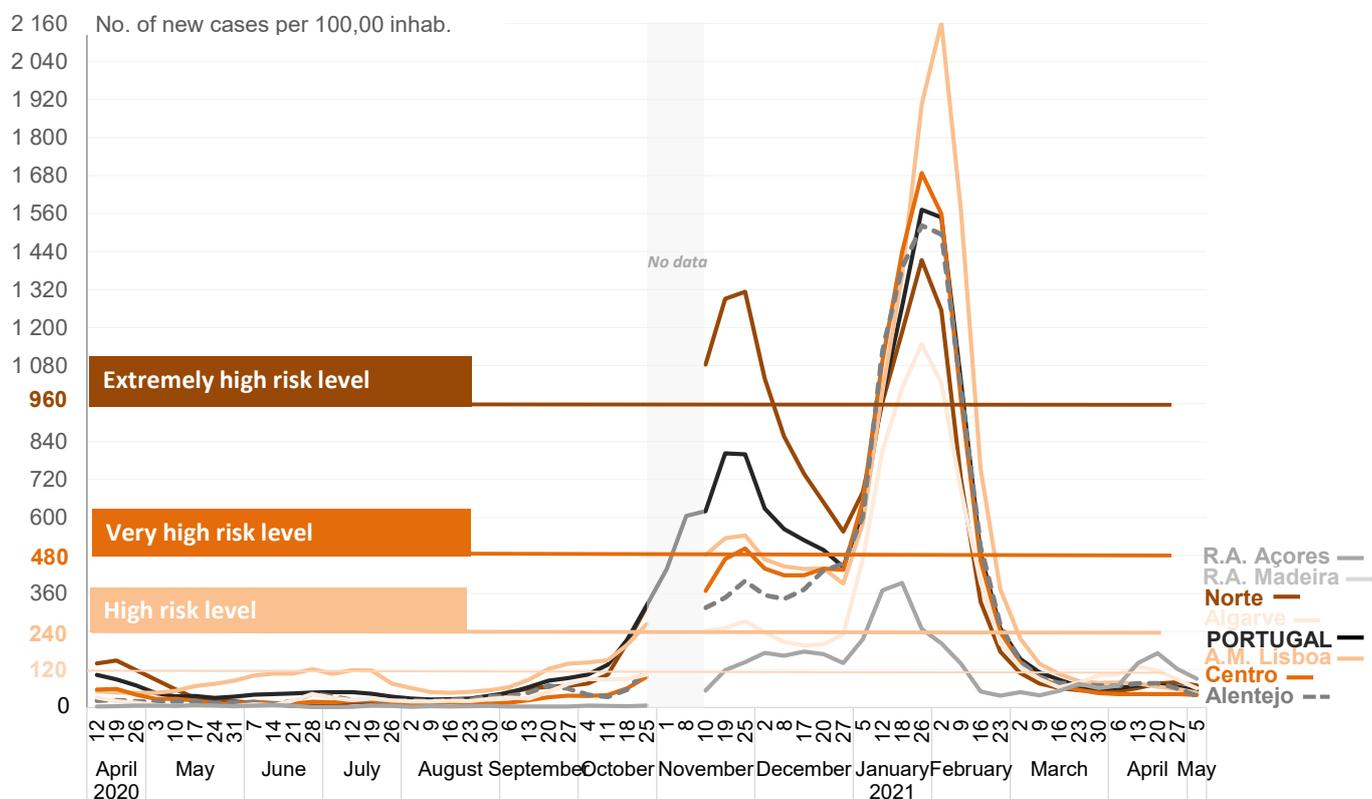
Figure 9 – Number of municipalities by class of 14-day cumulative incidence rate of COVID-19, weekly



Source: Directorate-General of Health, Daily COVID-19 Status Report (released on May 7); INE, I.P., Annual estimates of resident population, 31 December 2019. The absence of values at the regional level on 1 and 8 November is due to the interruption in the dissemination of data at the municipality level in the COVID-19 Status reports. The dates marked on the graph axis correspond to Sundays until 8 November and then to the reference days associated with the 14-day cumulative incidence indicator that is now being released weekly by the Directorate-General of Health (see technical note at the end of the press release), which since 26 January 2021 correspond mainly to Tuesdays.

On 5 May, there was a reduction in the 14-day cumulative incidence rate in all NUTS 2 regions

Figure 10 - 14-day cumulative incidence rate of COVID-19, Portugal and NUTS 2, weekly



Source: Directorate-General of Health, Daily COVID-19 Status Report (released up to May 7). INE, I.P., Annual estimates of resident population, 31 December 2019.
 Note: The absence of values at the regional level on 1 and 8 November is due to the interruption in the dissemination of data at the municipality level in the COVID-19 Status reports. The dates marked on the graph axis correspond to Sundays until 8 November and then to the reference days associated with the 14-day cumulative incidence indicator that is now being released weekly by the Directorate-General of Health (see technical note at the end of the press release), which since 26 January 2021 correspond mainly to Tuesdays. For 9 and 16 March, the data for Região Autónoma da Madeira should be interpreted taking into account the delay between diagnosis and notification reported by the DGS in the period under analysis.

Population mobility indicators at regional level: an analysis based on information from Facebook's "Data for Good" Initiative

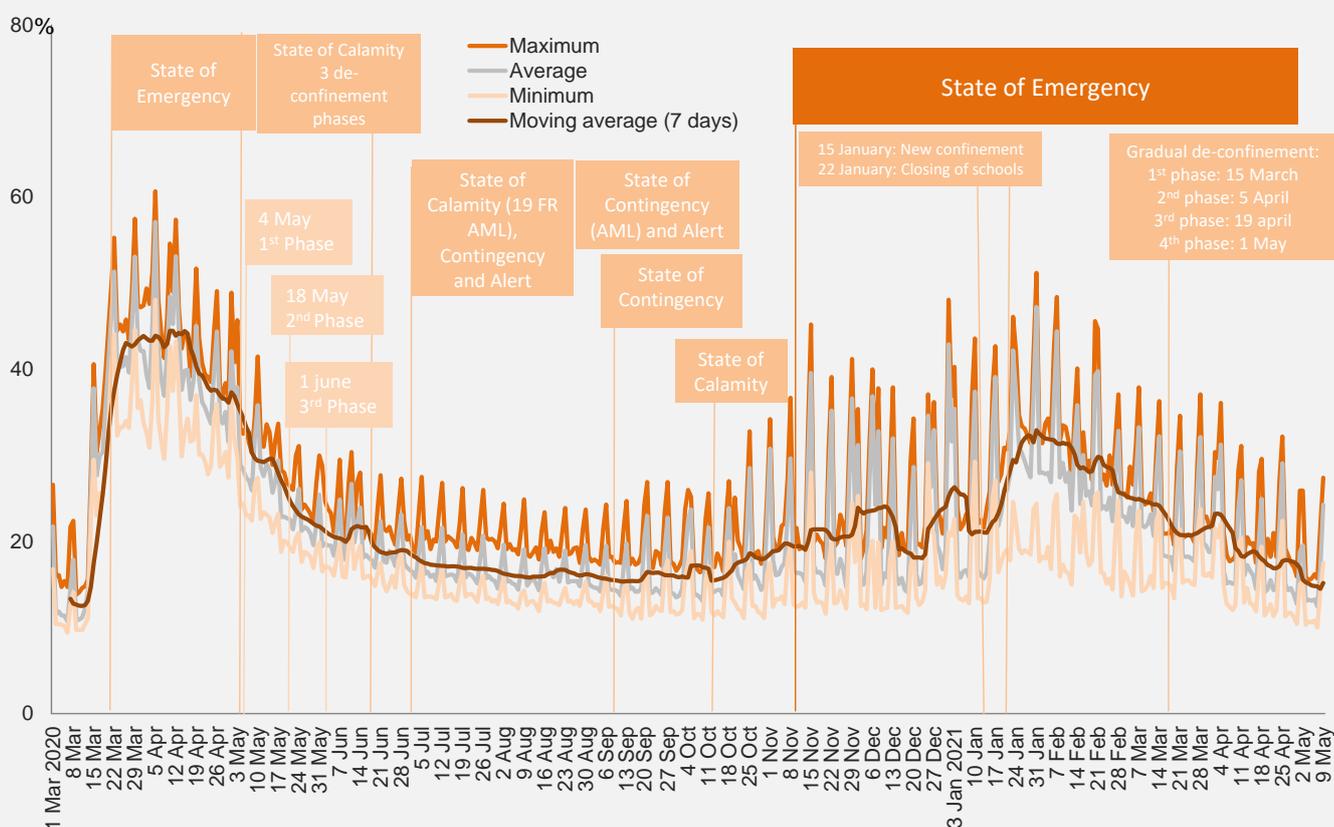
Taking advantage of Facebook's "Data for Good" initiative, the figure below shows the proportion of the population "staying put" between 1 March 2020 and 9 May 2021, namely the minimum, average and maximum values calculated based on the NUTS 3 sub-regions. The proportion of population that "stayed put" is based on the number of Facebook users associated with a single reference grid of 600mx600m during 8 am and 8 pm on day x, requiring at least three occurrences during that time period.

It is possible to observe that on Sundays there is generally less mobility of the population than on other days of the week. It is also noteworthy that after the first confirmed cases of COVID-19 and following the declaration of the first State of Emergency, there is a decrease in the mobility of the population, followed by an increase in the levels of mobility after the implementation of the de-confinement measures.

Considering the moving average of the last 7 days there has been an overall reduction in the average levels of mobility following the declaration of the State of Emergency on November 9 and subsequent renewals. In this context, the days before Christmas and after New Year are the exception, where there is an increase in mobility due to the general cancelling of measures restricting circulation. This tendency to reduce mobility is accentuated after the entry into force, on January 15, 2021, of extraordinary measures to limit the spread of the pandemic, including a new confinement period, followed by the closing of schools on January 22.

From the second week of February there is an overall upward trend in mobility levels, which is accentuated following the gradual lifting of restrictive measures and the reopening of schools for the different levels of education according to the different phases of the de-confinement process (reopening of crèches, pre-school and 1st cycle on 15 March, 2nd and 3rd cycle on 5 April and secondary and higher education on 19 April). There was, however, a slight increase in the proportion of the population that "stayed at home" during the days associated with school holidays and the Easter period.

Proportion of the population "staying put" between 1 March 2020 and 9 May 2021 – minimum, average and maximum values of NUTS 3 sub-regions



Source: Facebook's "Data for Good" Initiative. Data provided by Carnegie Mellon University. Note: The dates marked on the graph axis correspond to Sundays.