# COVID19\_SPA\_VISUAL **COVID-19 in SPAIN**

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Official Data Source: https://www.mscbs.gob.es/

Official Data in pdf (2020-03-03 to Today):

Official Data in .csv (2020-03-03 to Today):

- 1) COVID19\_SPA.csv the data correspond to the whole of the Spanish State.
  2) COVID19\_SPA\_AC.csv the data has been classified by Autonomous Communities (Regions).

#### Dataset Info¶

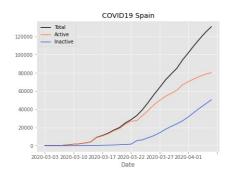
Each dataset contains 9 columns:

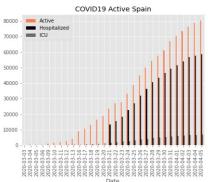
- Region Date
- <sup>1</sup> **Total** : Total Confirmed Cases.
- 2 AI(14d): Accumulated Incidence in the last 14 days.
- 34 Hospitalized
- 4 ICU
- 3 Deads
- 3 Recovered
- New : New Confirmed Cases

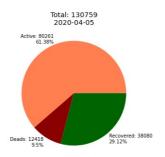
 $^1$  The Total Confirmed Cases do not come from the sum of Hospitalized, Recovered and Dead patients, since they are not exclusive.

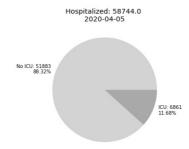
### COVID19 in the Spanish State 1

Data Visualization of COVID19\_SPA.csv





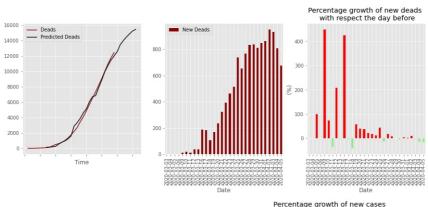


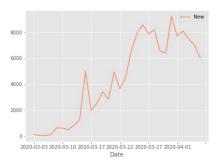


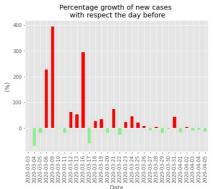
 $<sup>^{2}\,\</sup>mathrm{AI}\textsc{:}$  Accumulated incidence (cases accumulated per 100,000 inhabitants).

 $<sup>^{3}</sup>$  Dead and Recovered patients may have been hospitalized and therefore compute in both groups.

 $<sup>^{\</sup>rm 4}$  Patients who have required ICU also compute in patients who have been hospitalized.







### Percentage growth of new cases 1

- \$i\$, day 
   \$N\_i\$, new cases on day \$i\$ 
   Percentage growth of new cases,  $\frac{N_{i}-N_{i-1}}{N_{i-1}}100 (\%)$

Notable changes in the percentage growth of reported new cases:

- 2020-03-06
- 2020-03-06

   +228.2% more new cases than on 2020-03-05.

   2020-03-07 No Data.
   2020-03-08 No Data.
   2020-03-09

   +395.3% more new cases than on 2020-03-06.

   2020-03-14

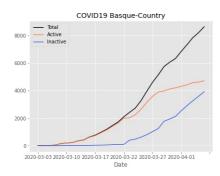
   Lockdown measures are implemented

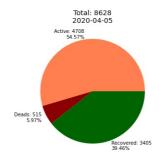
   2020-03-16

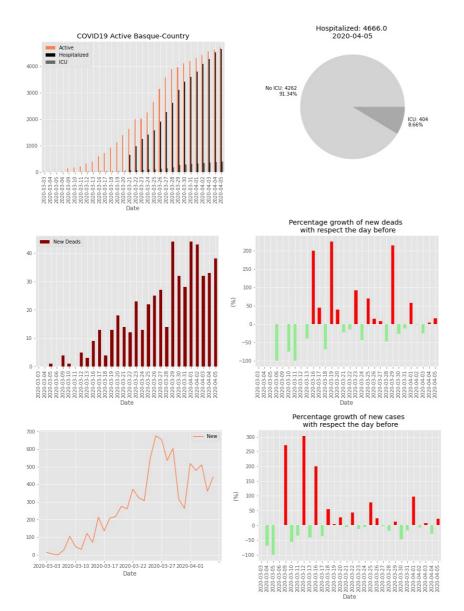
   +295.7% more new cases than on 2020-03-15.

### **COVID19** in the Basque Country 1

Data Visualization of COVID19\_SPA\_AC.csv







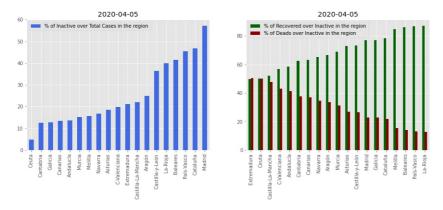
## COVID19 compare regions¶

Autonomous Communities:

['Andalucía', 'Aragón', 'Asturias', 'Baleares', 'Canarias', 'Cantabria', 'Castilla-La-Mancha', 'Castilla-y-León', 'Cataluña', 'Ceuta', 'C-Valenciana', 'Extremadura', 'Galicia', 'Madrid', 'Melilla', 'Murcia', 'Navarra', 'País-Vasco', 'La-Rioja']

In an attempt to stop COVID19, **loockdown** measures were stablished the 2020-3-14. Since then, COVID19 is hitting the society and its **Universal Health-Care System** severelly. The Political-&-Administrative model in Spain delegates to the Autonomous Communities the management of the Health-Care System in each region. Thus, analysing and comparing the progress of the COVID19 pandemia by Autonomous Communities makes sense.

- The **% of Inactive Cases over Total Cases in the region** gives a measure about **how close** an Autonomous Community is to defeat COVID19. While **high** percentages indicate that the Autonomous Communities are about to end with COVID19, **low** percentages show the opposite. In any case, this values are only a *proximity* indicator towards the end of the COVID19 crisis and **can not be used to state how well Autonomous Communities Health-Care Systems are dealing with the infected population.**
- The % of Recovered&Deads over Inactive Cases in the region shows a picture of the Recovered-Dead ratio over Inactive cases at
  the present moment. This values must be treated just as "objetive-data" and can not be used to compare how well or how badly
  Autonomous Communities Health-Care Systems are dealing with the infected population since the scope of COVID19Scenario differs in a large amount from region to region.



In order to understand the graph bellow watch:  $\underline{\text{https://www.youtube.com/watch?v=54XLXg4fYsc}}$ 

