Monograph

The COVID-19 pandemic in Spain

Andrés Arístegui & Francisco Sánchez
1. WHY DO THIS MONOGRAPH?

 EUROPEAN UNION

End 2019 news reached Europe that a new virus had emerged in China
End January 2020 first cases in the European Union
Mid-March 2020 almost the entire population of the European Union was on lockdown
Early April 2020 tens of thousands of deaths were being recorded every week

 SPAIN

14 March – 20 June 2020 STATE OF ALARM

National Geographic Institute at the service of the rest of the Administration

Several weeks providing with thematic maps

POWER OF CARTOGRAPHY AND GEOGRAPHY IN CRISIS MANAGEMENT

Provide a cartographic-geographic perspective of the situation

MONOGRAPH
2. HOW DO THIS MONOGRAPH?

Scientific network

- National Geographic Institute
  - Technical direction
    - Processing data
    - Drawing maps
    - Quality-controls
    - Editing + printing + publishing
    - Legal support

DEPENDENCE

- speed
- provisional data
- ENGLISH
- 200 maps + 100 statist. graphs
- 132 pages

Administration

- Data
  - European Union
  - National Administration
    - 17 Regions
    - 8,000 Local Authorities

Scientific direction
- Thematic structure
- Texts

- 34 Universities
- 4 Research institutions
  - (140 researchers)
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Part I – Global context
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Part I – Global context

ORIGINS AND SPREAD OF COVID-19 IN CHINA

COVID-19 CUMULATIVE CASES
29 January 2020

LATENCY INDEX
29 January 2020

- 2,261
- 1,000
- 500
- 100

0.25 - 0.50
0.51 - 1.00
1.01 - 2.50
2.51 - 5.00
5.01 - 9.66

* Recorded cases per 1,000
  travelers from Wuhan

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Part I – Global context

DEATHS FROM COVID-19 IN THE EUROPEAN UNION

MORTALITY DUE TO COVID-19
January-June 2020
(deaths/100,000 inhabitants)

- < 2.6
- 2.6 - 5.0
- 5.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- > 50.0

Source: World Health Organization
National Atlas of Spain CC BY 4.0 ign.es
Members engaged: www.ign.es/resources/home/participants.pdf

DEATHS FROM COVID-19 IN THE EUROPEAN UNION
1 January 2020 – 1 July 2020

EVOlUTION IN THE NUMBER OF DEATHS FROM COVID-19 IN THE EUROPEAN UNION

Source: World Health Organization
National Atlas of Spain CC BY 4.0 ign.es
Members engaged: www.ign.es/resources/home/participants.pdf
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Part I
Global context

1. Start + spread across World
2. Impact in EU
3. Effects in World and EU

Part II
Pandemic in Spain

4. Population + settlements
5. Health resources
6. First cases
7. Putting resources into action
8. Rising phase
9. Downward phase
10. Overview
11. Different behaviours

Part III
Effects in Spain

12. Internal territorial governance
13. Mobility
14. Economic indicators
15. Labour Market
16. Treasury
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19. Environmental impact
Part II – Pandemic in Spain
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Part II – Pandemic in Spain

DEATHS
Average April 2017-2019

Deaths by province of residence of the deceased

Residents abroad who have died in Spain

Source: Death Statistics, National Statistical Institute
National Atlas of Spain CC BY 4.0 ign.es
Members engaged: www.ign.es/resources/one/participantes.pdf

DEATHS
April 2020

Deaths by province of residence of the deceased

Residents abroad who have died in Spain

Source: Death Statistics, National Statistical Institute
National Atlas of Spain CC BY 4.0 ign.es
Members engaged: www.ign.es/resources/one/participantes.pdf
Part II – Pandemic in Spain

DEATHS - Average May 2017-2019

- Deaths by province of residence of the deceased

Source: Data from Spanish National Institute of Statistics, National Atlas of Spain CC BY 4.0. Members engaged: www.ign.es/resources/one/participantes.pdf

DEATHS - May 2020

- Deaths by province of residence of the deceased

Source: Data from Spanish National Institute of Statistics, National Atlas of Spain CC BY 4.0. Members engaged: www.ign.es/resources/one/participantes.pdf
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Part II – Pandemic in Spain
Part II – Pandemic in Spain

COVID-19 INCIDENCE AND POPULATION INCOME
City of Barcelona

CUMULATIVE INCIDENCE OF COVID-19 CASES
February-June 2020
(cases/100,000 inhab.)

< 500
500 - 1,000
> 1,000

HOUSEHOLD DISPOSABLE INCOME
BY NEIGHBOURHOOD
2017
(Barcelona = 100)

< 60.0
60.1 - 80.0
80.1 - 100.0
100.1 - 120.0
> 120.0

* Pedralbes: 248.8

Source: Barcelona Public Health Agency and Barcelona City Council
National Atlas of Spain CCBY 4.0 ignores
Members restricted: www.ign.es/resources/geoportal/paises.pdf
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Part II – Pandemic in Spain

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Part III – Effects in Spain

Evolución de la Intensidad Media Diaria (IMD) de Tráfico
Estación A-81-0. Carretera A-70. PK 15+100 (Alicante)
Semanas 10 a 27 de 2019 y 2020

Fuente: Dirección General de Carreteras, MITMA

Datos estimados provisionalmente a partir de los datos brutos recogidos por las estaciones de oferta permanentes

13-18 December 2021
Part III – Effects in Spain
Part III – Effects in Spain
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Part III – Effects in Spain

[Map and chart showing economic data for Spain]
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Part III – Effects in Spain
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Part III – Effects in Spain
4. PUBLICATIONS (Spanish + English)

- **PAPER**
  - Image of a paper with maps and charts.

- **DIGITAL BOOK**
  - Interactive digital book with map content.

- **GEOPORTAL**

- **INTERACTIVE**
  - Story maps using ArcGIS Online.

- **STORY MAPS**
  - Maps showing data on Covid-19 cases and deaths.
Monograph
The COVID-19 pandemic in Spain

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