

# **COVID-19 BURDEN TASK FORCE**

International burden of disease conference Belgrade, Serbia, 15-16 September 2022

Sara M. Pires smpi@food.dtu.dk









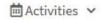


















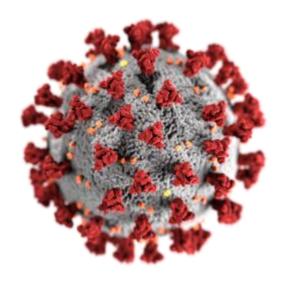


# **European Burden of Disease Network**



### COVID-19

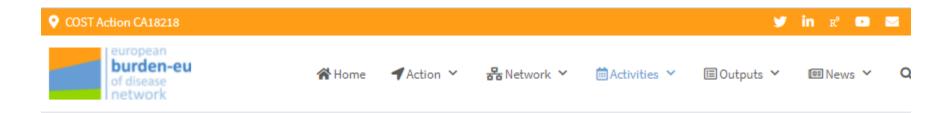
- Infectious disease by SARS-CoV-2
- Declared as a pandemic by WHO in March 2020
- High public health impact globally



## COVID-19

- Perfect practical case to contribute to all aims of burden-eu
  - Research
    - Disease model, health outcomes
    - Data requirements
    - Computation
  - Building capacity
    - Burden of disease calculation
    - Knowledege translation





#### **Burden of COVID-19 Task Force**

The European Burden of Disease Network established the Burden of COVID-19 Task Force, as a sub-group of WG2 Infectious Diseases. The TF welcomes members who are conducting or interested in launching national studies to estimate the burden of disease of COVID-19.

Its aims are to:

- Share experiences in national burden of COVID-19 studies
- · Support each other with calculations, model assumptions, data gaps
- · Harmonize methodologies and align strategies for communicating results
- . Discuss research projects and upcoming evidence on long-COVID

The TF meets approximately every six weeks. We select a different topic for each meeting, and focus mostly on technical discussions. We also have the opportunity to arrange ad-hoc meetings and discussions as needed/requested by members of the TF, and to use the burden-eu discussion forum.

You can find the minutes of our meetings on the 🛆 Google Drive.

If you are interested in joining, contact Sara Pires.

Other resources on COVID-19 disease burden are available on this page.



 Provide guidance for data requirements, methodology and communicating results



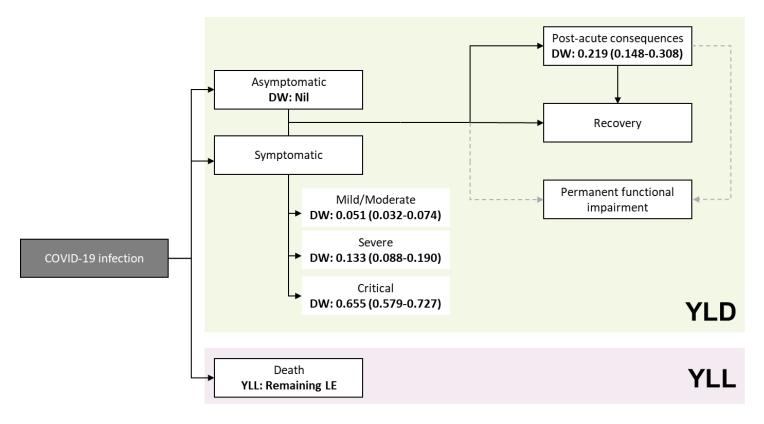


#### **Burden of disease of COVID-19**

#### PROTOCOL FOR COUNTRY STUDIES

#### Contents

INTRODUCTION	2
Purpose of this protocol	
now to use this protocol	2
BURDEN OF DISEASE STUDIES	3
The disability adjusted life year (DALV)	
Building a disease model	3
IMPLEMENTING A BURDEN OF DISEASE STUDY OF COVID-19	5
ow to use this protocol  INDEN OF DISEASE STUDIES	5
Setting	5
Team	5
Data access and permissions	
Disease model	5
Data requirements	в
Demographic data	6
Data requirements for years of life lost	9
CALCULATIONS	10
Uncertainty	11
NOTES ON KNOWLEDGE TRANSLATION	12
Use of COVID 10 disease hundry estimates	12
USE OF COVID-19 disease burden estimates	12



- Open to all network members conducting or interested in implementing national studies.
- Regular group meetings
- Ad-hoc meetings with countries
- Long-COVID meetings
- Online discussion forum
- Several studies launched
  - harmonized approaches
  - comparable estimates

- Public webinars, attended by over 100 participants
- Website collects and continuously posts all published articles related to the burden of COVID





#### **BoD-COVID Studies**

**Netherlands** 

**Scotland** 

Germany

Malta

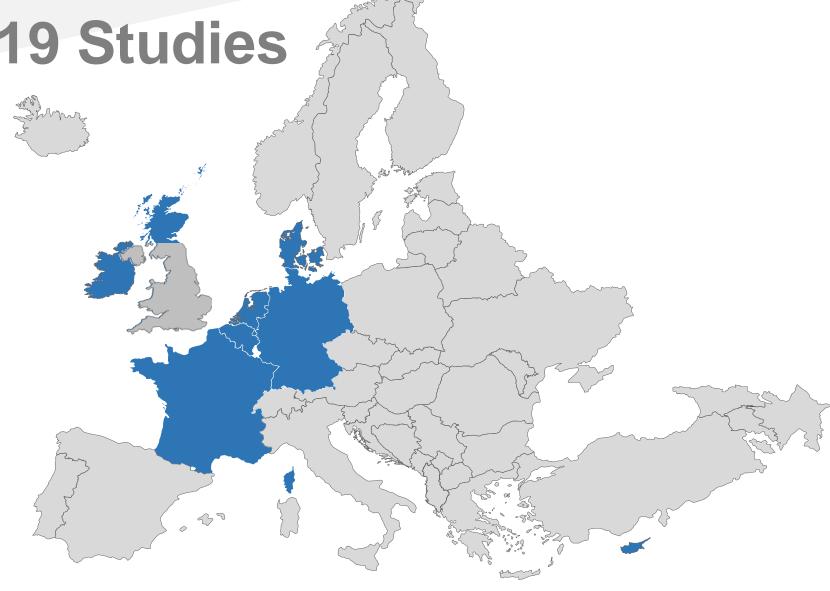
**Ireland** 

**Denmark** 

**France** 

**Belgium** 

**Ireland** 



#### Country adaptations

- Some countries included post-acute consequences of COVID-19 acute infections
- Germany defined mild cases in YLD calculations
- The Netherlands corrected for underreporting of hospital admissions and deaths
- Most countries used durations derived from their national data collections
- Scotland and Belgium used daily prevalence estimates from a Susceptible-Exposed-Infectious-Removed (SEIR) transmission model, and daily hospital prevalence data
- All studies except Germany used the GBD aspirational life expectancy life table

Country	Period of analysis	Long-COVID	DALY/100,000	% YLD
		included		
Australia	1 Jan-31 Dec 2020	Yes, estimated	32.7	3.5%
Belgium	Mar 2020- 31 Dec 2021	Yes	1968	5%
Cyprus	9 March 2020 – 8 March 2021	N/A	1881 YLL	NA
Denmark	28 Feb 2020-28 Feb 2021	No	520	1.6%
France	Jan- 31 Dec 2020	Yes, limited	1472	1%
Germany	1 Jan-31 Dec 2020	No	368	0.7%
Ireland	1 Mar 2020 – 28 Feb 2021	Yes, estimated	1033	1.3%
Malta	7 Mar 2020-31 Mar 2021	Yes, limited	1086	5%
Netherlands	1 Jan-31 Dec 2020	No	1570	1%
Scotland	1 Jan-31 Dec 2020	Yes, limited	1770- 1980	2%
	M. 2000 B. 2004	\$ c	21/2	21/2

- National burden of COVID-19 ranged between 32 and app. 2,000 DALYs/ 100,000 inhabitants
- Consistent large contribution of mortality to the burden, between app. 1 and 5%

- Harmonized efforts and methodologies have allowed for comparable estimates and communication of results
- Future studies should evaluate the impact of interventions and unravel the indirect health impact of the COVID-19 crisis
- Burden of disease indicators, and standardization of approaches where applicable, can be useful for monitoring within- and across-country public health in an ongoing pandemic

What have we been doing lately?

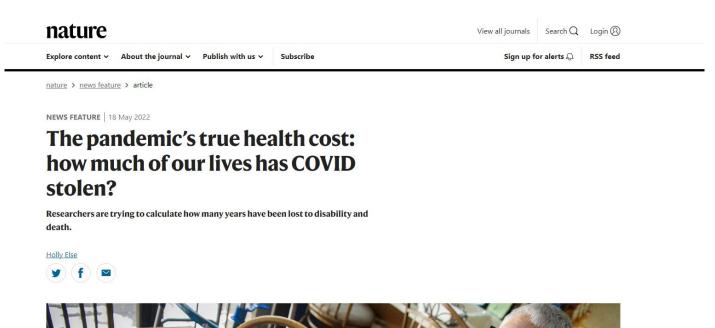
- Focus on long-COVID-19
  - Available data incidence, severity
  - Disability weights
  - Updating disease model



A woman who has had COVID-19 attends a physiotherapy session in Madrid. Credit: Pierre-Phillipe Marcou/AFP/Getty

The pandemic's true health cost: how much of our lives has COVID stolen? (nature.com)

What have we learned along the way?





Join us: ismpi@food.dtu.dk; info@burden-eu.net

- What to expect:
  - Share experiences in national burden of COVID-19 studies
  - Support with calculations, model assumptions, data gaps
  - Harmonize methodologies and align strategies for communicating results
  - Discuss research projects and upcoming evidence on long-COVID

## Join our network



www.burden-eu.net/join

Twitter @BurdenE

Contact us at info@burden-eu.net