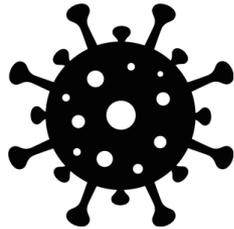


# ***THE DISEASE BURDEN OF COVID-19 IN BELGIUM IN 2020 AND 2021***

**Lifestyle and chronic diseases  
Robby De Pauw, PhD**

15/09/2022

# BACKGROUND & AIMS



Estimate the burden of COVID-19 in Belgium during the **first two years** of the pandemic.

**Compare** COVID-19 with **other diseases** based on the GBD burden estimates of 2019

**Identify subgroups** of the population that borne a larger share of the COVID-19 burden

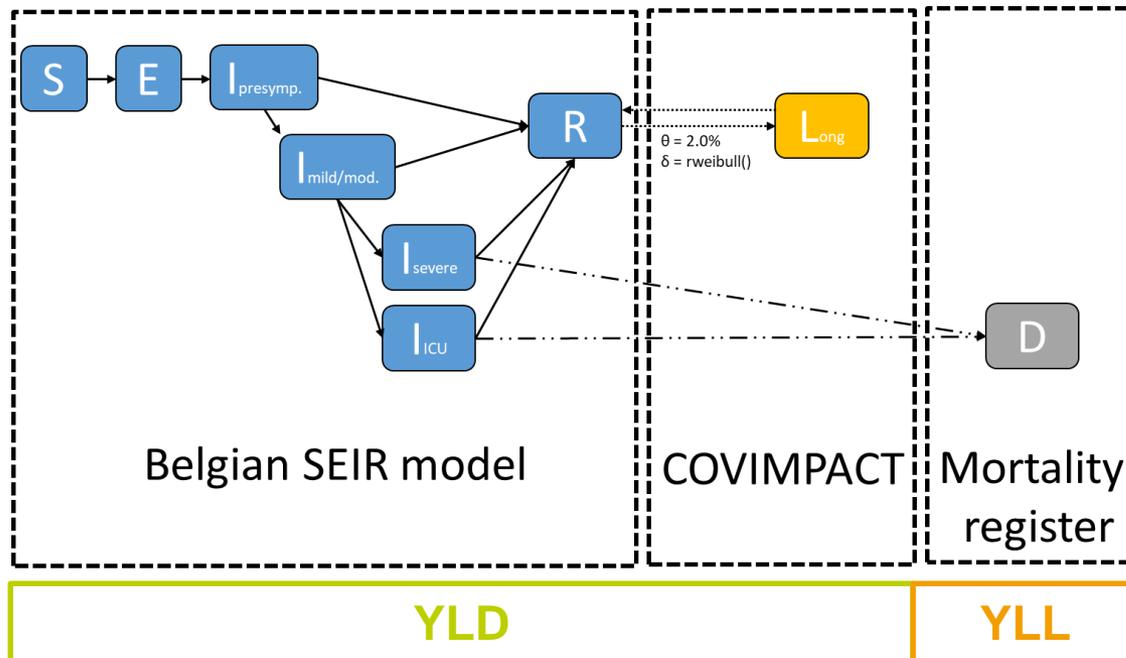
**Disability Adjusted Life Years = YLL (mortality) + YLD (morbidity)**

# METHODOLOGY

Data from **three** different sources:

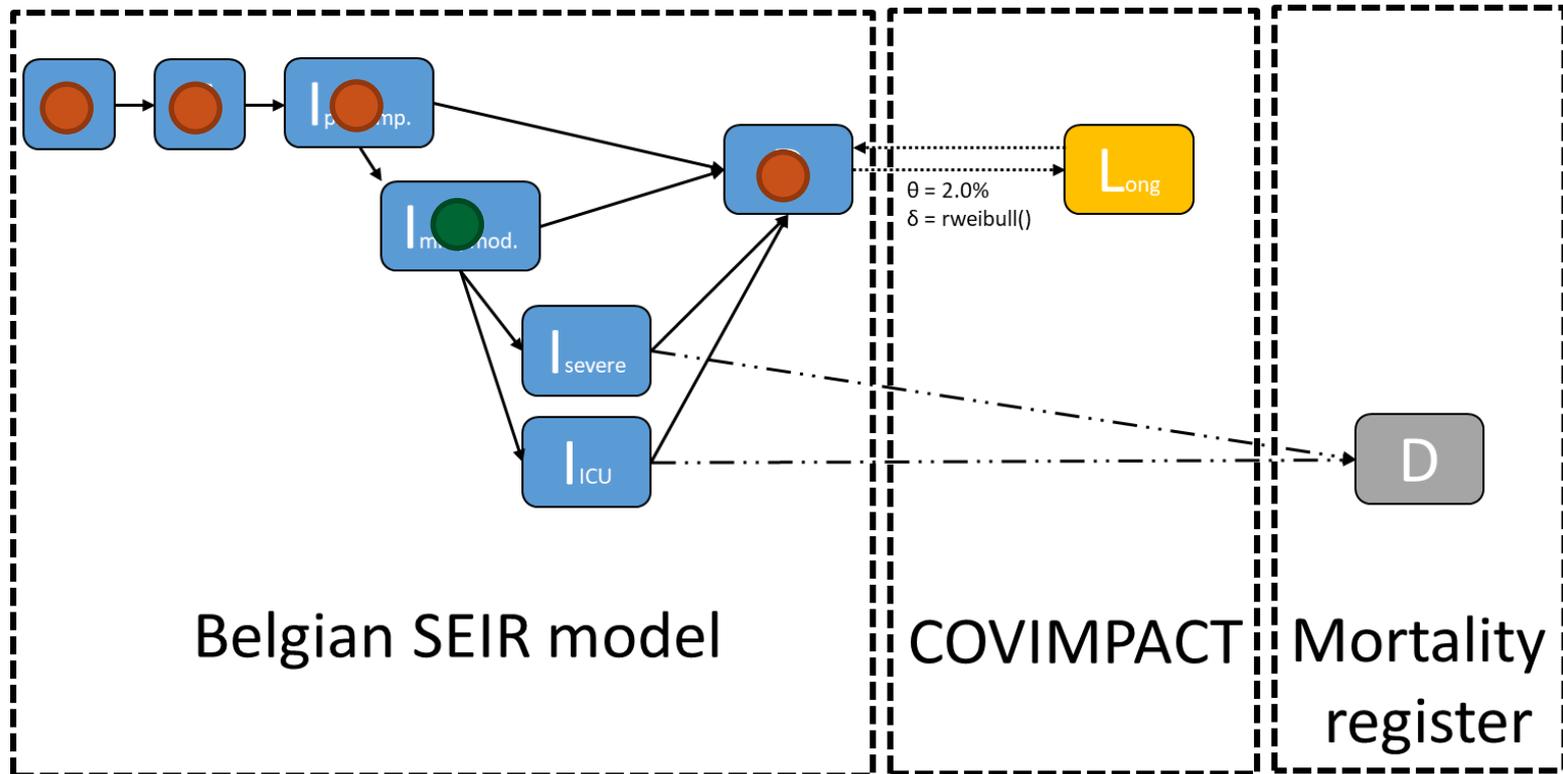
- SEIR model (Susceptible – Exposed – Infected - Recovered)
- Study on impact of long-COVID (microsimulation)
- Mortality register

Disease model based on **EU-Burden consensus** model



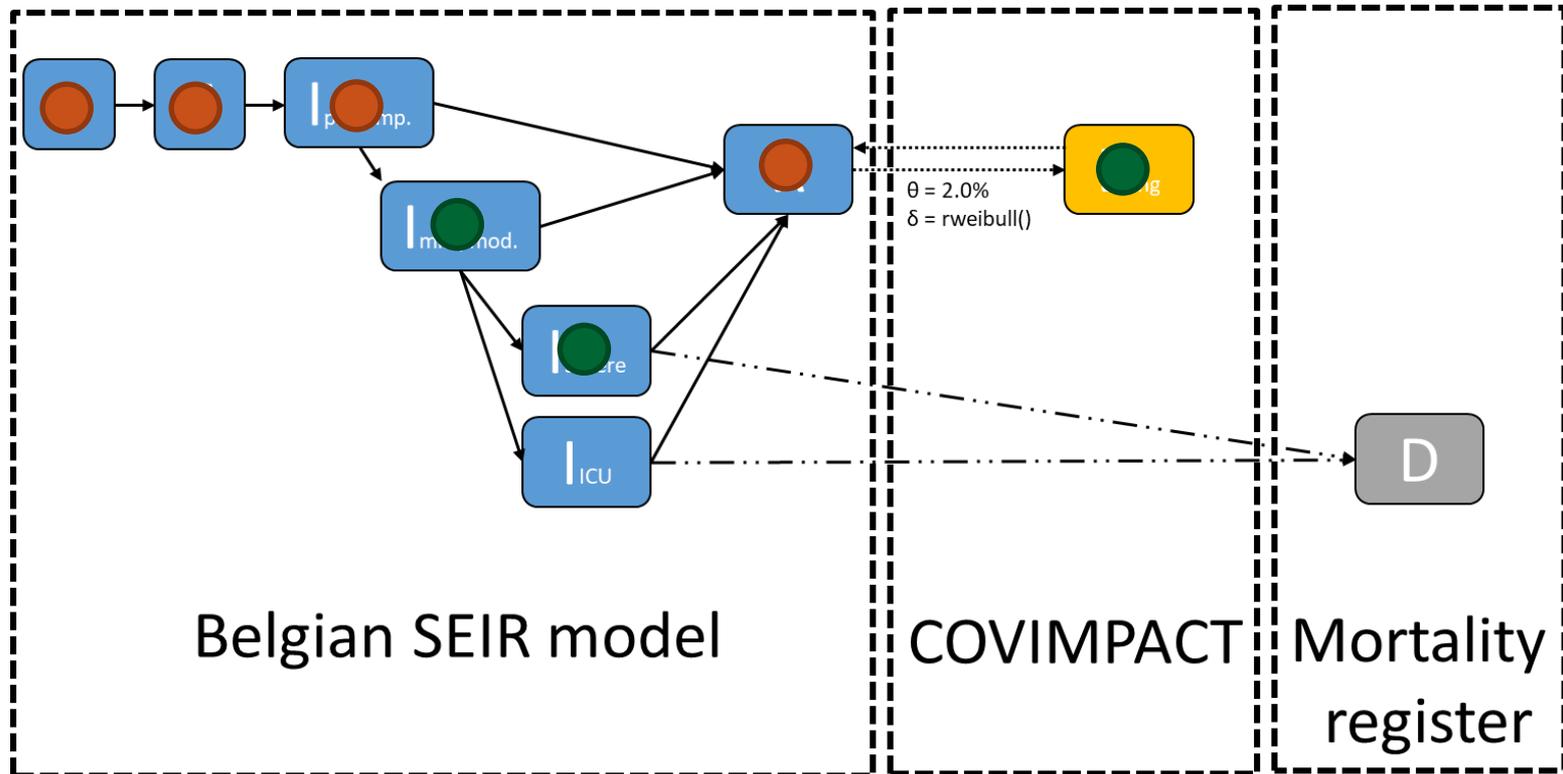
# METHODOLOGY

## Belgian 1



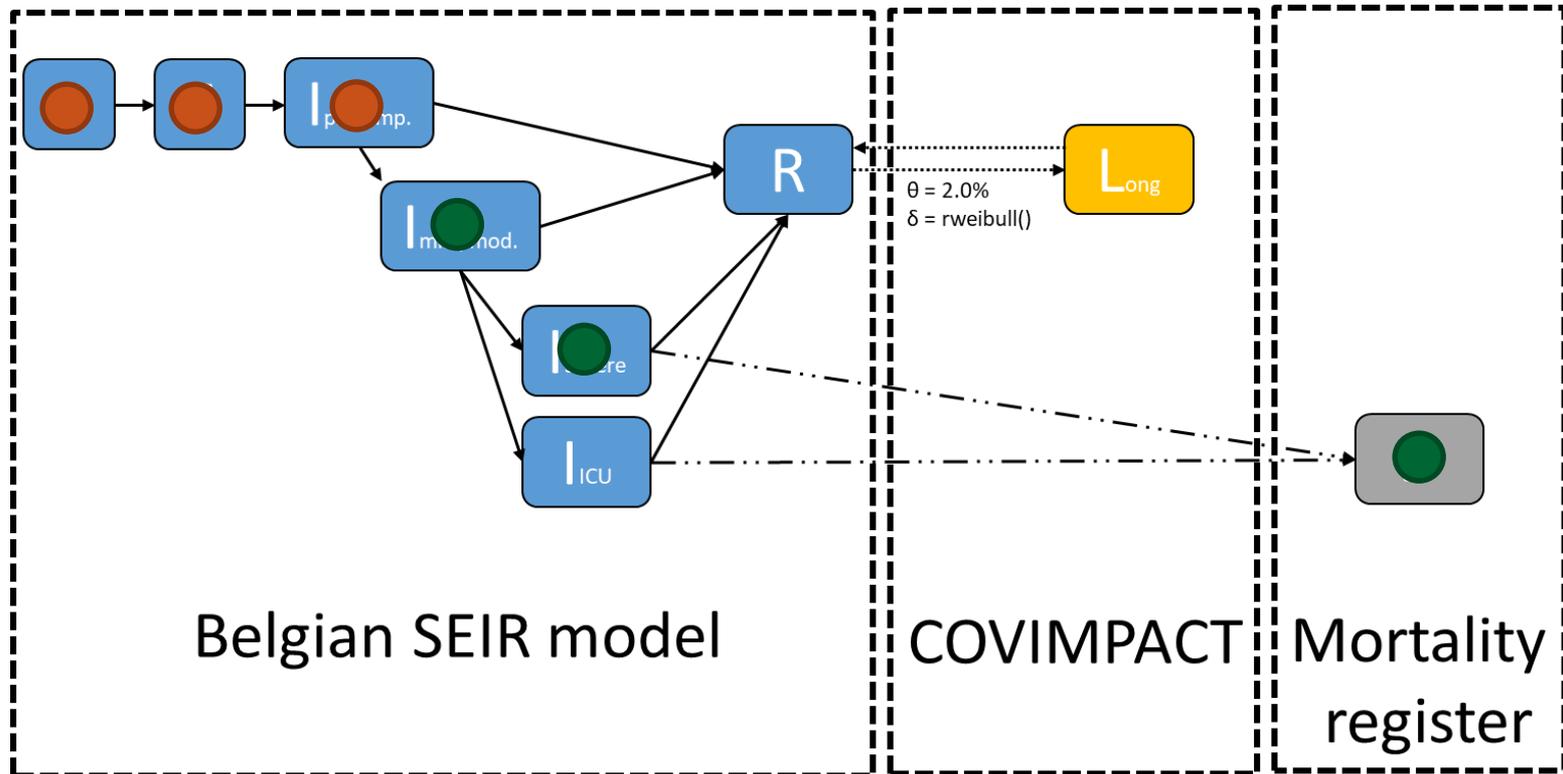
# METHODOLOGY

## Belgian 2



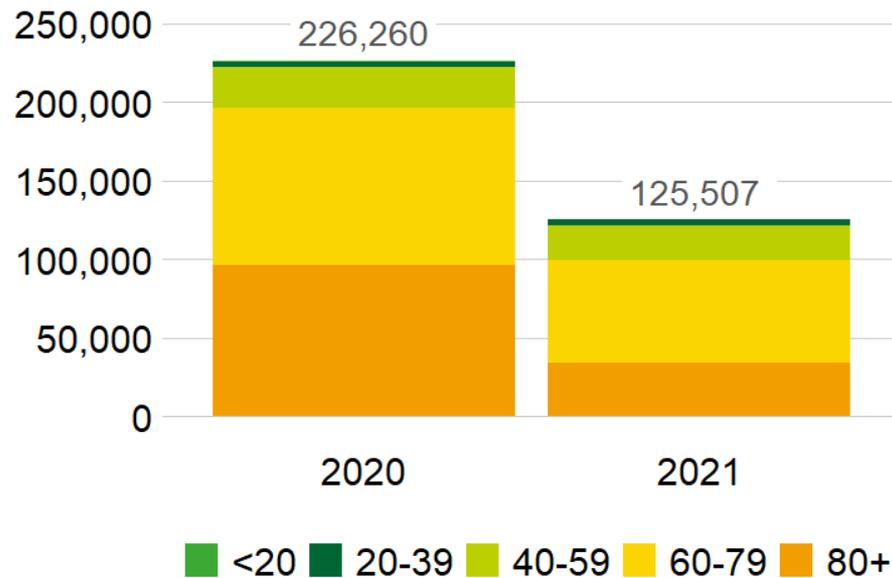
# METHODOLOGY

## Belgian 3



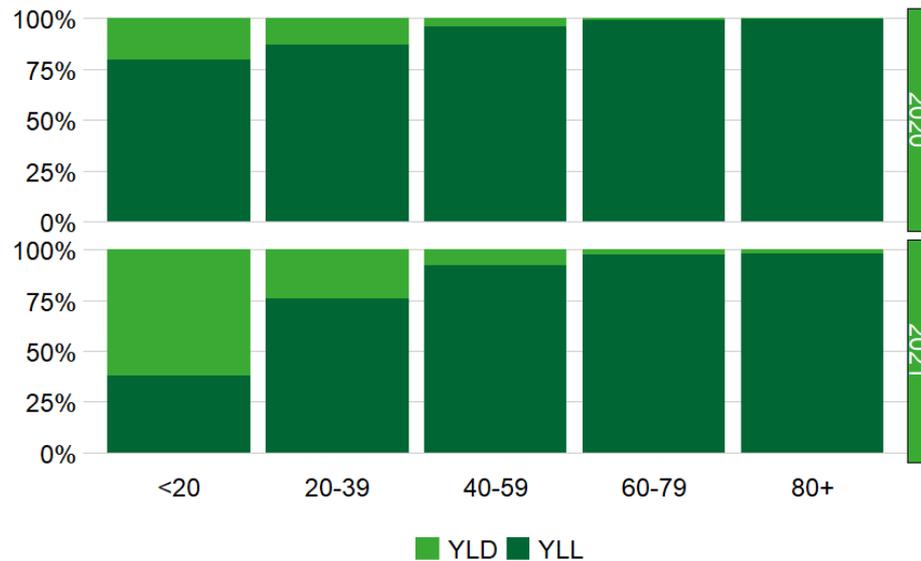
# RESULTS

- 226,000 DALYs in 2020
- 125,500 DALYs in 2021
- Largest share by elderly (60+ years)



# RESULTS

- Proportion attributed to morbidity component higher in the younger age groups.
- Share of morbidity attributable to long-COVID higher in 2021 compared to 2020.



# RESULTS

COVID-19 in 2020 compared to GBD-2019 results



Covid-19	1
Ischemic heart disease	1
Lung cancer	2
Low back pain	3
Falls	4
COPD	5
Stroke	6
Headache disorders	7
Diabetes	8
Alzheimer's disease	9
Self-harm	10
Depressive disorders	11
Colorectal cancer	12
Lower respiratory infect	13
Gynecological diseases	14
Endo/metab/blood/immune	15

# RESULTS

COVID-19 in 2021 compared to GBD-2019 results



Ischemic heart disease	1
Lung cancer	2
Low back pain	3
Falls	4
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# RESULTS

COVID-19 in 2021 compared to GBD-2019 results



Ischemic heart disease	1
Lung cancer	2
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Headache disorders	7
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# CONCLUSION

- The impact of COVID-19 in Belgium was **higher during the first year** of the pandemic compared to the second one.
- The burden of COVID-19 in Belgium is **mainly attributable to mortality** (> 95%).
- The **largest share** of the burden is borne by the elderly.

## Contact

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