

Acute and Long term health impact of COVID-19 in adults and children

## Health Effects

Acute and Long term health impact of COVID-19 in adults and children

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04-10-2021



## Goal

To investigate acute and long-term health impact of COVID-19 infection in adults and children aged 5 years and older

## How

COVID-19  
quality of life,  
PICO, VASCO)

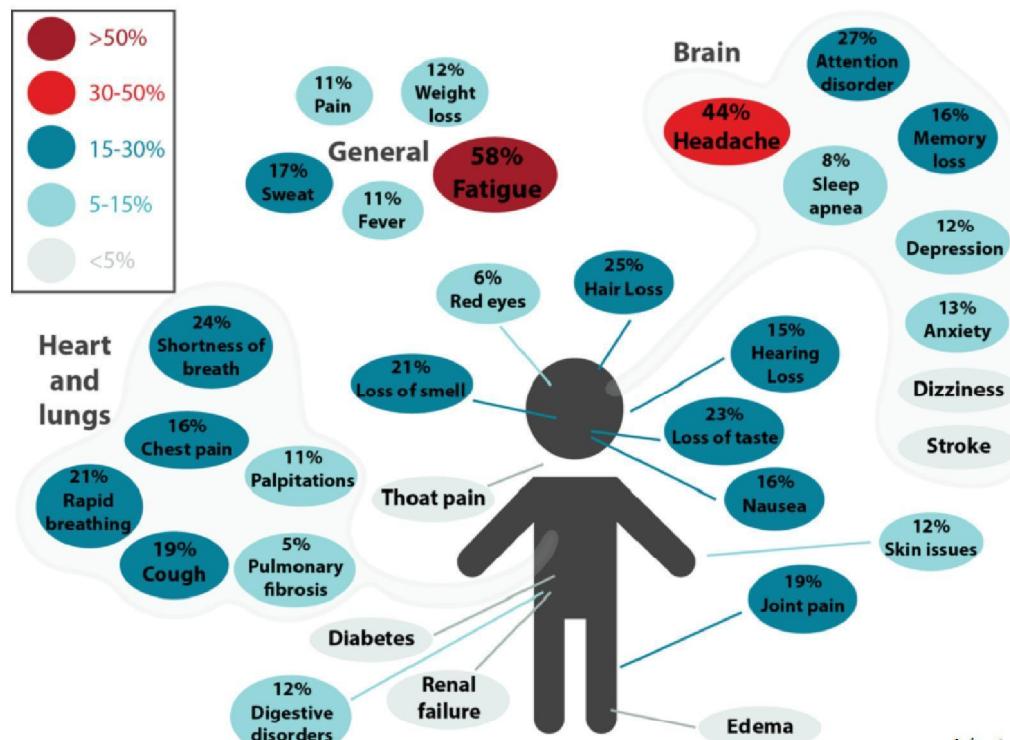
Exploring the prevalence, duration and severity of related symptoms, risk factors and impact on using data from various datasets (Long-COVID,

parties

Pooling data and findings, collaboration with external (Locomotion/COVworks)



## Long-term effects of COVID-19



Adapted from Lopez-Leon et al. (2021)



NEWS FEATURE | 09 June 2021

## The four most urgent questions about long COVID

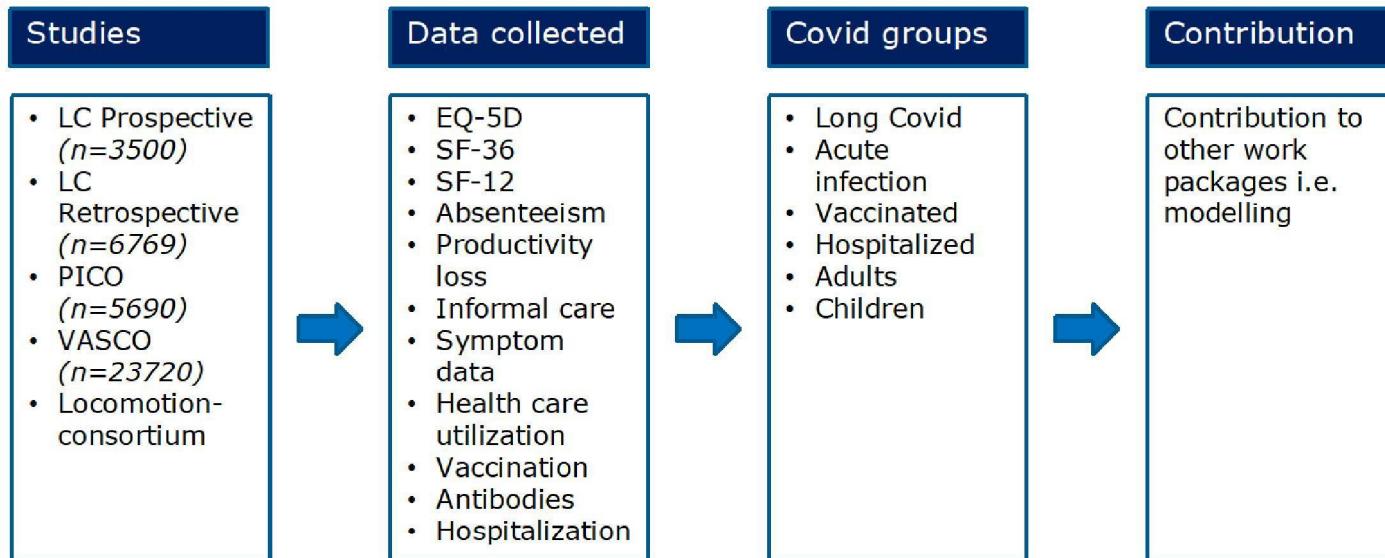
Scientists are starting to get insights into the lingering disorder that affects some people infected with SARS-CoV-2 – but many mysteries remain unsolved.

Michael Marshall



Illustration by Acapulco Studio

- How many people get long COVID and who is most at risk?
- What is the underlying biology of long COVID?
- What is the relationship between long COVID and other post-infection syndromes?
- What can be done to help people with long COVID?
- **What is the impact of Covid-19 infection on quality of life?**





## Long Covid study

The Long COVID Study monitors participants over the course of a longer time period, looking at how often symptoms occur after a person tests positive for COVID-19.

	Prospective Cohort	Retrospective Cohort	Acute data
Adults	Yes	Yes	Yes
Children (5+)	Yes	Yes	Yes
Cases Covid +	Antigen, PCR	Antigen, PCR, No test	Antigen, PCR
Controls	Negative tests, Population controls	Self reported negatives	Case- (asymptomatic)
Participants (N)	≈2500 cases ≈ 1000 negative controls *population controls	3282 cases 3487 control	Proportion of cases with acute symptoms
Outcomes	EQ-5D, SF-12, Absenteeism, Productivity, informal care, symptom data, healthcare utilization, hospital	EQ-5D, SF-12, Absenteeism, Productivity, informal care, symptom data, healthcare utilization	Weekly symptoms data and EQ-5D

RIVM De zorg voor morgen begint vandaag

Welkom

Over het onderzoek bij jongeren en volwassenen

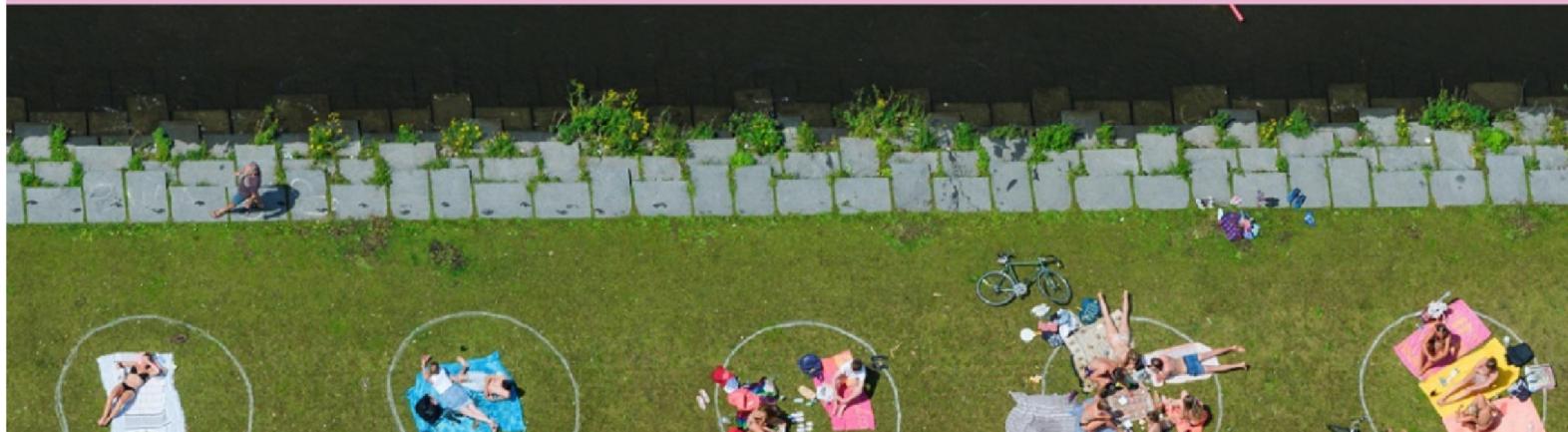
Over het onderzoek bij kinderen

Vraag en antwoord

Inloggen

Aanmelden

## LongCOVID-onderzoek



### Login

E-mail

E-mail \*

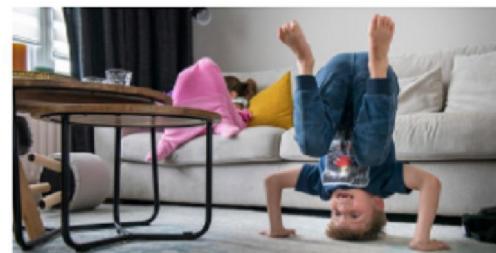
Wachtwoord

Wachtwoord \*

Gegevens onthouden

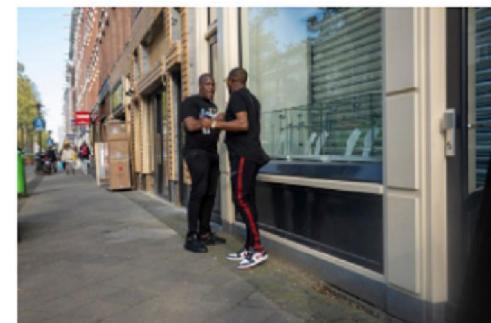
Login

WACHTWOORD VERGETEN?



Doe mee met het LongCOVID-onderzoek bij kinderen

Help mee aan onderzoek naar long COVID bij kinderen, door voor je kind periodiek een vragenlijst in te vullen. Dit kan anoniem en



Doe mee met het LongCOVID-onderzoek bij jongeren en volwassenen

Help mee aan onderzoek naar long COVID bij jongeren en volwassenen, door voor je kind periodiek een vragenlijst in te vullen.



## PIENTER Corona Study (PICO)

In the PIENTER Corona study, information about antibodies in people's blood is collected as well as information regarding the amount of people who have been in contact with the virus and have built up immunity after vaccination.

PICO 4	
Adults	Yes
Children	Yes
Cases Covid +	Antibody test
Controls	Negative tests, population controls
Participants (N)	Cases 766 Controls 4924
Outcomes	SF-12, symptom data, explore reinfections, antibody data



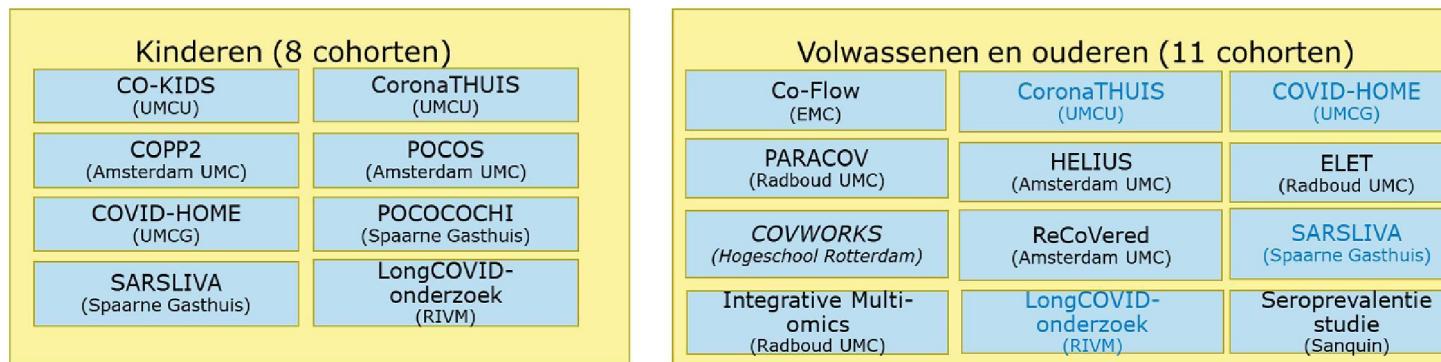
## Vaccine Study Covid-19 (VASCO)

Vasco study aims to estimate the product-specific effectiveness of Covid-19 vaccines against symptomatic SARS-CoV-2 infection by age and medical risk group.

	Baseline
Adults	Yes
Participants (N)	≈ 23 720 (vaccinated -21280, not vaccinated 2416)
Groups	<ol style="list-style-type: none"><li>1. Community-dwelling persons aged 60-84 years</li><li>2. Community-dwelling persons aged 18-59 years with a medical indication for being prioritized for COVID-19 vaccination</li><li>1. Community-dwelling persons aged 18-59 years without a medical indication for being prioritized for COVID-19 vaccination</li></ol>
Outcomes	Vaccination status, health status, behavior/measures against Covid-19, symptom data, corona test data



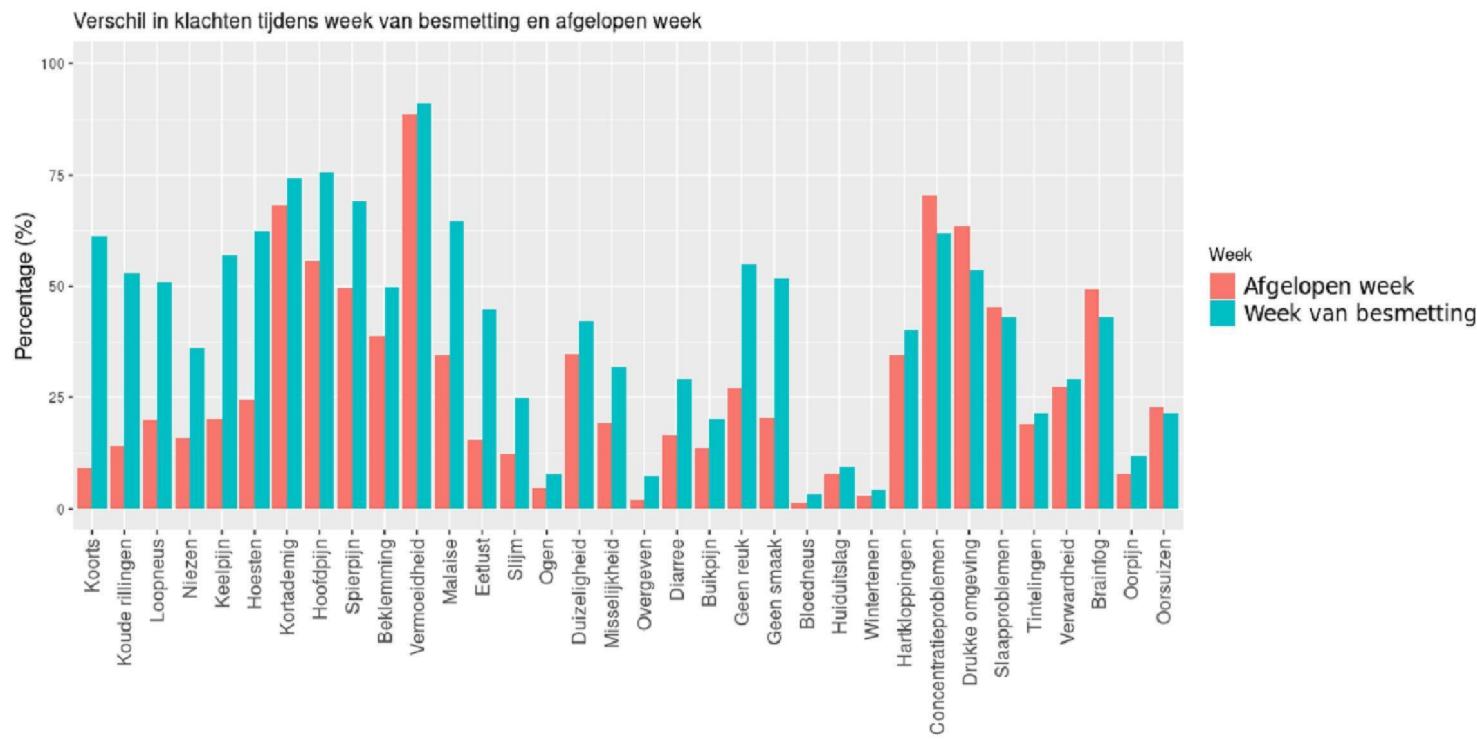
# Locomotion Consortium



Centrale Database

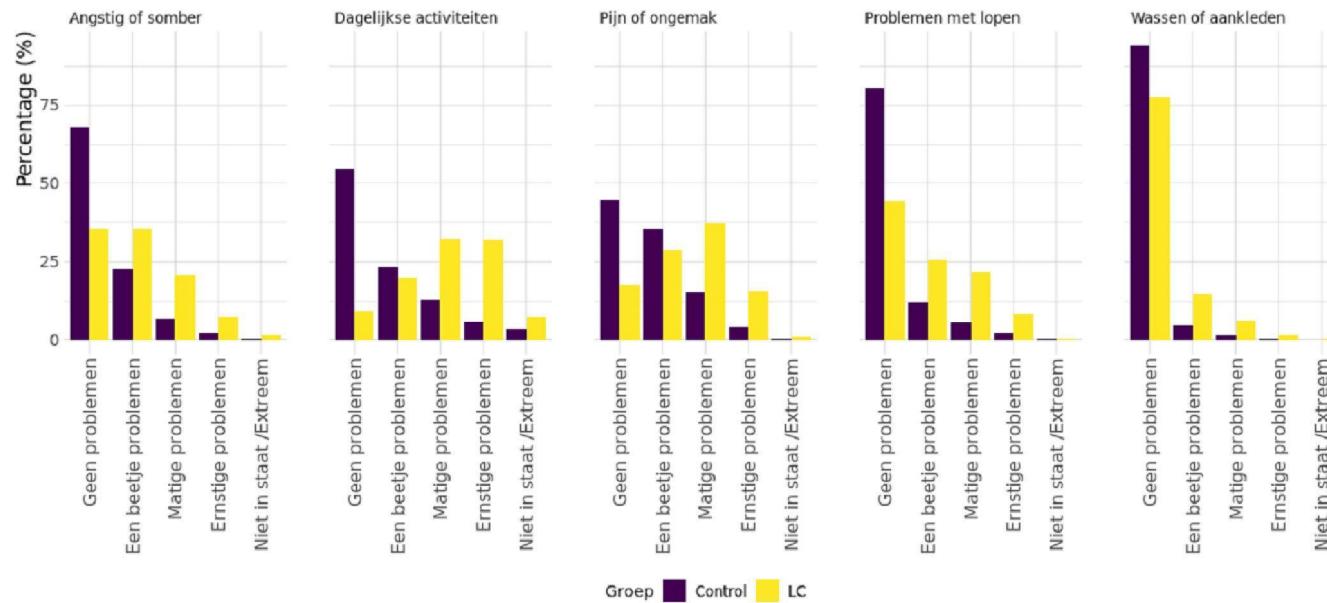


## Retrospective Cohort-Long Covid: Symptoms



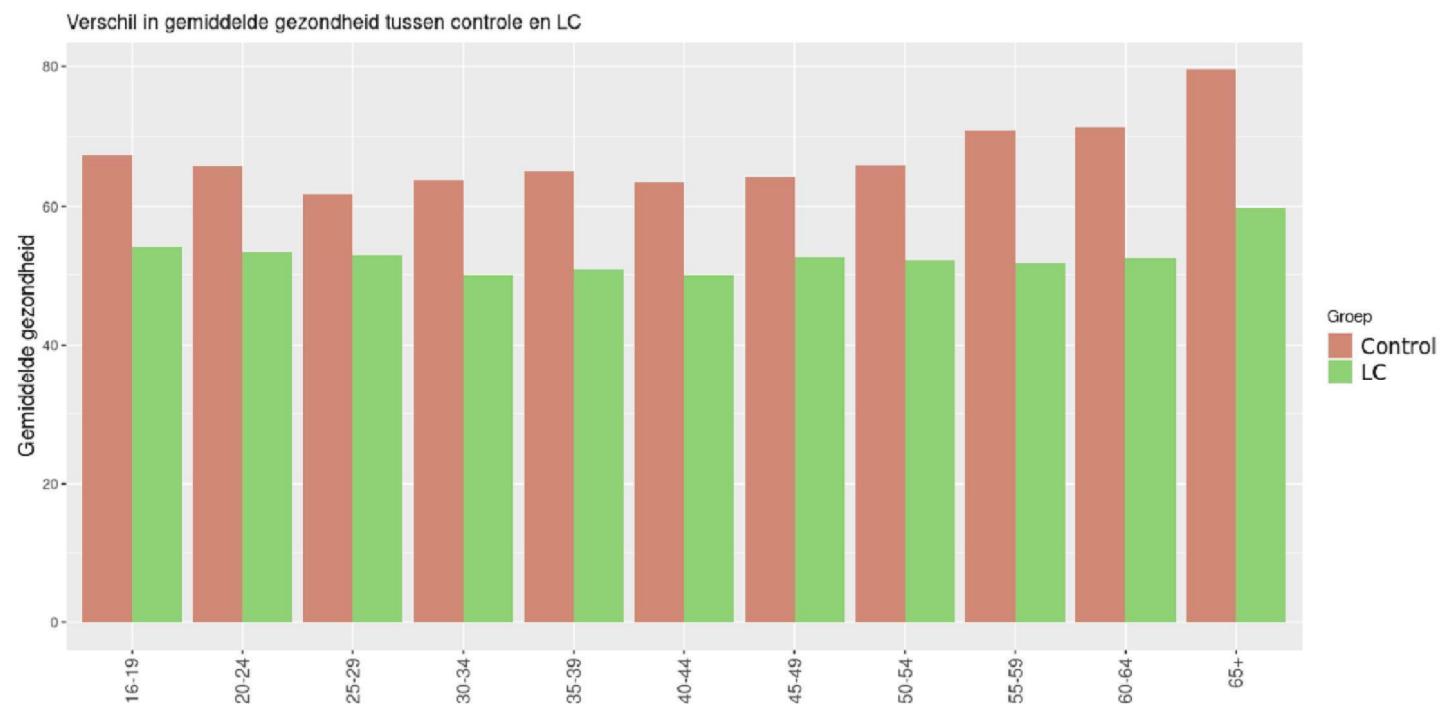


## Retrospective Cohort-Long Covid: EQ-5D





## Retrospective Cohort-Long Covid: EQ-5D VAS





## Next steps

- PICO 4 analysis and PICO 5
- Long-Covid: Prospective data analysis T0/T3/T6/T9/T12
- Long-Covid: Retrospective data analysis T0/T3/T6/T9/T12
- Long-Covid : Acute data analysis
- VASCO-defining research questions
- Locomotion consortium
- Causality models- literature search then exploring suitable dataset to use
- **Case control study in the CBS environment**



## Discussion points

- Definition of Long Covid:
  - ongoing symptoms persisting for (4-12 weeks)
  - ongoing symptoms persisting for (12 weeks+)
  - late onset of symptoms related to COVID-19
  - post intensive care syndrome (previously intensive care vs non intensive care/hospitalized patients)
  - Fluctuating signs and symptoms related to Covid-19 infection
- How our results feed into other studies within the RIVM and vice versa