

# SUSTAINING A NETWORK, AN ESSENTIAL PUBLIC HEALTH SKILL EXPERIENCES FROM THE EUROPEAN BURDEN OF DISEASE NETWORK

BAPH Assembly Meeting – 20/01/2023

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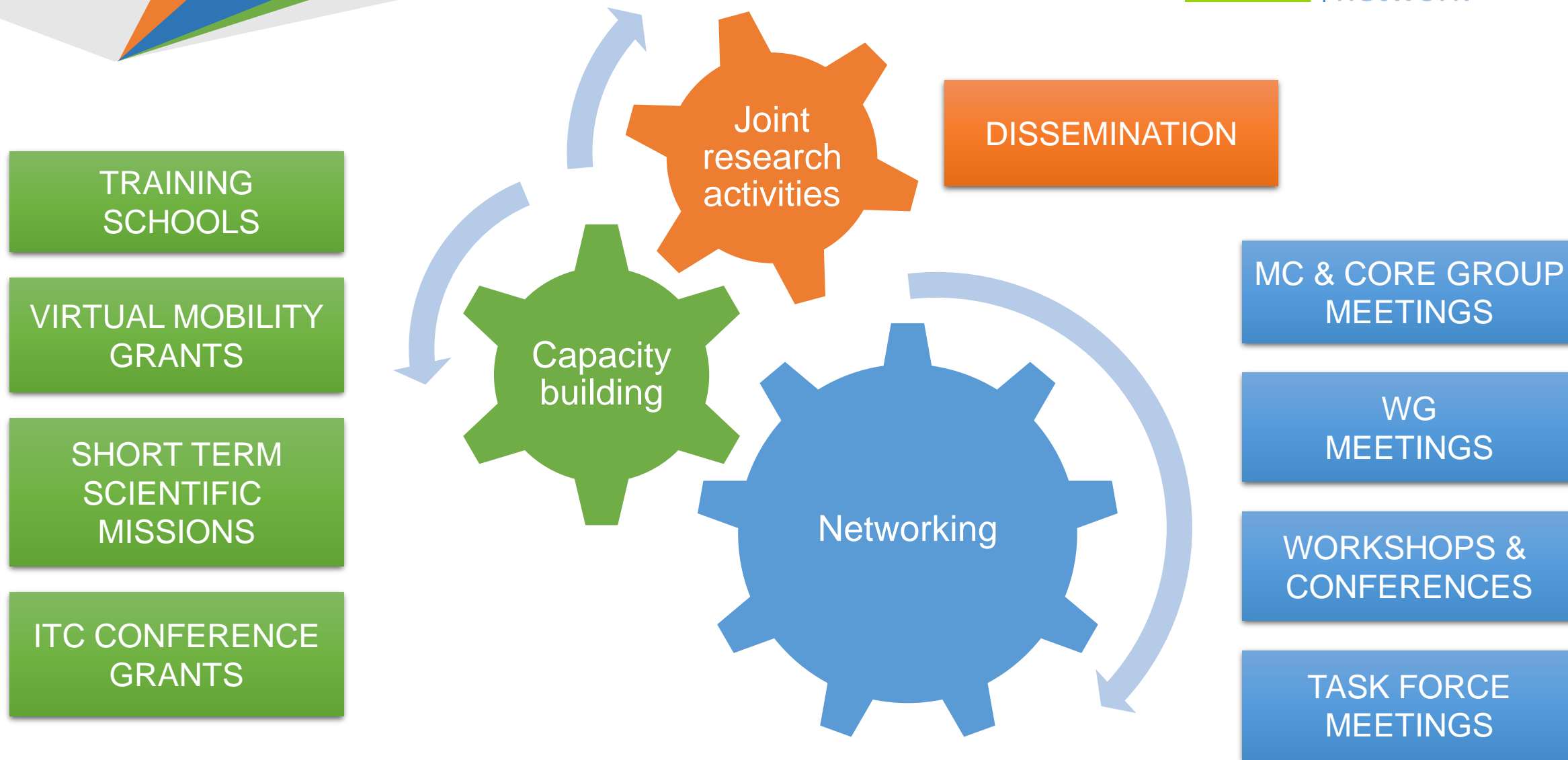
COST Action CA18218  
**European Burden of Disease Network**



*Technical platform to integrate and strengthen capacity in burden of disease assessment across Europe and beyond*

**[www.burden-eu.net](http://www.burden-eu.net)**







A photograph of a laptop on a wooden desk. The laptop screen shows a video conference with several participants in a grid layout. In the foreground, a green ceramic mug is partially visible. A blue horizontal bar is overlaid across the middle of the image, containing the text "392 members" in white.

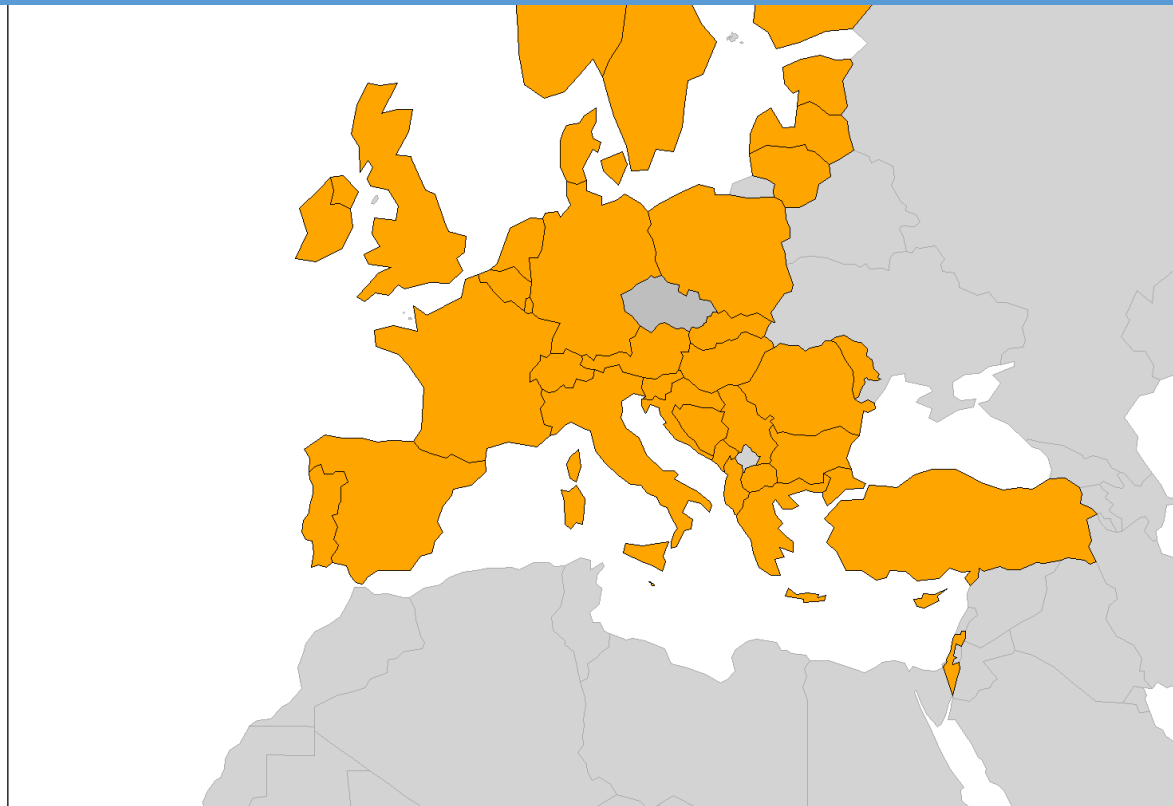
**392 members**

# 38+20 countries

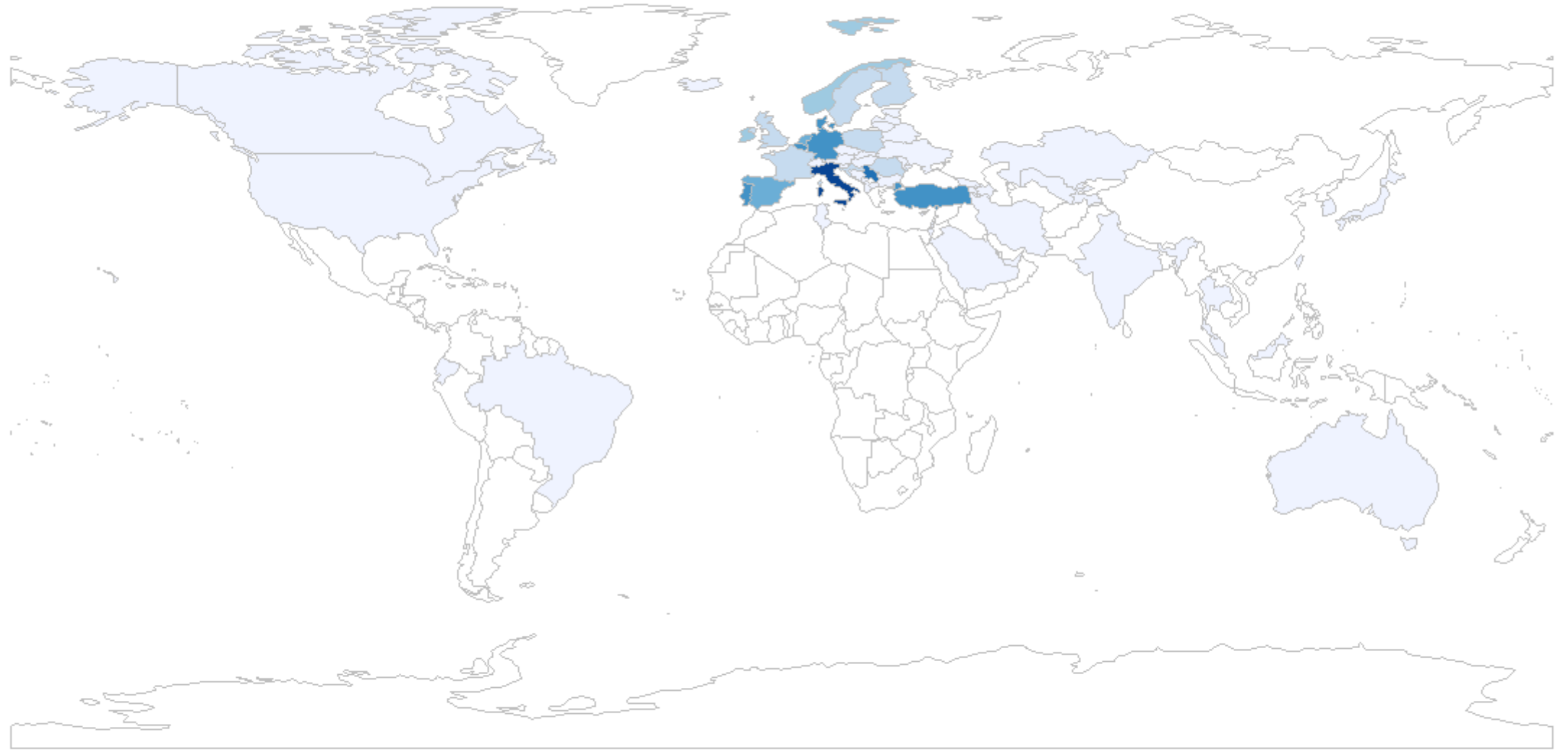


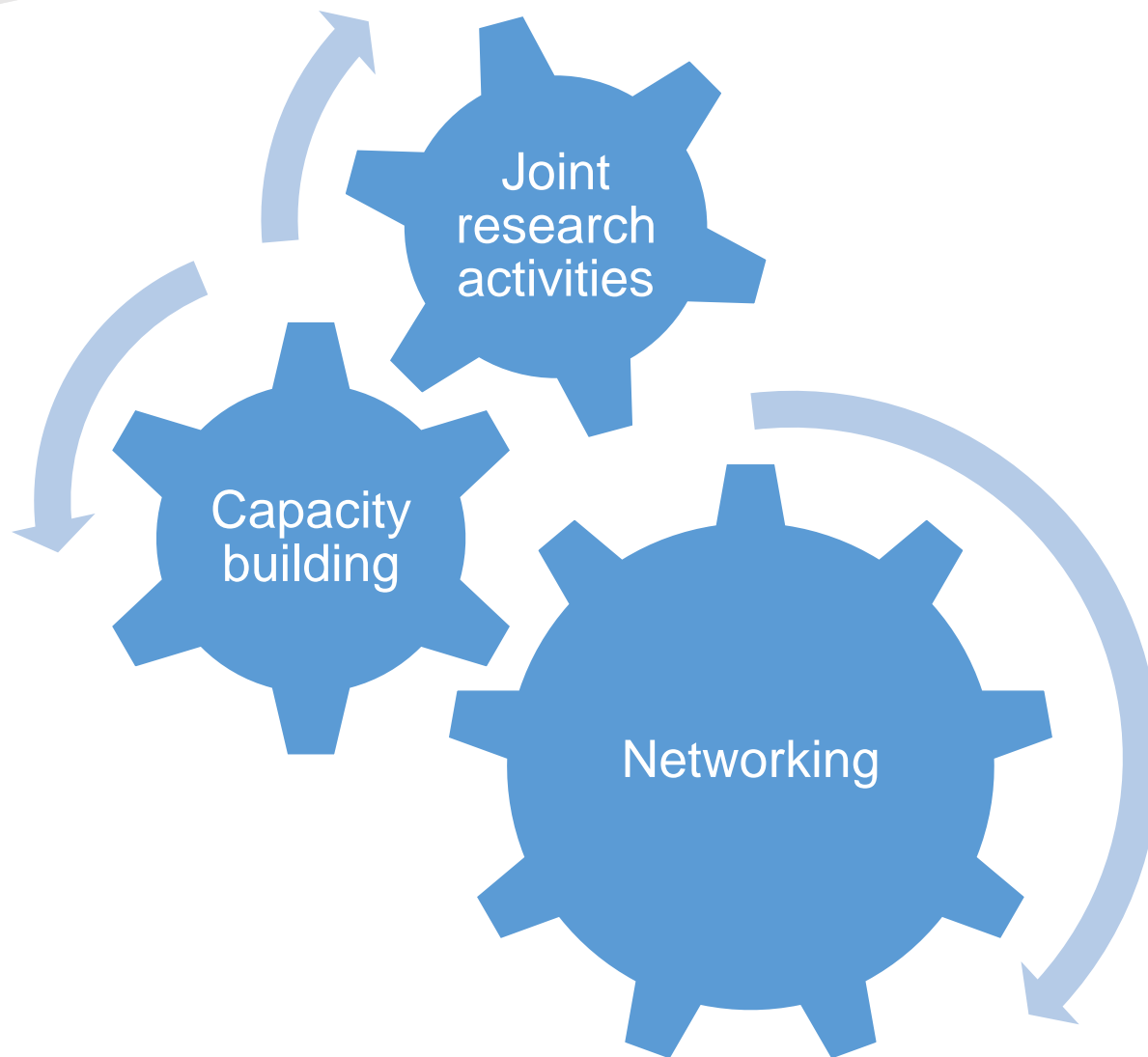
World Health  
Organization

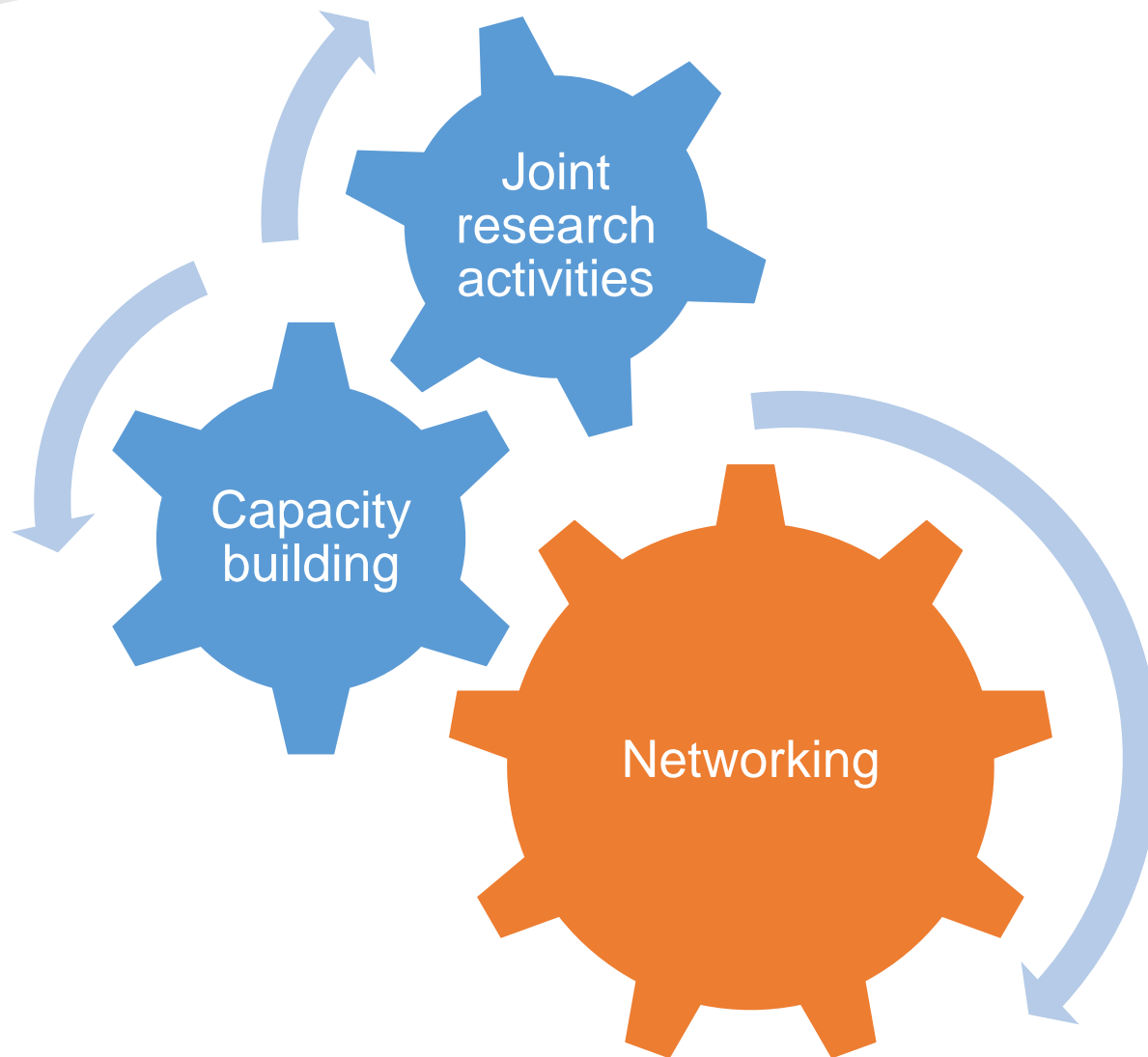
European  
**Observatory**  
on Health Systems and Policies  
a partnership hosted by WHO



## Members by Country











evleeschauwer (Host)

Brec... (Host)





# International Burden of Disease Conference 15-16 September 2022, Belgrade, Serbia



<https://www.burden-eu.net/conference>





Health, risk factors and inequalities in the EU: Insights from the Global Burden of Disease study

14th European Public Health Conference • 10 November 2021



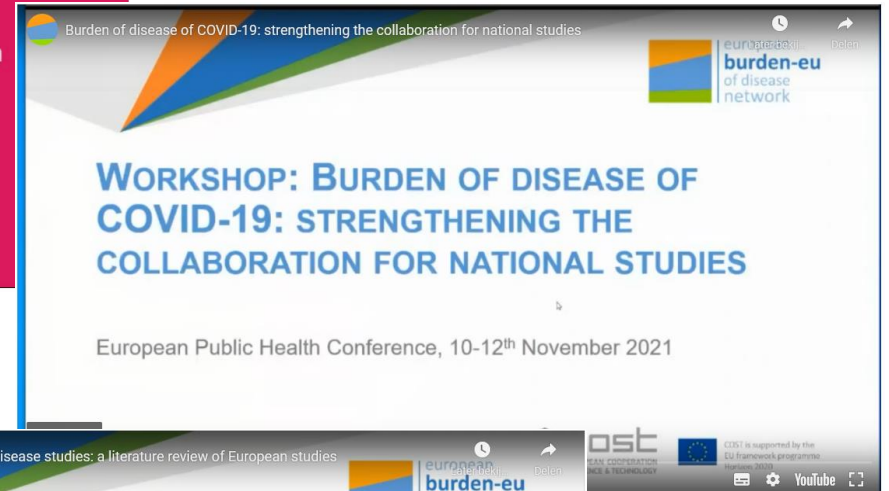
Infographics as a tool for knowledge translation

*An infographic worth a thousand words*

Infographics and the knowledge translation framework

Henk Hilderink  
Cindy Deuning  
Eveline van der Wilk

National Institute for Public Health and the Environment  
Ministry of Health, Welfare and Sport



Burden of disease of COVID-19: strengthening the collaboration for national studies

WORKSHOP: BURDEN OF DISEASE OF COVID-19: STRENGTHENING THE COLLABORATION FOR NATIONAL STUDIES

European Public Health Conference, 10-12<sup>th</sup> November 2021



Knowledge Translation and Burden of Disease, from theory to practice

KNOWLEDGE TRANSLATION:  
FROM THEORY TO PRACTICE

Dr Henk Hilderink and Dr Elena Pallari  
EPH conference 2021



Methodological choices in burden of disease studies: a literature review of European studies

METHODOLOGICAL CHOICES IN BURDEN OF DISEASE STUDIES: SYSTEMATIC LITERATURE REVIEW OF EUROPEAN STUDIES

14th European Public Health Conference • 11 November 2021

# 15th European Public Health Conference 10-12 November 2022, Berlin, Germany



<https://www.burden-eu.net/eph2022>



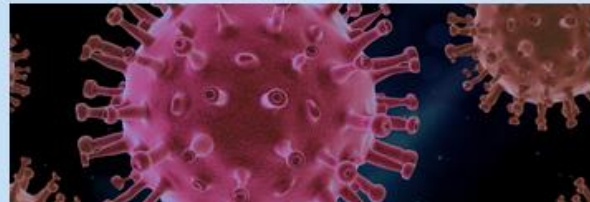
**The burden-eu COST Action wants to put its members in the spotlight!** Spotlights are short (500-1000 words) blogposts where network members present their work in a personal and vulgarizing way. The spotlights also describe how the presented work benefited from the COST Action.

Do you have a recent publication or new project related to burden of disease? Please let us know via [info@burden-eu.net](mailto:info@burden-eu.net), and we will be happy to put you in the spotlight!

Santé Publique France - National burden of disease study for France



Alexander Rommel - BoCO-19: Towards a harmonization of population health metrics for the surveillance of dynamic outbreaks



Lea Sletting Jakobsen - Impact of dairy consumption in the Danish population



Sarah Cuschieri - Experiences of the network from Malta



Aline Anton - Estimating headache prevalence and severity in Germany



Zubair Kabir - Development of a Global Burden of Disease-Frailty Index





[Click here to view our newsletters online](#)



*We wish you a  
happy and healthy  
2023!*

Dear colleague,

From the whole burden-eu team, we would like to wish you a very **happy and healthy 2023!**



**BurdenEU**

754 Tweets



Edit profile

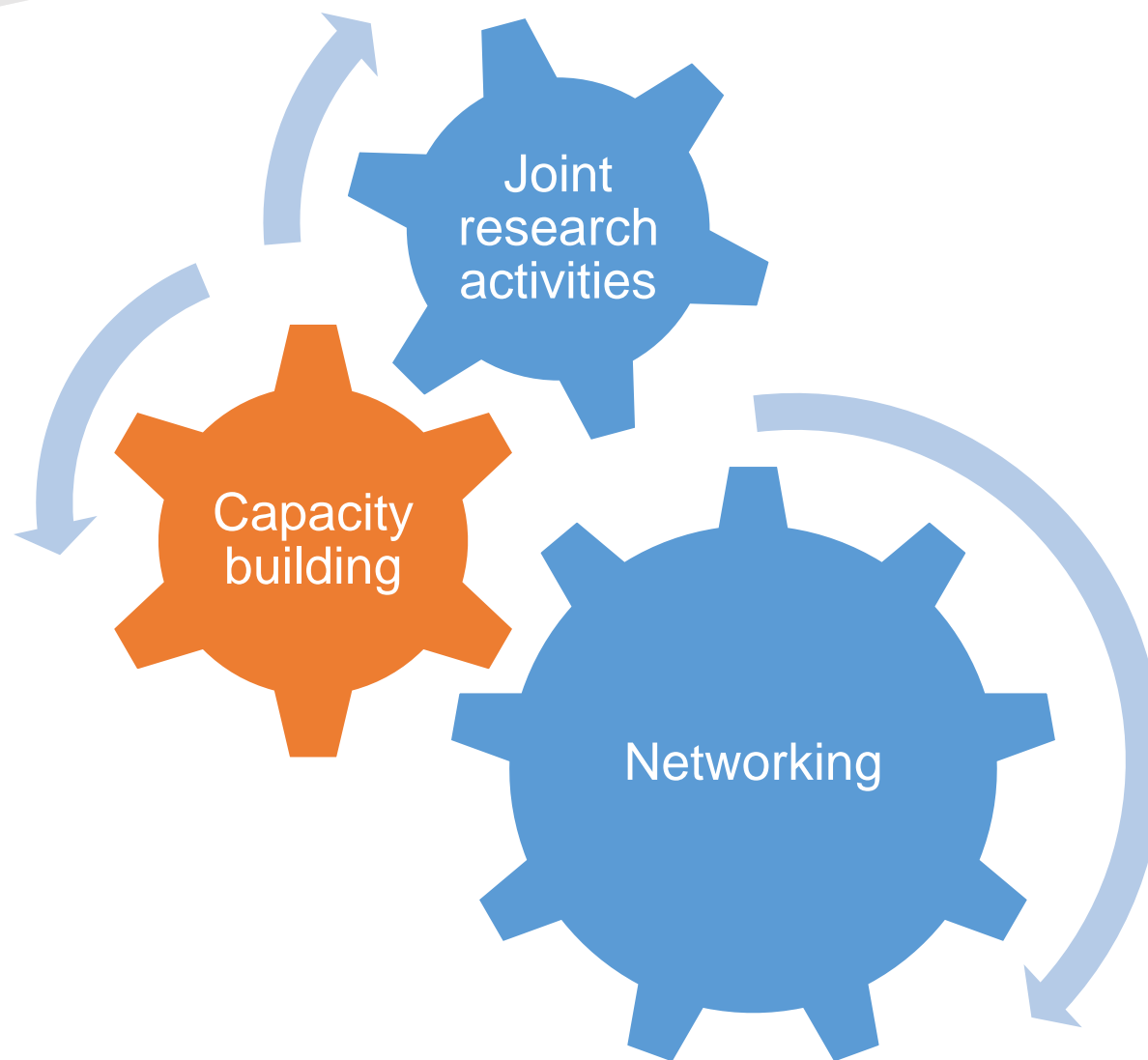
**BurdenEU**

@BurdenEU

Technical platform for integrating and strengthening capacity in #BurdenOfDisease assessment across Europe and beyond | 🇪🇺 | #BurdenEU @COSTprogramme CA18218

[burden-eu.net](https://burden-eu.net) 📅 Joined June 2019

481 Following 426 Followers



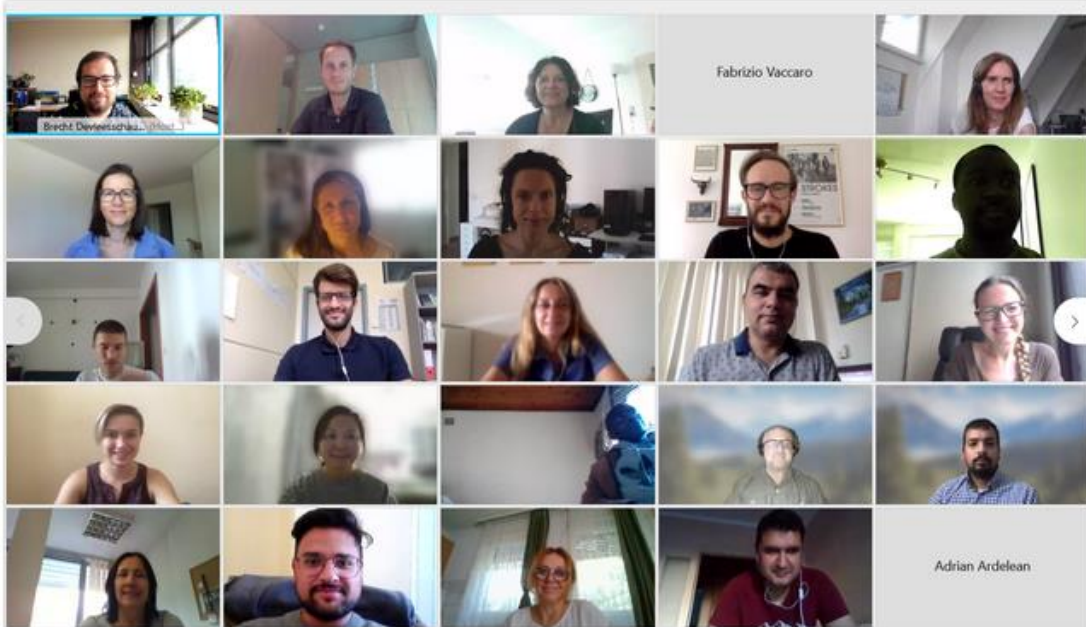
# Individual capacity building

## Short-term scientific missions

Date	Applicant	Host institution	Title
06/06/2022	José Chen-Xu	National Food Institute, Technical University of Denmark	Burden of lung cancer associated with occupational exposure to hexavalent chromium
24/06/2022	Periklis Charalampous	Robert Koch Institute	Methodological advances in burden of disease studies
24/06/2022	Tina Lesnik	Robert Koch Institute	Methods and concepts of calculating YLLs

## Virtual mobility grants

Date	Applicant	Title
27/10/2021	Grant Wyper	Scientific communication activities of the European Burden of Disease Network
10/10/2021	João Vasco Santos	Comparison of methods for YLL calculation
07/10/2021	Periklis Charalampous	Infectious disease burden activities across Europe: a systematic literature review of data sources and methodological choices
04/10/2021	Elena Pallari	The implementation of a framework on BoD evidence use in practice

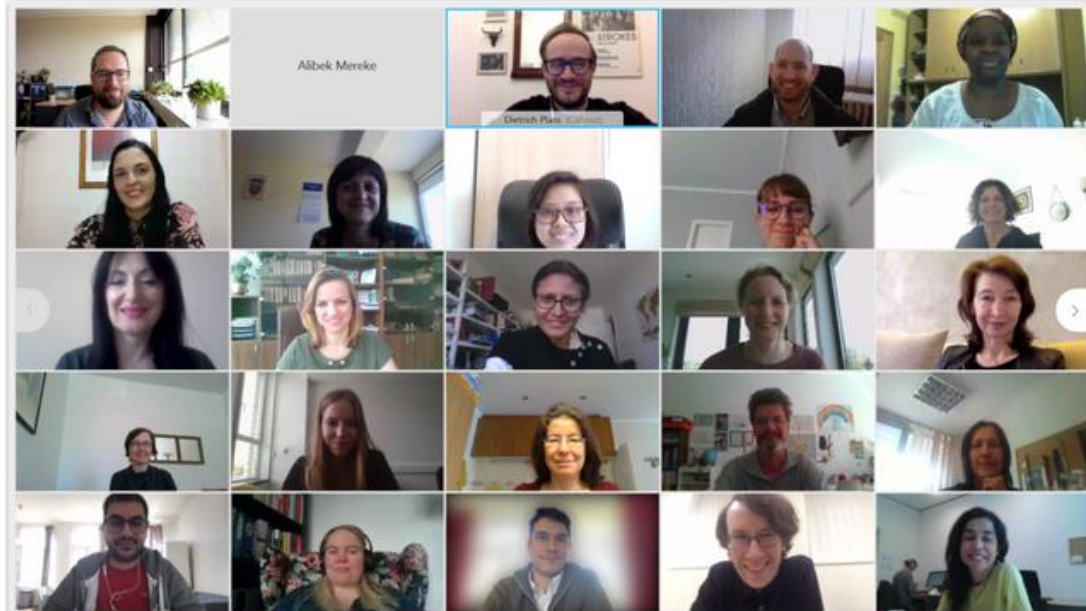


## [Training School] General concepts of burden of disease - 2nd edition

Introduction to the calculation and use of DALYs

📅 September 2021

[Read more:](#)



## [Training School] General concepts of burden of disease - 1st edition

Introduction to the calculation and use of DALYs

📅 May-June 2021

[Read more:](#)



# COVID-19 Disease Burden Training School 30 March to 1 April 2022, Ljubljana, Slovenia





# General concepts of burden of disease - 3rd edition

9-11 May 2022, Tbilisi, Georgia



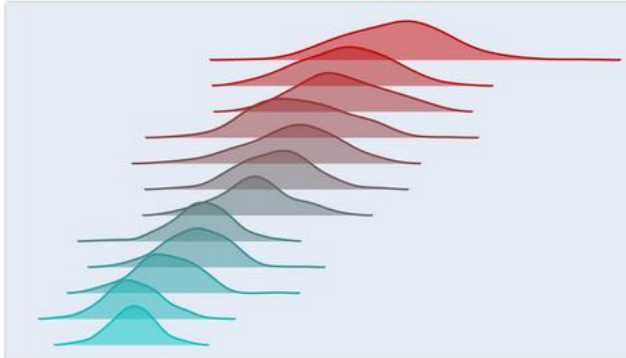




### [Webinar] Measuring the burden of rare diseases

📅 Tuesday 14 September 2021, 9h-10h30 CET

[Read more:](#)



### [Webinar] Forecasting the Global Burden of Disease Study

📅 Tuesday 29 June 2021, 16h-17h CET

[Read more:](#)



### [Webinar] Burden of disease assessment for COVID-19: initial insights and future perspectives

📅 Friday 21 May 2021, 14h-15h CET

[Read more:](#)

[www.burden-eu.net/webinars](http://www.burden-eu.net/webinars)



### [Webinar] Activities and achievements of the Italian GBD Initiative

📅 Thursday 29 April 2021, 13h-14h CET

[Read more:](#)



### [Webinar] Elicitation and practical use of disability weights for quantifying years lived with disability

📅 Thursday 14 January 2021, 13h-14h CET

[Read more:](#)



### [Webinar] Quantifying COVID-19 disease burden

📅 Friday 20 November 2020, 11h-12h CET

[Read more:](#)

# Task Forces

- Launched after 3rd WG meeting Jan 2022
- Small groups, dedicated to specific topics
  - COVID-19
  - PFAS
  - Rare diseases
  - Social inequalities
  - Air pollution & noise
  - Redistribution of ill-defined deaths
  - ...
- Tailored, technical discussions

<https://www.burden-eu.net/outputs/covid-19>

## COVID-19

COVID-19 has affected many countries in Europe in beyond. There is currently a growing interest to quantify the disease burden of COVID-19, measure its population health impact and compare it to other diseases. On this page, we compile burden of disease resources specifically fo

### Burden of COVID-19 Task Force

The Burden of COVID-19 Task Force brings together members who are conducting or interested in launching national studies to estimate t of COVID-19. The TF meets approximately every six weeks to discuss technical aspects of COVID-19 burden calculation.

More information about the Task Force is available [here](#).

### Burden of COVID-19 calculation protocol

The burden-eu Core Group has prepared a protocol to provide guidance for anyone planning to assess the burden of disease of COVID DALYs. It focuses on the direct health impact of the disease, and describes the data requirements, the methods, and considerations f It also aims to foster harmonization of methodologies for estimating the burden of disease of COVID-19 across countries.

You can download the protocol [here](#).

### Burden of COVID-19 webinars

On Friday 20 November 2020, our COST Action has organized a webinar on quantifying COVID-19 disease burden. You can repla presentations [here](#).

### Burden of COVID-19 publications

DALY calculation methods for COVID-19

Wyper GM, Assunção RM, Colzani E, Grant I, Haagsma JA, Lagerweij G, Von der Lippe E, McDonald SA, Pires SM, Porst M, Speybroeck N, Devleeschauwer B.

**Burden of disease methods: a guide to calculate COVID-19 disability-adjusted life years.** *Int J Public Health.* 2021;66:619011. doi: [10.3389/ijph.2021.619011](https://doi.org/10.3389/ijph.2021.619011)





# Estimating the direct Covid-19 disability-adjusted life years impact on the **Malta** population for the first full year



Sarah Cuschieri<sup>1\*</sup>, Neville Calleja<sup>2,3</sup>, Brecht Devleeschauwer<sup>4,5</sup> and Grant M. A. Wyper<sup>6</sup>

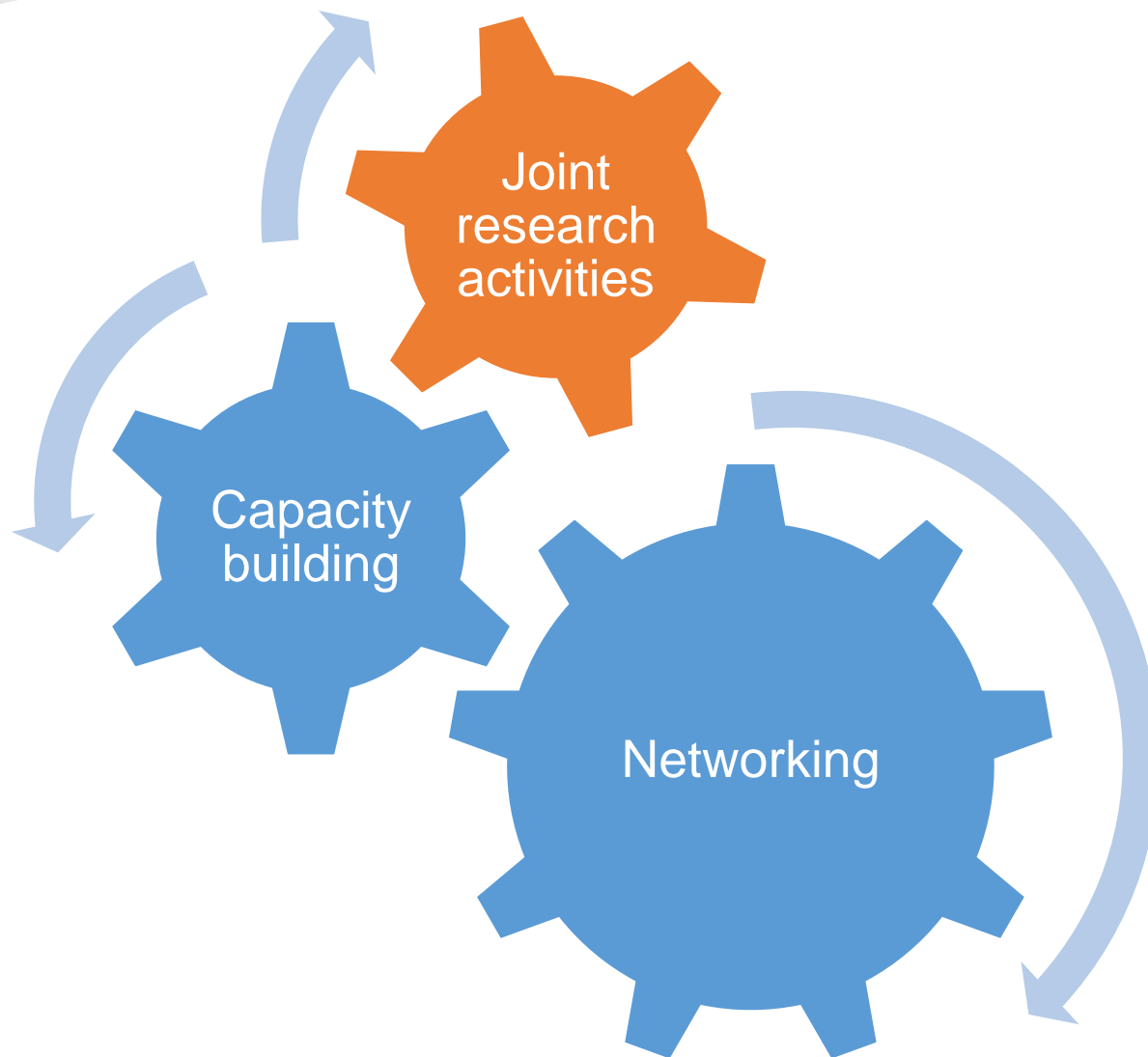
## **Measuring the direct population impact of COVID-19 in **Scotland**, 2020: estimating disability-adjusted life years (DALYs) during the first full calendar year**

Grant MA Wyper<sup>1,\*</sup>, Eilidh Fletcher<sup>2</sup>, Ian Grant<sup>2</sup>, Gerry McCartney<sup>1</sup>, Colin Fischbacher<sup>3</sup>, Oliver Harding<sup>4</sup>, Hannah Jones<sup>1</sup>, Maria Teresa de Haro Moro<sup>2</sup>, Niko Speybroeck<sup>5</sup>, Brecht Devleeschauwer<sup>6,7</sup>, Diane L Stockton<sup>1</sup>


## **The estimated disease burden of acute COVID-19 in the **Netherlands** in 2020, in disability-adjusted life-years**

Scott A. McDonald<sup>1</sup>, Giske R. Lagerweij<sup>1</sup>, Pieter de Boer<sup>1</sup>, Hester E. de Melker<sup>1</sup>, Roan Pijnacker<sup>1</sup>, Lapo Mughini Gras<sup>1</sup>, Mirjam E. Kretzschmar<sup>1,2</sup>, Gerco den Hartog<sup>1</sup>, Arianne B. van Gageldonk-Lafeber<sup>1</sup>, RIVM COVID-19 surveillance and epidemiology team<sup>1</sup>, Susan van den Hof<sup>1</sup>, Jacco Wallinga<sup>1,3</sup>





## Burden of non-communicable diseases in Europe: a systematic review of methodological choices

Periklis Charalampous <sup>1</sup>, Vanessa Gorasso<sup>2,3</sup>, Dietrich Elena von der Lippe<sup>6</sup>, Alibek Mereke<sup>7</sup>, Jane Idavain<sup>8</sup>, Joana Nazaré Morgado<sup>10</sup>, Che Henry Ngwa<sup>11</sup>, Isabel Noguera<sup>12</sup>, María José Santi-Cano<sup>13</sup>, Rodrigo Sarmiento<sup>12,14</sup>, Brecht Devleesschauwer<sup>4,6</sup>, Juanita A. Haagsma<sup>1</sup>, The COST Action CA18218 Part

+ Infectious diseases  
+ Risk Factors

Charalampous et al. *BMC Public Health* (2022) 22:1564

<https://doi.org/10.1186/s12889-022-13925-z>

BMC Public Health

RESEARCH

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## Methodological considerations in injury burden of disease studies across Europe: a systematic literature review

Periklis Charalampous<sup>1\*</sup>, Elena Pallari<sup>2</sup>, Vanessa Gorasso<sup>3,4</sup>, Elena von der Lippe<sup>5</sup>, Brecht Devleesschauwer<sup>4,6</sup>, Sara M. Pires<sup>7</sup>, Dietrich Plass<sup>8</sup>, Jane Idavain<sup>9</sup>, Che Henry Ngwa<sup>10,11</sup>, Isabel Noguera<sup>12</sup>, Alicia Padron-Monedero<sup>12</sup>, Rodrigo Sarmiento<sup>12,13</sup>, Marek Majdan<sup>14</sup>, Balázs Ádám<sup>15,16</sup>, Ala'a AlKerwi<sup>17</sup>, Seila Cilovic-Lagarija<sup>18</sup>, Benjamin Clarsen<sup>19,20,21</sup>, Barbara Corso<sup>22</sup>, Sarah Cuschieri<sup>23</sup>, Keren Dopelt<sup>24,25</sup>, Mary Economou<sup>26</sup>, Florian Fischer<sup>27</sup>, Alberto Freitas<sup>28,29</sup>, Juan Manuel García-González<sup>30</sup>, Federica Gazzelloni<sup>31</sup>, Artemis Gkitakou<sup>32</sup>, Hakan Gulmez<sup>33</sup>, Paul Hynds<sup>34</sup>, Gaetano Isola<sup>35</sup>, Lea S. Jakobsen<sup>7</sup>, Zubair Kabir<sup>36</sup>, Katarzyna Kissimova-Skarbek<sup>37</sup>, Ann Kristin Knudsen<sup>20</sup>, Naime Meriç Konar<sup>38</sup>, Carina Ladeira<sup>39,40</sup>, Brian Lassen<sup>7</sup>, Aaron Liew<sup>41</sup>, Marjeta Majer<sup>42</sup>, Enkeleint A. Mechili<sup>43,44</sup>, Alibek Mereke<sup>45</sup>, Lorenzo Monasta<sup>46</sup>, Stefania Mondello<sup>47</sup>, Joana Nazaré Morgado<sup>48</sup>, Evangelia Nena<sup>49</sup>, Edmond S. W. Ng<sup>50</sup>, Vikram Niranjan<sup>51</sup>, Iskra Alexandra Nola<sup>42</sup>, Rónán O’Caoimh<sup>52</sup>, Panagiotis Petrou<sup>53</sup>, Vera Pinheiro<sup>28</sup>, Miguel Reina Ortiz<sup>54</sup>, Silvia Riva<sup>55</sup>, Hanen Samouda<sup>56</sup>, João Vasco Santos<sup>28,29,57</sup>, Cornelia Melinda Adi Santoso<sup>58</sup>, Milena Santric Milicevic<sup>59</sup>, Dimitrios Skempes<sup>60</sup>, Ana Catarina Sousa<sup>61,62</sup>, Niko Speybroeck<sup>63</sup>, Fimka Tozija<sup>64,65</sup>, Brigid Unim<sup>66</sup>, Hilal Bektaş Uysal<sup>67</sup>, Fabrizio Giovanni Vaccaro<sup>68</sup>, Orsolya Varga<sup>16</sup>, Milena Vasic<sup>69,70</sup>, Francesco Saverio Violante<sup>71,72</sup>, Grant M. A. Wyper<sup>73</sup>, Suzanne Polinder<sup>1</sup> and Juanita A. Haagsma<sup>1</sup>









### Measuring disability-adjusted life years (DALYs) due to low back pain in Malta

Cuschieri S, Wyper GMA, Calleja N, Gorasso V, Devleesschauwer B

*Arch Public Health.* 2020;78:68



### Burden of foodborne diseases: think global, act local

Pires SM, Desta BN, Mughini-Gras L, Mmbaga BT, Fayemi OE, Salvador EM, Gobena T, Majowicz SE, Hald TM, Hoejskov PS, Minato Y, Devleesschauwer B

*Curr Opin Food Sci.* 2021;39:152-159



### Reflections on key methodological decisions in national burden of disease assessments

von der Lippe E, Devleesschauwer B, Gourley M, Haagsma J, Hilderink H, Porst M, Wengler A, Wyper G, Grant I

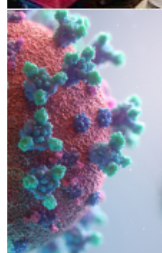
*Arch Public Health.* 2020;78:137



### Recommendations to plan a national burden of disease study

Haneef R, Schmidt J, Gallay A, Devleesschauwer B, Grant I, Rommel A, Wyper GMA, van Oyen H, Hilderink H, Ziese T, Newton J

*Arch Public Health.* 2021;79:126



### Estimating the direct Covid-19 disability-adjusted life years impact on the Malta population for the first full year

Cuschieri S, Calleja N, Devleesschauwer B, Wyper GMA

*BMC Public Health.* 2021;;21:1827



### The increasing significance of disease severity in a burden of disease framework

Wyper G, Assunção R, Fletcher E, Gourley M, Grant I, Haagsma J, Hilderink H, Idavain J, Lesnik T, von der Lippe E, Majdan M, McCartney G, Pallari E, Pires S, Plass D, Porst M, Santos J, Santric-Milicevic M, de Haro Moro MT, Stockton D, Devleesschauwer B

*Scand J Public Health.* 2021; in press



### Burden of non-communicable diseases in Cyprus, 1990–2017: findings from the Global Burden of Disease 2017 study

Charalampous P, Pallari E, Tyrovolas S, Middleton N, Economou M, Devleesschauwer B, Haagsma JA

*Arch Public Health.* 2021;79:138



### Health expectancies in the European Union: same concept, different methods, different results

Santos JV, Viana J, Devleesschauwer B, Haagsma J, Costa-Santos C, Ricciardi W, Freitas A

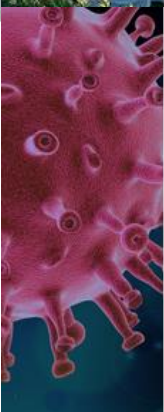
*J Epidemiol Community Health.* 2021;75:764-771



### Burden of disease methods: a guide to calculate COVID-19 disability-adjusted life years

Wyper GMA, Assunção RMA, Colzani E, Grant I, Haagsma JA, Lagerweij G, Von der Lippe E, McDonald SA, Pires SM, Porst M, Speybroeck N, Devleesschauwer B

*Int J Public Health.* 2021;66:619011



### Population vulnerability to COVID-19 in Europe: a burden of disease analysis

Wyper GM, Assunção RM, Cuschieri S, Devleesschauwer B, Fletcher E, Haagsma JA, Hilderink H, Idavain J, Lesnik T, Von der Lippe E, Majdan M, Santric-Milicevic M, Pallari E, Peñalvo JL, Pires SM, Plass D, Santos JV, Stockton DL, Thomsen ST, Grant I

*Arch Public Health.* 2020;78:47



### Risk factors and their contribution to population health in the European Union (EU-28) countries in 2007 and 2017

Santos JV, Gorasso V, Souza J, Wyper GMA, Grant I, Pinheiro V, Viana J, Ricciardi W, Haagsma JA, Devleesschauwer B, Plass D, Freitas A

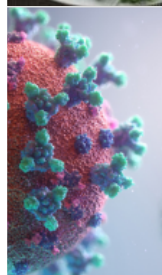
*Eur J Public Health.* 2021; in press



### Conducting national burden of disease studies in small countries in Europe– a feasible challenge?

Cuschieri S, Pallari E, Terzic N, Alkerwi A, Sigurvinsdottir R, Sigfusdottir ID, Devleesschauwer B

*Arch Public Health.* 2021;79:73



### Valuing the years of life lost due to COVID-19: the differences and pitfalls.

Devleesschauwer B, McDonald S, Speybroeck N, Wyper GMA

*Int J Public Health.* 2020;65:719-720



### European burden of disease network: strengthening the collaboration

Devleesschauwer B

*Eur J Public Health.* 2020;30:2-3



# Take home messages

- Networking is key
  - Face to face >>> Online
- COVID forced us to develop new networking tools
  - Webinars
  - Spotlight
  - Task forces
  - (Online meetings, training?!)
- Setup of meetings, webinars, etc.. requires few but very motivated people





# COST Action CA18218

## European Burden of Disease Network



[www.burden-eu.net](http://www.burden-eu.net)

