european burden-eu of disease network

PFAS-BURDEN TASK FORCE

International burden of disease conference

Belgrade, Serbia, 15-16 September 2022

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cost EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

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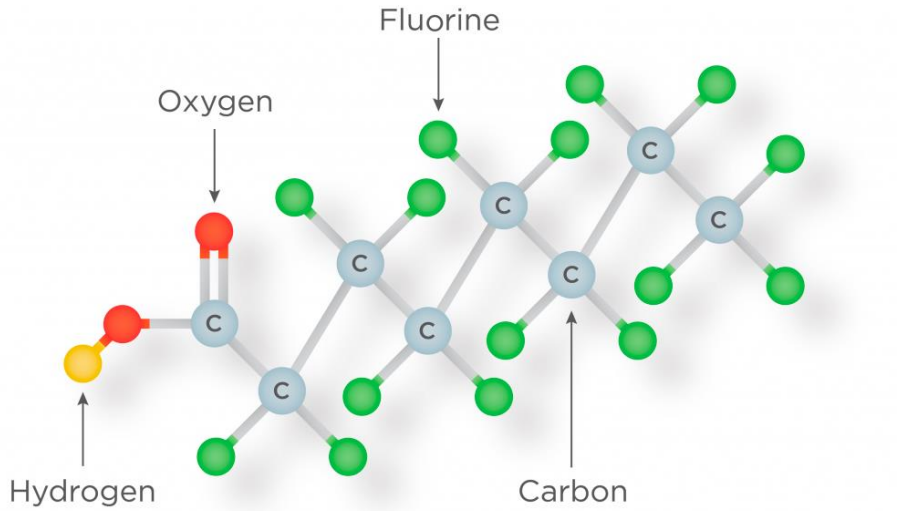
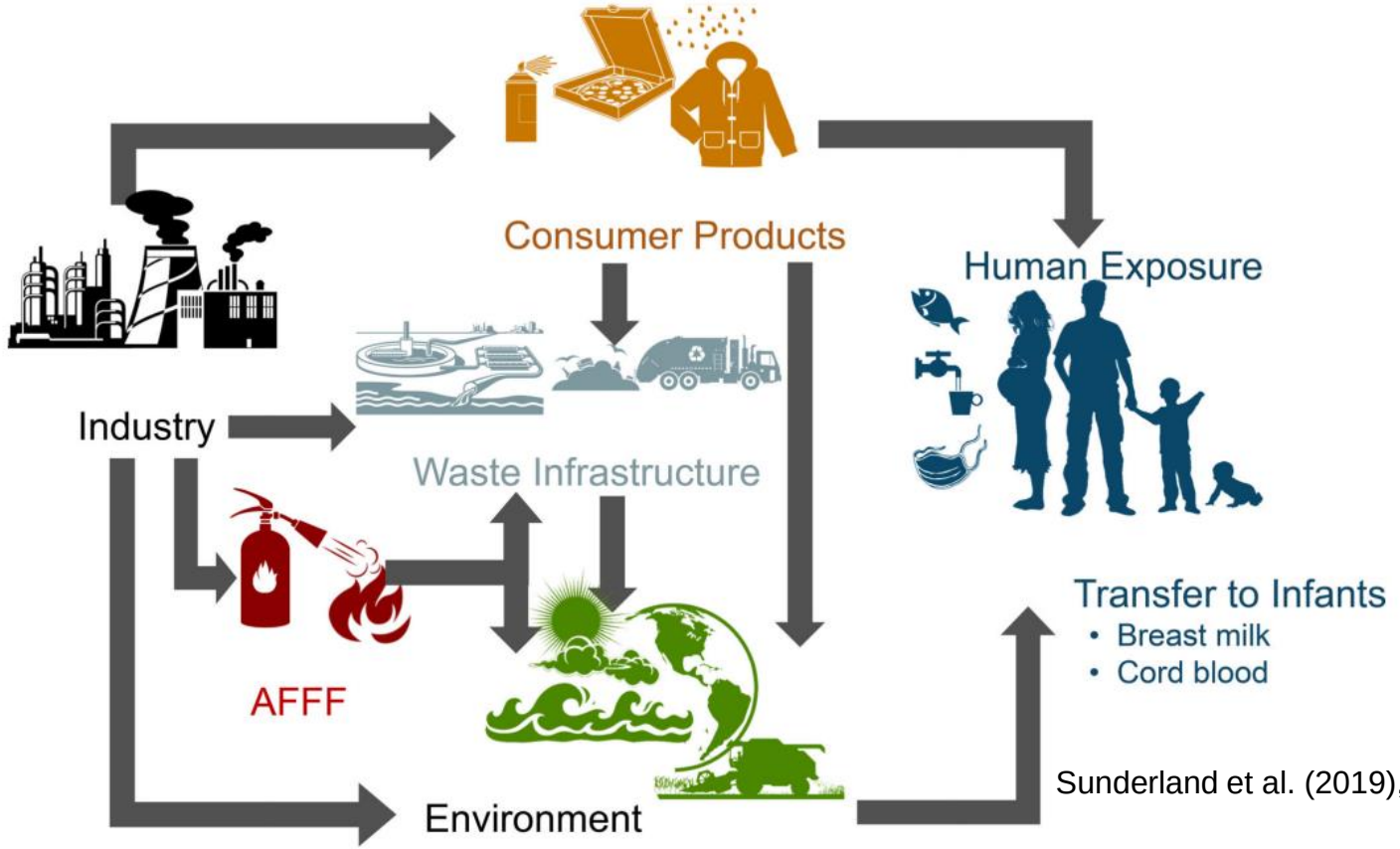
Per- and Polyfluoroalkyl Substances (PFASs)

- Group of >5000 man-made substances, produced since 1940's
- Water & oil-repellant and heat resistant properties
- "For-ever" chemicals, accumulate in environment



https://www.pfasfacts.com/

PFAS Exposure Routes

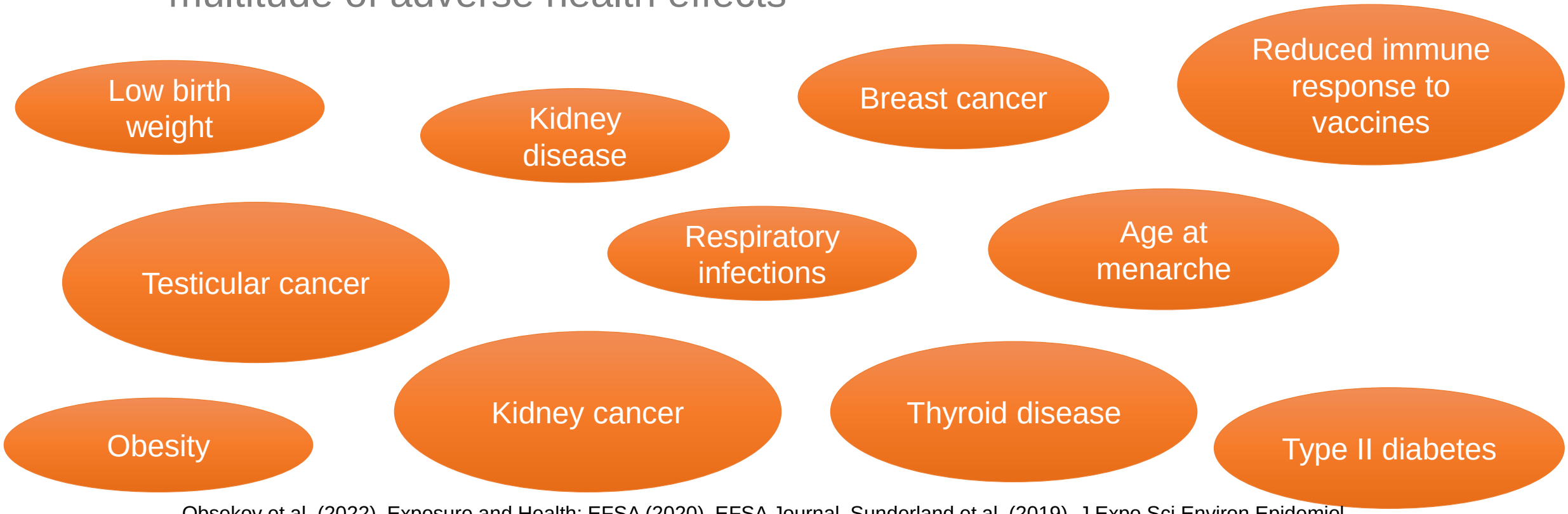


Sunderland et al. (2019), J Expo Sci Environ Epidemiol

- Widely detected in human blood world wide
- Long half-live in human body (~2 yrs)

PFAS-associated health effects

- Endocrine disruptor
  - Low dose exposure in the general population associated with a multitude of adverse health effects



Obsekov et al. (2022), Exposure and Health; EFSA (2020), EFSA Journal, Sunderland et al. (2019), J Expo Sci Environ Epidemiol

PFAS high on the political agenda

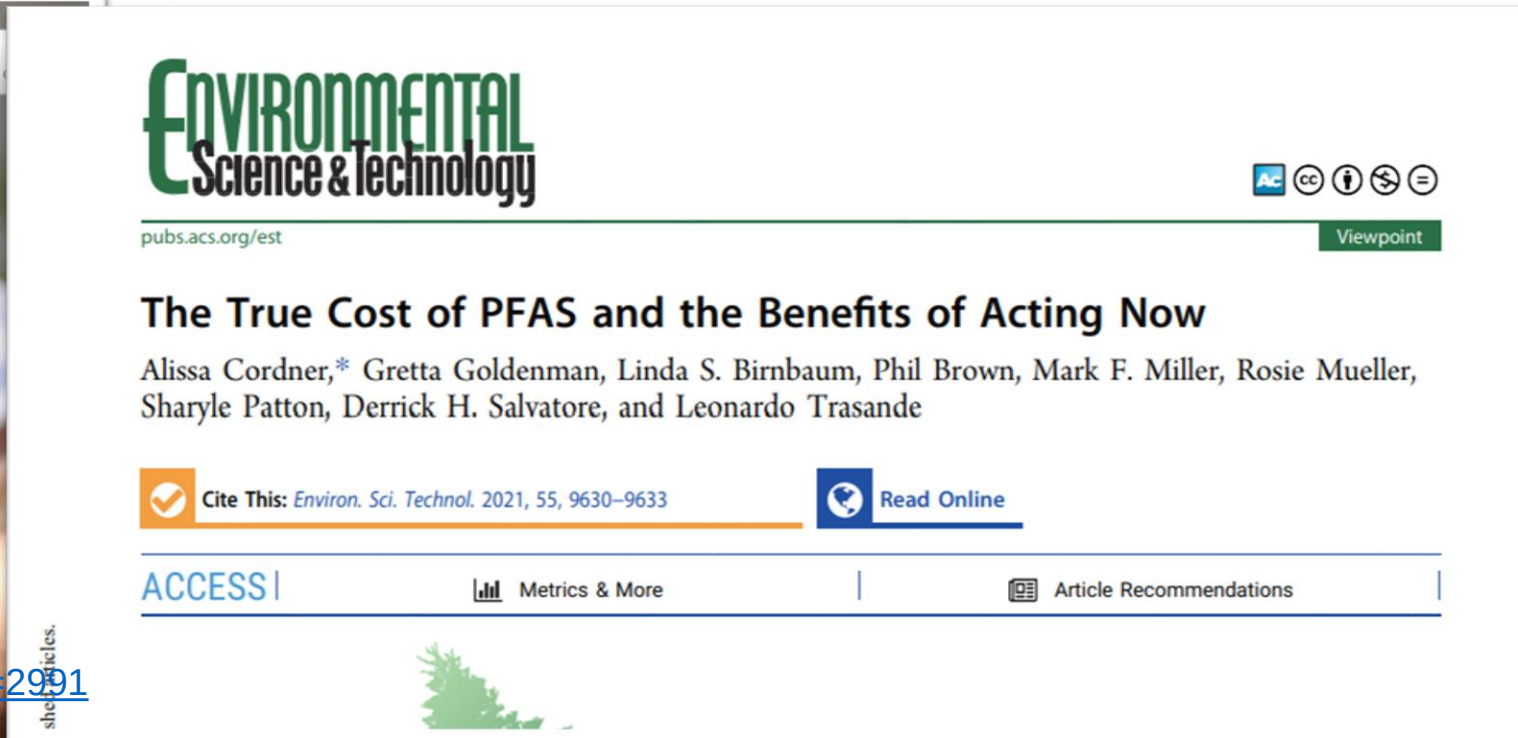
- Since 2015 – body of evidence in humans is growing
- Drinking water contamination, hot-spot contamination

www.ing.dk, (2020)

Socioeconomic impact of PFAS

- Studies of cost to society of environmental and human exposure
- Counter-balance the ”benefit” of PFAS application and cost of mitigation strategies (e.g. cleaning of drinking water)

http://norden.diva-portal.org/smash/record.jsf?pid=diva2%3A1295959&dswid=2991



Burden of Disease of PFAS?

- DALY capture public health impact in terms of morbidity and mortality
- Few (two?) studies on PFAS BoD to date
- DALY to complement other indicators influencing chemical policy?

Exposure and Health
https://doi.org/10.1007/s12403-022-00496-y

ORIGINAL PAPER

Check for updates

Leveraging Systematic Reviews to Explore Disease Burden and Costs of Per- and Polyfluoroalkyl Substance Exposures in the United States

Vladislav Obsekov[1] · Linda G. Kahn[1,2] · Leonardo Trasande[1,2,3,4,5]

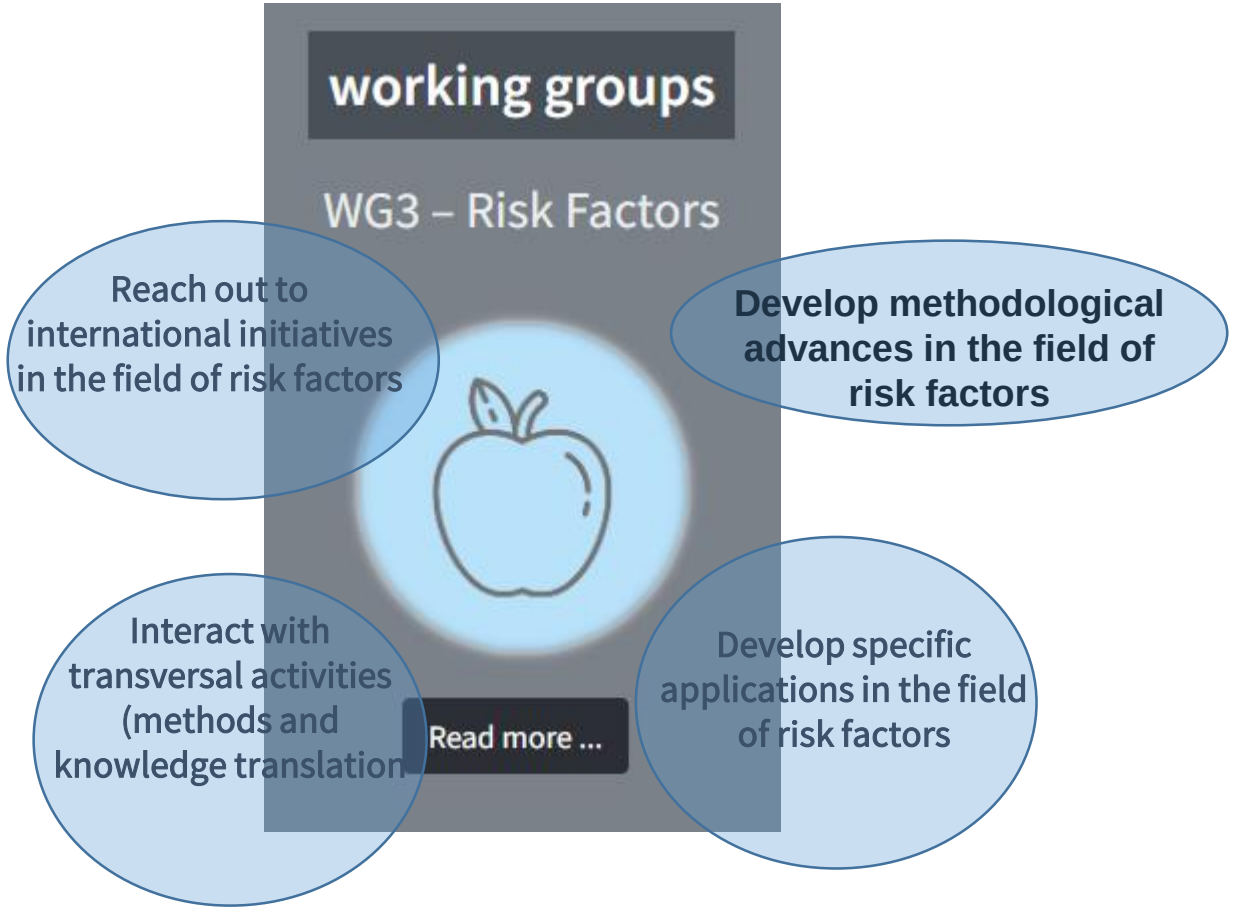
Received: 24 March 2022 / Revised: 3 June 2022 / Accepted: 23 June 2022

Development of health indicators for exposure to endocrine disrupting substances in Flanders and calculation of the social health costs

Buekers J. Cops J. Rodriguez L.(2022). https://archief-algemeen.omgeving.vlaanderen.be/xmlui/handle/acd/784186

Burden of PFAS Task Force

- Established after Burden-EU WG meeting in January 2022
- Under WG3 – Risk factors
- Currently ~15 members



Task Force Aims

european burden-eu of disease network

Home | Action | Network | Activities | Outputs | News

Burden of PFAS Task Force

The Task Force (TF) on PFAS disease burden is an initiative under the European Burden of Disease Network. The TF is a subgroup of WG3 Risk Factors. The TF is welcoming members with an interest in advancing initiatives in estimation of PFAS disease burden and related activities.

Its aims are to:

- Share experiences and harmonize methodologies in studies of disease burden of PFAS
- Support each other with calculations, model assumptions, data gaps of national burden studies on PFAS
- Serve as a platform for technical and scientific discussions on PFAS burden and related topics
- Discuss and collaborate on concrete research projects on disease burden of PFAS

The TF meets approximately every 6 weeks. Besides a status update on PFAS activities from the participants of the TF, different topics for discussion are selected for each meeting. If possible, external experts are invited for presenting their research within PFAS. 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, and relevant publications on PFAS exposure and burden, on the Google Drive.

If you are interested in joining, contact Lea Sletting Jakobsen.

https://www.burden-eu.net/network/task-forces

Activities

- Meetings every 6-8 weeks
  - Status updates
  - Topics
- Concrete projects
  - Protocol to harmonize methods (Fall 2022)
  - Use of BoD in regulatory settings (in progess)
    - case studies and scoping review

Discussion Topic	Possible presenter	Scheduling
Flandern BoD PFAS study – example	Jurgen Buekers	24. Mar. 2022
Economic impact/cost of inaction	Leo Trasande	13. Sep. 2022
PFAS research/JECS study(?)	K. Kannan	TBD
Grading the evidence of health outcomes of PFAS exposure	? (people involved in EFSA opinion, other risk assessments?)	TBD
PFAS Exposure assessment	? (people involved in HB4EU?)	TBD

Research question/topic	Short description
Protocol for conducting national burden of disease of PFAS studies	Description of data, disease models, computational models for estimating burden of PFAS
Impact of imposing restrictions on PFAS in fire foam	Evaluation of case studies. Example of application of burden studies in regulatory settings.
SLRs	- Exposure-outcomes pairs - Disease burden in regulatory settings

Join the Task Force

- Contact leaja@food.dtu.dk or info@burden-eu.net

Join if you:

- are interested in the topic of BoD of chemical exposures
- wish to set up a national study (or already have)
- engage with other researcher passionate about the topic!