



ERA-ENVHEALTH

NEWSFLASH



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SAVE THE DATE

7 OCTOBER 2020

ONLINE OPEN CONFERENCE ON MULTIPLE EXPOSURES IN ENVIRONMENTAL HEALTH

<https://www.folkhalsomyndigheten.se/2020-era-envhealth-open-conference/>

Special thanks to Ric van Poll, RIVM, for compiling this Newsflash and Yvette Meganck, FPS HFCSE, for the layout

EDITORIAL

Although the SARS-CoV-2 is still dominating the news around the world there is still news from other domains: welcome to the ERA-ENVHEALTH network NEWSFLASH 35, 1st semester 2020!

The ERA-ENVHEALTH-network will still have its annual meeting and Open Conference titled: “MULTIPLE EXPOSURES IN ENVIRONMENTAL HEALTH”. This time however digitally on October 7th. The conference will present ongoing research and policy work on multiple exposures in environmental health, with a special focus on equity. It will be hosted by both the Swedish Public Health Institute and the Swedish Environmental Protection Agency.

Read also more about the “SWEDISH ENVIRONMENTAL HEALTH REPORT FOR CHILDREN”. The Environmental health report 2020 will give an up-to-date description of how environmental factors affecting the health of children in the Swedish population.

European participation of ERA ENVHEALTH members in European project can be found in “HERA: HEALTH AND ENVIRONMENT RESEARCH AGENDA: INTEGRATING ENVIRONMENT AND HEALTH RESEARCH: A VISION FOR THE EU”. The overall aim of the HERA project is to set the priorities for an environment, climate and health research agenda in the EU by identifying and prioritising the major research goals that could address these challenges.

It can also be found in PREPARATION OF AN EU PARTNERSHIP FOR CHEMICAL RISK ASSESSMENT UNDER HORIZON EUROPE A European partnership on chemical risk assessment. It is currently being prepared with Member states and Associated countries. The current working title and acronym is “Partnership for the Assessment of Risks of Chemicals”, PARC.

Three contributions dealing with COVID-19. The first is on RISK PERCEPTION AND COVID-19. By now the majority of people around the world have heard of the Coronavirus, and of the need to practice hand hygiene and social distancing to prevent its spread. But while some individuals strictly adhere to the restrictions, others ignore or delay the governments’ rules, mingle in crowds in public places, at beaches, or at their homes.

Relevant differences in risk perception are discussed. The second is on PRIORITIES OF ENVIRONMENTAL EPIDEMIOLOGY STUDIES IN ITALY, RELATED TO THE SARS-COV-2 VIRUS EMERGENCE. A contribution about whether exposure to air pollution, both chronic and acute, have an effect on the probability of infection, the appearance of symptoms and the course of the Covid-19 caused by SARS-CoV-2. Finally an example of how a national health agency reorganises to ensure it can continue its mission in times of a pandemic outbreak.

Nevertheless the environment and health work continues. The German Environment Agency (UBA) is funding a new project called “Human Biomonitoring – using new evidence for better protection from chemicals” which started in April 2020 and will end in December 2021.

Read also about “THE BELGIAN COLLABORATION IN ENVIRONMENT AND HEALTH”. The Belgian collaboration on environmental health is based on NEHAP, the national environment health action plan. The national cell drew up a NEHAP in 2004, describing the practical modalities and objectives of the collaboration. To this day, NEHAP is the working tool with which the national cell carries out its work.

Now available in English the results of a national survey from the Netherlands on the perceived residential environment in: “PERCEIVING THE PHYSICAL LIVING ENVIRONMENT IN THE NETHERLANDS ANNOYANCE INVENTORY 2016”.

Finally, Swedish EPA has the overall responsibility for coordinating the national and regional environmental monitoring, which includes ten programme areas. One of these areas is the program for Health-related Environmental Monitoring – HÅMI. The program started in 1993 and the focus is to estimate human exposure of hazardous substances from the environment that can affect the human health. Read more about HEALTH RELATED ENVIRONMENTAL MONITORING IN SWEDEN RIKSMATEN ADOLESCENTS 2016–17 a national representative, cross-sectional dietary survey.

Enjoy reading Newsflash 35 from the ERA-ENVHEALTH network, have a nice summer, stay well and hopefully we meet, digitally, on October 7th 2020 at our annual Open Conference!

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MULTIPLE EXPOSURES IN ENVIRONMENTAL HEALTH – A DIGITAL HAPPENING THIS AUTUMN

On October 7th, the Public Health Agency of Sweden and the Swedish Environmental Protection Agency jointly organise the 2020 ERA-ENVHEALTH open conference, this time online. The digital event will present ongoing research and policy work on multiple exposures in environmental health, with a special focus on equity.

In order to adapt the conference to a digital setting it will be shorter and more compact than a traditional full-day conference, more in line with a TV production. It will be broadcast from a studio in Stockholm with presenters live and via link, followed by reflections in the studio with Swedish experts from both policy and research. Interaction with the participants will be enabled via an app adapted for this event.

The conference will provide an arena for knowledge exchange between academia and the public sector, and aims to develop and promote national and international collaboration. We welcome all members of the ERA-ENVHEALTH network, representatives from local, regional and national levels as well as research institutions with an interest in environmental health.

Please visit the conference website for more information and registration:

<https://www.folkhalsomyndigheten.se/2020-era-envhealth-open-conference/>

2020 ERA-ENVHEALTH OPEN CONFERENCE

Multiple exposures and equity in environmental health
– an integrated approach for sustainable development –

7 OCTOBER 2020

<https://www.folkhalsomyndigheten.se/2020-era-envhealth-open-conference/>



SWEDISH ENVIRONMENTAL PROTECTION AGENCY



Folkhälsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN

SWEDISH ENVIRONMENTAL HEALTH REPORT FOR CHILDREN

The Environmental health report 2020 will give an up-to-date description of how environmental factors affect the health of children in the Swedish population. The report is based on the Environmental health survey 2019 (MHE 19) which has been carried out every fourth year since 1999, alternating its focus on adults and children. This is the third time the Children's Environmental health survey is conducted, with previous surveys from 2003 and 2011. The questionnaire concerned the health and environments of children in three age groups: 8 months, 4 years, and 12 years. The questions were in most cases answered by the children's parents, but some of the questions were directly asked of children in 12-year-old group. The questions focused on the children's exposure to environmental factors and on their self-rated symptoms, health, and levels of disturbance by various environmental factors. These included housing and indoor environment, noise, air quality, tobacco smoke, food habits, transport, extracurricular activities and outdoor activities, chemicals in products and concern over climate change. Around 114,500 questionnaires were sent out between March and June 2019, with a response rate of 42%.

The results from the survey will be presented in an Environmental Health Report, which will be published by the end of the year. Results will also be presented in fact sheets and available to view and to download from the website of the Public Health Agency of Sweden.

The Environmental health report presents the results from the survey together with national and international risk assessments, articles in peer-review journals and national health databases. The report will also describe current knowledge regarding exposure of environmental factors, effects on health and how the effects may impact the children at large. The factors described in this report are considered to be significant factors for environmental health, and are mainly the same as those presented in previous reports published in 2001, 2005, 2009 and 2013. This report will also describe trends over time, based on comparisons with previous surveys for children. The report is planned to be published in December 2020.

HEALTH AND ENVIRONMENT RESEARCH AGENDA – HERA: INTEGRATING ENVIRONMENT AND HEALTH RESEARCH: A VISION FOR THE EU¹

European citizens are very concerned about the effects of climate change and of environmental deterioration on both human and ecosystem health. The recently adopted European Green Deal addresses their concerns and sets a number of specific objectives to address these problems. Innovative and creative research is needed to support such adaptive and preventive measures. The overall aim of the HERA project is to set the priorities for an environment, climate and health research agenda in the EU by identifying and prioritising the major research goals that could address these challenges. Research is expected to support decision-making at all levels and to help attaining the ultimate goals of protecting and improving ecosystem quality and human health.



HERA is co-coordinated by INSERM (*Institut National de la Santé et de la Recherche Médicale*, France) and ISGlobal (Institute for Global Health, Spain) and involves 15 European countries, an international organization and a European NGO: 24 partners working together to prepare the Health and Environment Research Agenda 2020-2030. The HERA project targets interdisciplinary international research cooperation. The research agenda is co-created with stakeholders in Europe, based on current and anticipated societal challenges and policy needs.

Over the first year of the HERA project, an extensive review of current knowledge, policies and activities was performed through web-based surveys and consultation meetings targeting research communities and stakeholder groups resulting in the identification of a number of research areas that needed to be addressed by the EU Research Agenda. The results of these consultations and analyses are presented in the interim research agenda for environment, climate and health in Europe for 2020-2030, which was published recently.

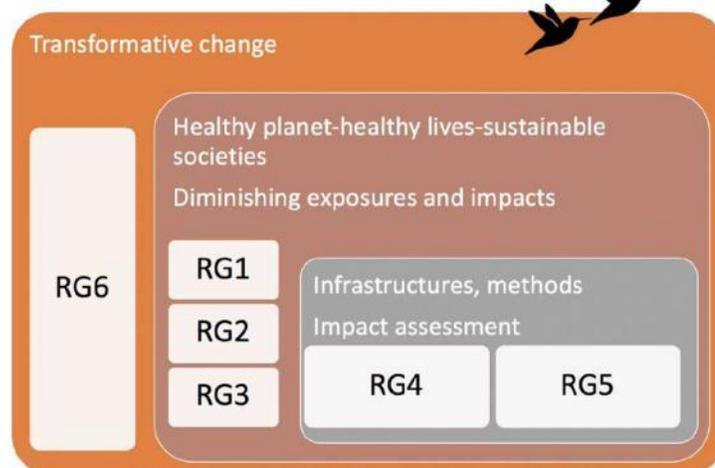
Recommendations put forward in this interim agenda consist of themes grouped into six Research Goals (RG). The first three RGs relate to environmental exposures, sectorbased issues and more holistic questions that need additional research (RG1, RG2, RG3); the next two (RG4, RG5) address methodologies, tools and infrastructures that form an essential basis for tackling the research needs. The last RG (RG6) describes higher-level multidisciplinary transformational approaches that would enable us to address the significant challenges ahead of us. In this way, the interim agenda covers research to reduce the effects of climate change and environmental degradation on health, to eliminate environmental exposures harmful to health such as chemicals, plastics and radiation and to promote healthy lives in sustainable and inclusive societies including research on urban and rural living, air pollution and occupational conditions. To achieve these goals, infrastructures and tools such as cohorts, exposome infrastructures and planetary health monitoring are required. Due to the urgency of the challenges that we are facing, a series of research needs to achieve transformational changes using innovative interdisciplinary approaches are suggested.

¹ Hera is a 36-month coordination and support action funded by the European union's horizon 2020 research and innovation programme under the grant agreement no. 825417. <https://www.heraresearcheu.eu/>

Scheme representing the interactions among the different Research goals.

Research needs for infrastructures and methodologies are described in RG4 and RG6. These tools are required to develop projects addressing global, problem-based and targeted issues in environment, climate and health.

Ambitious multidisciplinary transformational approaches will be needed to tackle the major questions that need to be addressed in the next decade.



While numerous aspects of global changes and biological agents are covered in the interim agenda, the unprecedented and new implications that the COVID-19 pandemic will have on global societies are not included in this interim agenda. However, the HERA Partners have worked hard in the past weeks to synthesise and organise the research needs on the interlinkages of the COVID-19 pandemic with Environment Climate and Health. The first results are available in the document entitled HERA-COVID19 published on the HERA website. Several suggestions, some of which are of typical European relevance (such as the harmonisation of cohorts and survey efforts...), are organised into three main research goals:

1. Environmental drivers of SARS-cov2 emergence and spread;
2. Health impact of COVID-19 and environmental stressors; and
3. Integrated socio-economic, political and health implications of COVID-19 and intervention strategies.

Research goals on the interlinkages of global environmental change and the emergence and impact of the COVID-19 pandemic and the long-term research needs will also be examined. However, it will take several months in order to generate more thorough material.

In this respect, the work of the HERA consortium will continue and the interim research agenda will be further refined to provide more specific directions and to also take into account implications to research priorities of the current and future global pandemics, through Europe-wide consultations to be carried out and defined in the final research agenda.

The HERA consortium is interested in perspectives of all stakeholders on issues in the environment, climate and health nexus that need scientific support. Further input is sought from all stakeholders through an online survey, to provide feedback on the HERA Interim Agenda and COVID19 Report as well as on the particular Research Goals identified in the reports. New topics that the reports do not currently cover can also be identified.

Participate using the following link:

<https://link.webpolsurveys.com/Participation/Public/40b698fe-f564-49a5-948b-e604f7221a54?displayId=Fin2020591>

The input received with this survey will be used to further enrich the Interim Agenda towards the final HERA Research Agenda, to be delivered in 2021.

PREPARATION OF AN EU PARTNERSHIP FOR CHEMICAL RISK ASSESSMENT UNDER HORIZON EUROPE

A European partnership on chemical risk assessment to be implemented under the next research and innovation programme Horizon Europe of the European Commission is currently being prepared with Member states and Associated countries. The current working title and acronym is "Partnership for the Assessment of Risks of Chemicals", PARC. Though the Horizon Europe calendar is not yet set, this partnership is planned for the

first set of partnerships to be launched in 2022 and should run for 7 years. At the invitation of the EU Commission and with the support of competent ministries, selected risk assessment and risk management authorities from more than 20 EU Member states (plus Switzerland and Norway) and relevant EU agencies (EEA, EFSA, ECHA) and Commission services (DG R&I, DG SANTE,



DG ENV, JRC) are currently working on the concept for the partnership. The partnership relies on strong interactions of these authorities with research and academic institutions. The French Agency for Food, Environmental and Occupational Health & Safety (ANSES) has taken on the coordination of this future partnership. In addition, several of the ERA-ENVHEALTH network members are actively involved in the preparation of PARC, such as the German Environment Agency (UBA) contributing also the experiences from coordinating the HBM4EU project², the Dutch National Institute for Public Health and the Environment (RIVM) and the Belgian Federal Public Service Health, Food Chain Safety and Environment – together with the Flemish Department for the Environment and Spatial Planning (DOMG) and research institutes Sciensano and the Flemish Institute for Technological Research (VITO).

The overarching goal of PARC is to consolidate and strengthen the EU's research and innovation capacity for chemical risk assessment to protect human health and the environment. PARC is therefore intended to make an overarching contribution to the achievement of the European Green Deal, especially to the sub-goals "Towards a zero pollution ambition for a toxic-free environment" and the "Chemicals Strategy for Sustainability", which is to be published in autumn 2020. PARC is also a direct answer to the Council Conclusion of June 2019 'Towards a Sustainable Chemicals Policy Strategy of the Union', highlighting the need for a sustainably-funded structure for applied research in this area that should embrace inter alia a continuation of the existing initiatives in the areas of human biomonitoring, notably HBM4EU activities, the development and adaptation of test methods in toxicology and the scientific basis for risk assessment and risk management of chemicals³.

The partnership will build on the legacy and recommendations of the ongoing HBM4EU project, by placing human biomonitoring in a broader chemical risk assessment initiative as it will consolidate and further develop the European HBM Platform, but will also address research questions on the assessment and monitoring of chemicals in the environment. Another major component of PARC is hazard assessment as originally defined in the concept of an EU-Toxicology programme supported by several risk assessment organisations in Europe (at Member-state and EU levels).

PARC is designed to specifically focus on regulatory research and innovation needs that are jointly defined by European and national authorities. The partnership will therefore tackle joint challenges, such as gaps in knowledge of and information on hazards, occurrence and exposures to chemicals and mixtures

as well as scattered and non-accessible evidence. Screening, testing and assessment methods are to be developed, and their use and validation promoted. The joining of forces shall help optimise the use of resources and contribute to better risk communication and awareness of chemical risk assessment processes. PARC will also work on tackling the science-regulatory gap. The objectives and impacts of the activities carried out within the partnership shall be on three levels by:

- setting up an EU-wide cross-disciplinary network to identify and agree on research and innovation needs for regulatory chemical risk assessment and support the regulatory uptake of results, implementing a joint EU research and innovation activities responding to the common priorities identified to support the current regulatory risk assessment processes and respond to emerging challenges, and
- strengthening existing capacities and build new EU-wide, transdisciplinary research and innovation platforms to support chemical risk assessment.

Though no information on the overall budget can yet be provided at this point, as the Horizon Europe programme is not launched yet, an EU co-fund rate of 50% has been evoked for this type of partnership with Member-state co-funding relying mostly on in-kind contributions.

PARC⁴ will bring together European risk assessment and regulatory agencies and policymakers to set a joint research and innovation agenda together with academic institutions and with active involvement of stakeholders. The research and innovation programme will be developed to answer concrete policy relevant questions from EU and national policy makers and the governance structure will ensure that it responds to the policy needs and ambitions. In the participating countries, National Hubs will be established to network stakeholders, flag national interests and bring in strong national expertise. The networks, partnership and community thus created including the engagement with stakeholders / non-governmental organisations representing environmental, health, occupational and consumer priorities, as well as trade unions and industry and citizens- are crucial to the success and sustainability of the activities.

The latest concept paper has recently been published and is available here:

https://ec.europa.eu/info/files/european-partnership-chemicals-risk-assessment_en

² HBM4EU is a 5-year joint effort of 30 countries, the European Environment Agency and the European Commission, co-funded by the European Union's Horizon 2020 research and innovation programme under grant agreement No 733032. The initiative, led by UBA (Germany) is coordinating and advancing human biomonitoring in Europe and is generating evidence of the actual exposure of citizens to chemicals and the possible health effects in order to support policy making. <https://www.hbm4eu.eu/>

³ <http://data.consilium.europa.eu/doc/document/ST-10713-2019-INIT/en/pdf>

A survey to identify priorities for the partnership has been launched and is open until 18 September 2020: https://www.hbm4eu.eu/parc_survey/. All national and international bodies involved in chemical risk assessment and/or management are invited to contribute their priorities.



RISK PERCEPTION AND COVID-19

(based on: Cori, L.; Bianchi, F.; Cadum, E.; Anthonj, C. *Risk Perception and COVID-19. Int. J. Environ. Res. Public Health* 2020, 17, 3114. <https://doi.org/10.3390/ijerph17093114>)

By now the majority of people around the world have heard of the Coronavirus, and of the need to practice hand hygiene and social distancing to prevent its spread. But while some individuals strictly adhere to the restrictions, others ignore or delay the governments' rules, mingle in crowds in public places, at beaches, or at their homes. The fact that individuals in these times of joint challenge act so differently indicates that the personal and social risk perception can vary a lot. But overall, fear dominates the information in different media channels.

Never forgotten anxieties re-emerge from the distant (plague) or closer (smallpox) past when a novel disease rapidly appears, crossing borders and approaching worlds that seemed very far away.

The situation is particularly difficult in the case of a communicable disease as a novel coronavirus. In fact, knowledge of the "real" risk that people fear is one of the factors that most affect perception, and in the case of SARS-CoV-2 there are many barely known aspects. This, in turn depends on the ability to measure risk, which is a "titanic" enterprise when it moves through time and space and depending on many social and environmental factors. But the quantification of the risk cannot prescind from its characterization.

One by one, the elements that characterize the perception of risk emerge, and must be considered to manage risk communication in a conscious way. The elements that increase or mitigate fear and risk perceptions are:

Voluntariness: If the risk is taken voluntarily it seems to be perceived as lower. This is applicable to smoking, driving fast cars and practicing dangerous sports. If the risk is imposed by others (external forces) or uncontrollable, it is perceived as greater. The risk of COVID-19, like of all epidemics, is not only involuntary, but clearly uncontrollable by individuals, and difficult to control even by the health authorities and governments.

Knowledge: An unusual risk is perceived as more frightening, and the novel Coronavirus circulating in these times has been presented as a completely unknown virus, with testing that had to be newly developed to detect it, and without remedy to cure it. A risk of natural origin provokes less fear than one caused by a

human, and conspiracy theories that accompany the novel threat increase the feeling of discomfort and fear. A reversible risk is perceived as associated with less anxiety as compared to an irreversible risk. And a risk that comes with benefits could also be acceptable, as is the case e.g. for technologies/industries that create jobs or provide services while impacting on social justice, where social decisions need to be balanced against different needs and values. In the case of the novel Coronavirus, we see how individuals, communities, countries suffer from disadvantages. The fear of death hangs over all the infected - regardless of the lethality rate.

Visibility: an invisible risk factor is perceived as more hazardous than a visible one (e.g., a chemical plant, an incinerator, or radio base stations).

Trust: If there is any confidence in those managing the risk at all, it is at present not perceived as high. In the case of COVID-19, many individuals raise their voices, even in an opportunistic way, to undermine the credibility of health institutions. Once trust is lost, it is very difficult to regain it. Divergences within the scientific community in an emergency situation can have devastating effects, if they don't produce a consensus. Public authorities need to pay particular attention to sharing knowledge, finding alliances in society and building confidence – which in turn would reduce the fear.

Fear is inherent in the COVID-19 characteristics and not completely manageable, especially with generic call to dominate fear, and an excess of public concern around the difficult management of such a complex problem cannot be avoided.

The role of the factors identified above appears crucial to plan communication actions suitable for the next delicate phase. Communicating strategies and the application and effectiveness of different protective measures for different age groups and individuals with different health conditions. The active involvement of communities - which are showing extraordinary creative, mobilization and support skills - can transform the sense of outrage into an assumption of personal and collective responsibility.



Knowledge can mean growth of collective awareness increase of self-efficacy and empowerment contributing to political decision-making. Mutual trust and the reliance on local communication networks between peers could exponentially increase the possibilities of applying flexible measures. Attention to the aspects of equity, respect for rights and privacy should be maximized, and the war metaphors should be shifted

towards health and wellbeing-promoting concepts linked to healing, collaboration and solidarity.

To summarize, in cases characterized by high risks, uncertainty and stakes, working adequately on perception and fear seems to be crucial in risk governance.

PRIORITIES OF ENVIRONMENTAL EPIDEMIOLOGY STUDIES IN ITALY, RELATED TO THE SARSCOV-2 VIRUS EMERGENCE

Liliana Cori, Fabrizio Bianchi, Institute of Clinical Physiology, National Research Council, Pisa, Italy

Among the research priorities in the environmental health domain, the recent worldwide diffusion of Covid-19 urged towards a re-orientation, to contribute to preventive and control measures.

With reference to the relationship between exposure to air pollution and Covid-19 the research question to answer may be: "Can exposure to air pollution, both chronic and acute, have an effect on the probability of infection, the appearance of symptoms and the course of the Covid-19 caused by SARS-CoV-2?". To answer such a complex question, studies based on individual knowledge of the determinants of Covid-19 disease are required. Reliable data on the spread of SARS-CoV-2, on the evolution and comorbidities of Covid-19, on the main cofactors that can act as confounders and effect modifiers, including exposure to pollution, need be considered in advanced epidemiological design studies.

Studies of this type are being activated in Italy by a collaboration agreement between the National Institute of Health (Istituto Superiore di Sanità), the National System for the Environmental Protection (SNPA) and the Italian Network on Environment and Health (RIAS project by the Ministry of Health, including the National Research Council).

To study patterns of spread of infectious disease and environmental interactions, the epidemiology of communicable diseases and environmental epidemiology should go hand in hand. Researchers are challenged by informing and supporting authorities on acquired knowledge and practical implications and sharing the results within and outside the scientific community. In a difficult context like the one we are living, researchers should reflect about science and be aware of risks and opportunities of disseminating results in a fair modality. Also the importance of understanding risk perceptions in these unprecedented times shouldn't be disregarded, to improve health risk communication, build trust and contribute to collaborating governance.

In conclusion, the basis for the primary prevention of health damage from air pollution is robust evidence on the causal relationships that is already available. Waiting for the results of etiological studies the notion that the pollution increases the susceptibility of vulnerable people or acts as an effect modifier towards Covid-19 should be communicated in order to further strengthen the need to decrease the level of exposure of the population as a whole.



Consiglio Nazionale
delle Ricerche

COVID-19: ANSES'S NEWS

Faced with the unprecedented situation generated by the epidemic, ANSES has adapted its organisation to enable it to continue fulfilling its health missions and since the beginning of the pandemic, ANSES has been making its expertise available to public decision-makers for the prevention of COVID-19-related

Health risks. The Agency has also been offering its expertise in its specific areas of competence – food and nutrition, animal health, occupational health, etc. – to provide the public with useful guidelines on how to organise daily life and protect health during this period.

Domestic animals and COVID-19 transmission

ANSES first looked at potential transmission of the COVID-19 disease via contaminated domestic animals or food in March concluding that in light of the scientific knowledge available, there was no evidence that pets or livestock play a role in the spread of the SARS-CoV-2 virus causing this disease: [COVID-19 cannot be transmitted by either farm animals or domestic animals](#). The initial findings of investigations into the possible infection of pets during COVID-19 outbreaks and experimental inoculation models of certain domestic animal species led the Agency to update its expert appraisal in April. After taking this new information into account, ANSES nevertheless considers that there is

currently no scientific evidence showing that domestic animals (livestock and pets) play an epidemiological role in the spread of SARS-CoV-2. Link to the ANSES news update: [COVID-19: domestic animals play no part in transmission of the virus to humans](#)

Diet, lockdown: good practices for everyday life

The lockdown imposed to combat the spread of the COVID - 19 epidemic has turned our way of life upside down. Sedentary behaviour, food hygiene, use of disinfectant products... ANSES warned about certain unsafe practices and offered solutions on how to protect health despite the constraints. See the links to:

- [Coronavirus: ANSES's recommendations on food, shopping and cleaning](#)
- [Ensuring sufficient vitamin D intake through diet during lockdown](#)
- [Good practices for preventing foodborne infections during the lockdown](#)
- [Keep up physical activity and limit sedentary behaviour: ANSES adapts its guidelines to the lockdown situation](#)
- [ANSES warns against taking food supplements that could lower the body's immune response](#)

French poison control centres reported numerous domestic accidents and poisoning cases related to COVID-19. ANSES provided an update on the situation, together with some recommendations on how to avoid the risks: [COVID-19: beware of poisoning related to disinfection and other risk situations](#)

Preventing worker exposure

Besides the indispensable healthcare activities, a number of jobs cannot be carried out by teleworking during the lockdown. ANSES examined exposure prevention with a view to giving employers recommendations on how to protect their employees. See: [COVID-19: preventing exposure to the virus in the workplace](#)

Limiting the presence of the virus in the environment

Since the slurry-spreading season is now beginning, ANSES received an urgent request to determine the potential risks associated with the agricultural use of sewage sludge produced during the COVID-19 outbreak. At this stage, on the basis of the data currently available, ANSES recommends that sewage sludge produced during the epidemic episode should not be spread without first being disinfected. See: [Sewage sludge produced during the COVID-19 epidemic can only be applied to fields after disinfection](#)

ANSES activities on coronaviruses

Understanding the mechanisms that enable an animal virus to acquire the ability to infect other animal species or humans, known as crossing the species barrier, is a major area of activity for ANSES. Several of the Agency's laboratories work on this topic for various pathogenic agents, including coronaviruses affecting dogs, cats and poultry and also trying to determine the exact role played by wild animals in the transmission of these viruses. Thanks to their expertise in this area, ANSES teams involved in studies on animal coronaviruses work in conjunction with other teams in research organisations in France (*INRA-National Veterinary School of Toulouse, Institut Pasteur, University Hospital Centre of Caen*) and with other European teams to develop various national or European research projects on the relationships between animal and human coronaviruses.



START OF A NEW PROJECT TO PROMOTE HUMAN BIOMONITORING

The German Environment Agency (UBA) is funding a new project called "Human Biomonitoring – using new evidence for better protection from chemicals" which started in April 2020 and will end in December 2021. The project is being carried out by CHEM Trust Europe, a non-profit organisation based in Germany, working in

close collaboration with CHEM Trust, an NGO based in the UK. CHEM Trust's joint mission is to prevent man-made chemicals from causing long term damage to wildlife or humans, by ensuring that chemicals which cause such harm are substituted with safer alternatives.

The project aims to make the tool of human biomonitoring (HBM) more widely known among German stakeholder organisations working on health and environmental issues, policymakers as well as the general public. The focus will be on the potential of HBM for improving chemical risk assessment and improving chemical policy at national and EU level.



The project comprises various activities. The first activity will be a webinar addressed to NGOs that informs them about human biomonitoring in general and presents and reflects on the ongoing activities of the [HBM4EU project](#) and its first results. Furthermore, a roundtable event in Berlin is currently scheduled for early 2021, bringing together policymakers, scientists and NGOs to discuss the need for further policy action, for the better protection of nature, wildlife and humans from harmful chemicals. Information for the general public will be produced based on selected results of the HBM4EU project as online leaflets. In addition, a feedback from the results of the [stakeholder](#) discussions to the HBM4EU is also envisaged to further shape the interface between science and society. Lessons learnt will be shared in the course of the project in order to make them available to other countries, which might consider using a similar approach to make the advantages and the potential of human biomonitoring known in their country. More information can be obtained via e-mail: cteurope@chemtrust.org.

THE BELGIAN COLLABORATION IN ENVIRONMENT AND HEALTH

For the last 17 years, the different government authorities in Belgium have collaborated intensely on the impact of the environment on health. Over the years, this collaboration has led to several projects and studies, the founding of permanent working groups and participation in various European projects.

The National Cell and NEHAP

Belgium has a specific administrative structure in which both the federal government, the communities and the regions have competences relating to environment and health. The various levels of authority work together to tackle the problems of environment – health as effectively as possible.

This collaboration is represented by the 'national cell environment-health', a body in which each Belgian Minister of the Environment and Health has an administrative representative.

The Belgian collaboration on environment – health is based on NEHAP, the national environment health action plan. The national cell drew up a NEHAP in 2004, describing the practical modalities and objectives of the collaboration. To this day, NEHAP is the working tool with which the national cell carries out its work.

The projects and working groups

Over the years, the national cell has launched a number of projects and studies on the impact of the environment on health, some of which cover:

- air quality in day-care facilities
- cities and pollution
- childhood cancer and the environment
- nanotechnology and health

Currently, the national cell is working on an e-learning training of healthcare professionals on environmental medicine. An earlier study has pointed out that health professionals still do not make the link between the environment and the specific illnesses and disorders of their patients. The national cell is currently developing a set of e-learning modules to train health professionals. With this training, the national cell aims at a better diagnosis and consequently a more adequate treatment of environment related diseases.

Another substantial project the national cell is currently working on is the monitoring of exotic mosquitoes in Belgium. The presence of exotic mosquitoes such as the tiger mosquito is rising in Belgium. These mosquitoes can potentially transmit viral diseases to humans such as zika, chikungunya and dengue. The current covid19 pandemic indicates the need for such monitoring. It is important to know where exotic mosquitoes may be located in order to prevent the possible outbreak of vector-borne virus diseases as efficiently as possible.

In addition to these projects, the national cell also oversees the work of 3 working groups:

- Ozone and Heat
- Exotic mosquitoes and other vectors
- Human Biomonitoring



PARC, HBM4EU and Democophes

The national cell has been coordinating the Belgian participation in human biomonitoring projects for years. The national cell participated in the Democophes project; the Democophes samples are now being used for the HBM4EU project. For HBM4EU, the national cell is now researching the presence of DINCH, phthalates, bisphenol S, bisphenol F and PAHs in the urine samples of mothers and their children who made their samples available to the DEMOCOPHES project in 2011. The results of this study will be available in 2021.

The national cell is strongly committed to PARC. The Belgian partners in PARC have provided their input to the concept paper. For the Belgian contribution to PARC, a working group has been set up, whose pilots work for the Flemish Region and the co-pilots for the federal government.

In addition to the environmental and health actors, the working group has also been expanded to include people from the federal public service Economy, the federal public service Employment, the federal food agency, the federal agency for medicines and the Flemish waste agency. The national cell will continue to oversee and coordinate the work of this working group.



PERCEIVING THE PHYSICAL LIVING ENVIRONMENT IN THE NETHERLANDS ANNOYANCE INVENTORY 2016

van Poll, R., et al. (2020). "Perception of Living Environment in the Netherlands: Disturbances Survey 2016." RIVM-report 2020-0075 (in English).

The National Institute for Public Health and the Environment (RIVM), in collaboration with Statistics Netherlands (CBS), carried out the seventh 'Inventory of Disturbances' (IV-7) in 2016. It was commissioned by the Ministry of Infrastructure and Water Management. The IV-7 is a questionnaire survey among a representative sample of residents of the Netherlands on how they experience their physical living environment. The survey examines environmental aspects such as sound, odour and vibrations, satisfaction with their living situation, anxiety and their opinion on the state of the living environment. The government closely monitors the development of disturbance in the living environment as well as satisfaction and concern about the living environment.

In the autumn of 2016, more than 8,000 Dutch residents aged 16 and older completed an 'on-line' survey. They answered questions on the annoyance and degree of sleep disturbance from more than 60 different sources of sound, odour and vibrations.

The main causes of noise annoyance are road traffic, noise produced by neighbours and air traffic. These are the same top 3 that were found in previous inventories of disturbances. Within road traffic, it is the roads with speed limits up to 50 km/h and mopeds and scooters that cause the most noise annoyance. The percentage of people who are disturbed by this is higher in the western part of the country and in the province of Limburg.

Noise annoyance caused by neighbours is difficult to address with policy measures. This is also evident from the figures on annoyance, which have remained stable over the years. Contact noises (walking stairs, slamming doors, hard floors) and outdoor activities are the main causes of noise annoyance. Noise and odour annoyance often go hand in hand with outdoor activities when the use of BBQs and fire baskets is involved. Odour annoyance caused by neighbours occurs more often nationwide than annoyance caused by factories, companies and the agricultural sector. Odour caused by commercial activities has clearly declined since the beginning of the century.

There is a clear reduction in noise annoyance caused by military air traffic, while annoyance due to civilian aviation has remained about the same at the national level.

Noise annoyance caused by train traffic is not among the top 3 at the national level, while rail transport may cause a lot of noise annoyance at the local level. This has to do with the reduction in the number of people who live near the railroad compared with the number of people who live near roads. The most severe noise annoyance is particularly noticeable in the vicinity of rail lines with a lot of freight traffic, often in combination with annoyance caused by vibrations. Research specifically aimed at nuisance near railways also shows that freight trains are more annoying than passenger trains.



Odour annoyance is mainly caused by neighbour's activities, in which combustion processes (barbecue, fire pits, fireplaces and all-purpose burners) play an important part. At the national level, the odour nuisance has decreased in recent decades due to business activities. This applies to factories and companies as well as to the agricultural sector.

Road traffic is by far the most important source of annoyance due to vibrations, followed by construction and demolition activities, and aircraft and helicopters. Wind turbines are a source of complaints at local level, but are still a minor source of nuisance due to vibrations at national level.



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Sleep disturbance caused by sounds is less common than noise annoyance. But the potential health effects are greater, which makes the impact on the Dutch population greater. For most sources of noise, the developments in sleep disturbance are equivalent to the noise annoyance. The top 3 sources of noise that cause sleep disturbance are road traffic, neighbours and recreational activities. Sleep disturbance caused by air traffic mainly occurs in the vicinity of Schiphol Airport and less near the other civilian airports. This is related to the small number of night flights at the regional airports. However, there is a striking increase in sleep disturbance caused by helicopters flying overhead, particularly in the western part of the country.

The survey includes several new sources that may cause nuisance now and in future. It is noteworthy that 8% of the population indicates experiencing at least some annoyance from low-frequency noise, described as a low, buzzing or humming sound from e.g. ventilation or air conditioners. The percentage of sleep disturbances is virtually the same as the percentage of people who are annoyed. It is difficult to speak of a single source for low-frequency sound since the cause of the nuisance cannot be clearly identified in many cases. But the extent of the problem indicates that the disturbance needs to be seriously considered in government policy.

HEALTH RELATED ENVIRONMENTAL MONITORING IN SWEDEN RIKSMATEN ADOLESCENTS 2016–17.

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The Swedish EPA is a governmental agency with a vision of achieving “A good environment for people and all living things, now and for future generations”. We have the overall responsibility for coordinating the national and regional environmental monitoring, which includes ten program areas. One of these areas is the program for Health-related Environmental Monitoring – HÄMI. The program started in 1993 and the focus is to estimate human exposure of hazardous substances from the environment that can affect the human health. Children, adolescents and women are regularly studied and for which time trends exist. Examples are Pb in children, Cd in middle aged women, PFAS, phthalates and BFRs in first-time mothers. Studies are also performed to link exposure to possible health effects by evaluating certain health indicators. The results that are generated within HÄMI should be able to show trends in human exposure, identify needs of action and to show effects of actions taken, e.g. from regulatory work.

The results are also used for international environmental reporting. Further, within the program pollutants in air are studied to make correlations with e.g. asthma, as well as exposure studies using personal sampling. Exposure of noise is also an example of data generated by HÄMI.

The studies within HÄMI are performed as collaborations with other agencies. The national representative, cross-sectional dietary survey Riksmaten adolescents 2016–17 was performed by the Swedish Food Agency during the school year of 2016–17 and the chemical analyses were financed by HÄMI. Details of the study design and sampling procedures are described elsewhere [1, 2]. Briefly, students in grade 5, grade 8 and 2nd year of high school (mean ages 12, 15 and 18 years) were recruited from representative Swedish schools. All types of municipalities were represented in the survey and overall, the geographic distribution corresponded to the underlying population.



Information on diet and background information was collected with questionnaires and with a web-based method where participants retrospectively registered 3 days of food consumption. Information on physical activity, health, and socioeconomic background was also collected. A total of 3,477 students (68% of the invited) participated in the dietary survey. 40% of the schools were randomly selected for blood and urine sampling. Complete dietary information and valid blood and urine samples were available from 1,105 of the 2,377 students that were invited to sampling.

Markers for nutritional status, HDL and LDL- cholesterol as well as a wide range of contaminants were analysed in the blood and urine samples. The analysed substance groups included mycotoxins, chlorinated and brominated persistent organic pollutants, per- and polyfluoroalkyl substances (PFAS), metals and metalloids, phthalate metabolites and phenolic substances (e.g. bisphenols and metabolites of some pesticides).

Data on iodine, ferritin, folate and 25-hydroxy vitamin D status are presented in a Swedish report [3]. In addition, in-depth analysis of mycotoxin data has been performed and published [4]. Results from the analyses of other contaminants have been compiled in a report that also investigates possible differences in contaminant concentrations between age groups, geographical regions and genders [2].



SWEDISH ENVIRONMENTAL PROTECTION AGENCY

The Swedish Food Agency will, in collaboration with researchers at universities, continue to evaluate data from Riksmaten Adolescents 2016–17 through studies on the association between contaminant levels and factors such as diet, sociodemographics, lifestyle and health. Evaluations of heavy metals and per- and polyfluoroalkyl substances in relation to consumption of different food groups and drinking water is already in progress [5, 6]. Riksmaten Adolescents 2016–17 is also part of a research project on chemical mixtures and of a project investigating effects of per- and polyfluoroalkyl substances on health. In addition, Riksmaten adolescents 2016–17 is one of the aligned studies on teenagers within HBM4EU and the data will also be included in the upcoming report regarding human health in the Arctic, provided by the Arctic Monitoring and Assessment Programme (AMAP).

Altogether, biomonitoring data from Riksmaten adolescents 2016–17 provide unique information that will be important for risk assessment and risk management as well as for monitoring of contaminant exposure on national and international level.



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UPCOMING MEETINGS

Multiple exposures in environmental health – a digital happening this autumn

On October 7th 2020, the ERA-ENVHEALTH open conference will be conducted, this time online. For more information visit:

<https://www.folkhalsomyndigheten.se/2020-era-envhealth-open-conference/>

Folkhalsomyndigheten.se

2020 ERA-ENVHEALTH OPEN CONFERENCE

Multiple exposures in environmental health

Folkhalsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN

Programme **Registration** **The setting** **Contact**

7 October 2020

Multiple exposures in environmental health – an integrated approach for equity and sustainable development

The Public Health Agency of Sweden and the Swedish Environmental Protection Agency jointly welcome you to the broadcast of the 2020 ERA-ENVHEALTH Open Conference.

Interaction with the participants will be enabled through an app adapted for this event.

We welcome all members of the ERA-ENVHEALTH network, representatives from local, regional and national levels as well as research institutions with an interest in environmental health to:

- An inspirational, solutions-oriented day showing good examples of synergies in policy and interdisciplinary method development in research.
- A pan-European conference with an integrated approach on exposure including socioeconomic and multiple physical and chemical environmental factors.
- A forum for exchange of experiences and for the development and promotion of further collaboration, within and between academia, government authorities and EU-member states.

Credibility of scientific expertise and public decision-making: new challenges for the governance of health risks in a changing world.

This conference marks the 10th anniversary conference of ANSES (Fr). It will be held on **20-21 January 2021** at the Conference Centre of the Cité des Sciences et de l'Industrie in Paris, France.

The Risk-Technology Nexus.

The 2021 SRA-Europe Benelux Chapter Conference will be held on March 23rd, in Eindhoven, Technical University, the Netherlands.



THE ERA-ENVHEALTH NETWORK

The European Environment and Health Action Plan for 2004-10 pointed to a need to strengthen networks between researchers, policy-makers and stakeholders. The FP7 ERA-ENVHEALTH project was set up to bring together European organisations planning research in the Environment and Health (E&H) arena with the objective of providing policy support. ERA-ENVHEALTH's task was to mobilise scientific research in support of European and national policies on E&H issues.

Goals and activities

ERA-ENVHEALTH facilitates better communication and deeper understanding of the drivers and priorities in E&H for both scientists and policy-makers. ERA-ENVHEALTH is a **unique active transnational network** in the E&H field. ERA-ENVHEALTH has shown that transnational collaboration in E&H fills an important niche and the network is an **innovative forum** to discuss challenges, visions and emerging issues. In this respect

- **access to, sharing and communicating information** is a crucial success factor, and
- **joint activities** are essential to promote exchange and collaboration and foster new ideas to enhance the uptake of environment and health issues and co-benefits in different sectors and provide valuable support in tackling the future challenges for better health and well-being.

Join us!

- Become a **member**: signature of the MoU, contribution on a voluntary basis
- Register for the ERA-ENVHEALTH **newsflash**: with regular up-to-date information on E&H activities
- Participate in its **annual conferences** and help build up this innovative discussion forum

The structure of the network is based on “contributing and sharing” and involves no centralised budget; each organisation participates on a voluntary basis.

THE ERA-ENVHEALTH MEMBERS

| Acronym | Name | Country | Logo |
|--------------------|------------------------------------------------------------------------|-------------|------|
| ANSES | French agency for food, environmental and occupational health & safety | France | |
| Centre Léon Bérard | University Lyon 1 | France | |
| CNR | Italian National Research Council | Italy | |
| EPA | Environmental Protection Agency | Ireland | |
| FPS HFCSE | Federal Public Service Health, Food Chain Safety and Environment | Belgium | |
| PHAS | Public Health Agency of Sweden | Sweden | |
| RIVM | National Institute for Public Health and the Environment | Netherlands | |
| Swedish EPA | Swedish Environmental Protection Agency | Sweden | |
| UA | University of Aveiro | Portugal | |
| UBA | German Environment Agency | Germany | |
| UoWM | University of Western Macedonia | Greece | |

CONTACT

www.anses.fr/en/content/era-envhealth-network

Do not hesitate to get in touch with the network either through your national contact point and member of the network or by contacting:

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