MPCMU-STOA joint workshop

Pandemics and other health crises
Lessons learned and future scenarios

Participants’ booklet
PANDEMICS AND OTHER HEALTH CRISES
Lessons learned and future scenarios

Thursday, 30 June 2022, 14:30 - 17:30
Room SPAAK 7C50 European Parliament, Brussels
& online via WebEx Events

Participants’ booklet
Prepared by Gianluca Quaglio, Medical Preparedness and Crisis Management Unit (MPCMU)


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1. Programme

14:30-14:50 | WELCOME AND INTRODUCTION
- Patrizia TOIA, MEP and STOA Panel member
- Etienne BASSOT, Director, Members’ Research Service, DG EPRS, European Parliament
- Kristian KNUDSEN, Director General, DG PERS, European Parliament
- Erika LANDI-GIETEMA, Director, Directorate for HR Support & Social Services, DG PERS (moderator)

14:50-16:00 | PART 1 - HEALTH CRISSES MANAGEMENT: DIFFERENT PERSPECTIVES
Introduction
- Luca RAGAZZONI, Center for Research and Training in Disaster Medicine, Novara, Italy

International organisations and future health crises
- Gerald ROCKENSCHAUB, World Health Organization - Europe, Copenhagen, Denmark
- Isabel DE LA MATA, DG SANTE, European Commission

Health crises within EU Member States
- Raed ARAFAT, Ministry of Internal Affairs, Romania
- Erika VLIEGHE, University Hospital Antwerp, Belgium

Health crises at institutional level and occupational health
- Claudia CHATELUS, Louis Pasteur Hospital, Colmar, France
- Petra CLAES, Medical Preparedness and Crisis Management Unit, DG PERS

16:00-17:10 | PART 2 - DISCUSSION AMONG EXPERTS AND Q&A

17:10-17:30 SUMMING UP AND CLOSING REMARKS
- Luca RAGAZZONI, Center for Research and Training in Disaster Medicine, Novara, Italy
- Eva KAILI, Vice-President of the European Parliament, responsible for STOA and ESPAS
2. Introduction

Background

It has been over two years since 11 March 2020 when the World Health Organization (WHO) announced that the coronavirus disease (Covid-19) had become pandemic (WHO, 2020). Since then, the disease has caused turmoil worldwide, with over 6 million deaths and profound social consequences. The pandemic has revealed serious shortcomings in preparedness and response to health emergencies at global, national, and local levels. Governance at all levels has faced an unprecedented need to interconnect the various complex aspects of society and health systems to manage an appropriate reaction (Nitzan, 2021).

Throughout the pandemic response, scientific advice has been needed to guide policy decisions. Countries and health institutions have relied on existing authorities to collect and translate emerging evidence into action, such as the European Centre for Disease Prevention and Control (ECDC) and the European Medicines Agency (EMA). In addition, temporary Covid-19 advisory groups, task forces, and panels of experts to inform decision making, have been established ad hoc (Heymann, 2022).

More than in previous health crises, the Covid pandemic has exposed weaknesses and highlighted the added value of a coordinated EU health response. The pandemic has demonstrated that there is a need for the EU to improve its capacity to respond to crises and build resilience to future shocks, generally and in specific relation to health.

It is important that the EU should learn from the experience and take action to improve preparedness planning for future epidemics. The present pandemic, by far the biggest public health crisis of the EU’s history, could catalyse the largest developments yet. Such collective action should progress incrementally, with the necessary input from all levels, i.e. international organisations, individual Member States, and local health institutions.

Resilience and health system resilience

After a crisis there is always a risk that public and political attention will move on, forgetting lessons learned and neglecting the needed reforms (Sagan, 2022). The pandemic has challenged global, national, regional, and local capacities to react and prepare. Calls to improve resilience to health threats have been made at each level.

A recent study of the European Observatory on Health Systems and Policies, defines resilience as the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks. Shock is a sudden and extreme change which impacts on a health system. It is different from a predictable health system stress, for example, the ageing population or seasonal flu. A shock cycle has four stages: i) preparedness; ii) shock onset and alert; iii) shock impact and management; iv) recovery and learning (Thomas, 2020).

The study identifies four key strategies for enhancing resilience, namely: i) governance, with effective leadership, vision, and communication, and able to successfully coordinate government and key stakeholders. This governance should be associated with effective information and surveillance systems, enabling timely detection of crises; ii) guaranteeing financial stability within health systems; iii) ensuring a stable and competent health workforce, and; iv) flexibility in delivering health care services (Thomas, 2020).

The assessment of resilience needs a context-specific approach. A regular evaluation of these strategies can allow the identification of actions to enhance resilience at global, national, and local levels.
European Union support for health systems

During the last two years, the European Union has put in place various instruments to strengthen and improve health systems at Member States level. It spans across many policy areas with implications for health and health systems, such as research and innovation, economic, social, and regional policy (Mauer, 2022).

The Recovery Assistance for Cohesion and the Territories of Europe (ReactEU) instrument will have had an increased budget and will be one of the largest programmes under Next Generation EU. By financing health entities directly, it will allow Member States and regions greater flexibility in responding to the ongoing health crisis (EC, 2022a).

Horizon 2020, the past EU research and innovation programme, had pledged over a billion euro for projects responding to Covid-19. The current EU framework program for research, Horizon Europe (2021-2027), will continue to fund basic and public health research (EC, 2022b).

The Pharmaceutical Strategy for Europe aims to modernise the regulatory framework and to support pharmaceutical research and technology. Its objectives include fulfilling currently unmet medical needs, supporting a competitive European pharmaceutical industry, and the diversification of medical supply chains, improving crisis-preparedness (EC, 2022c).

The pandemic has a major impact on patients, medical and healthcare staff, and health systems in Europe. The new health programme, EU4Health, can improve public health, expand access to healthcare, and bring innovation to EU health systems beyond the present Covid-19 crisis (EC, 2022d).

The European Health Union concept touches on competences at different levels. For example, the European Health Union has produced a new Regulation on Cross-Border Health Threats, which provides a more comprehensive framework for EU action on preparedness, early warning, and response. It has also expanded the mandate of two key EU agencies, the European Centre for Disease Prevention and Control (ECDC) and the European Medicines Agency (EMA), to assist with implementation. Further, a new Health Emergency Preparedness and Response Authority (HERA) has been established, aimed at improving the EU response to cross-border health threats (EC, 2022e).

Pandemic at international level

During the Covid-19 pandemic a multitude of initiatives to better prepare for the future has been implemented. While not denying their value, a treaty under the auspices of WHO would build coherence and avoid fragmentation.

Equitable access to safe and effective medical countermeasures, such as vaccines, therapeutics, and diagnostics should be guaranteed, increasing global production, and strengthening supply chains and regulatory distribution systems. In view of the cross-border nature of communicable diseases, it is necessary that relevant knowledge be available worldwide as rapidly as is possible. A new multilateral framework for sharing surveillance and monitoring data, genetic data and pathogens.

Concerning future health crises, the latest Global Health and Security Index report recommends that international health organisations should identify countries that may benefit most from additional support to improve their readiness for future health emergencies. Organisations should work with countries to make more data available to assess the strength of health systems. The report also recommends the formation of a dedicated international normative body to promote the early identification and reduction of global biological risks, improving coordination at all levels (Bell, 2021).
Pandemic at national level

Effective national responses to Covid-19, in the EU and worldwide, depend on multiple interrelating factors: efficient government, competent multi-level governance organisation, with rapid coordination, expedient scientific advice, and resilient health systems (Haldane, 2021). During the pandemic, coordinated health service and public health functions have been carried out, including testing, contact tracing, quarantine, vaccination, medical treatment, and socio-economic supports (Heymann, 2022).

Focussing on the long-term preparedness, there is a need for better mechanisms for sharing data, establishing preparedness plans and surveillance systems.

Concerning future health crises, the latest Global Health and Security Index report recommends that countries should guarantee adequate financial support for health systems, increase transparency for global prevention, detection, and response to epidemics. Further, countries should conduct comprehensive after-action Covid-19 pandemic analysis so that they can learn from this crisis.

Pandemic at medical services and occupational health

During the pandemic, in addition to public health measures, appropriate occupational health responses have been needed (Burdorf, 2021). The Medical Service of the Parliament, as well as the medical services of many other European institutions and agencies, transformed their services overnight to centre on Covid-19. Different activities have been implemented, including case management, contact tracing, vaccination, virtual occupational health, mental health support, risk reduction for Covid-19, and management of essential employees for business continuity.

The emergency services provided for on-site employees were kept in place. Non-medical interventions aimed at guaranteeing the best health conditions for employees have been progressively modified, taking into account the national epidemiological situation. The return-to-work approach has been adapted according to individual circumstances, the psychological effects of the pandemic, and varying risks of contamination in different occupations.

Occupational health services may play a role not only in responding to, but also in preparing for pandemics and health crises in general, managing concerns of their employees, conducting business continuity planning, and occupational risk assessment (Fadel, 2020).

Aims and structure of the workshop

Lessons from this crisis must be learned, and the necessary changes made at all levels, both in terms of improving collaboration and strengthening health systems. Making the link from recovery and learning from a previous crisis to preparedness for future crises is critical, but is often neglected. Once an emergency has passed, general attention typically returns to dealing with day-to-day system management, and the opportunity to learn from the crisis and to improve is missed.

This workshop will explore the modalities of response and preparation to the Covid pandemic, and to health crises in general. The event, requested by the STOA Panel, is organised in collaboration with the Medical Preparedness and Crisis Management Unit (MPCMU).

The workshop will consider actions at different levels: international organisations (global level), EU Member States (national level), and health services (local level). It provides an opportunity to look back at several initiatives taken during the pandemic, and to draw inspiration from them.

After the welcome section, the workshop is divided into two parts: in part I, speakers describe their experience, and the actions implemented by their institutions/organization during the pandemic. Part II centers on the three questions in the box below, which the panelists have been asked to answer.
1) Health system resilience is key to coping with catastrophic events, such as the economic crisis and the COVID-19 pandemic. Four key strategies have been suggested for enhancing resilience, namely: i) governance, with effective leadership able to coordinate government and key stakeholders; ii) guaranteeing financial stability within health systems; iii) ensuring a stable health workforce, and; iv) flexibility in delivering health care services. Based on your experience, what are your reflections on these four key strategies?

2) Based on your experience, what have been the biggest challenges in managing the pandemic?

3) From your perspective, what are the foremost 2-3 elements that you would like to see implemented to better deal with a new pandemic and more generally deal with new health crises?
References


Manastirliu O, et al. The world must act now to be prepared for future health emergencies. BMJ 2021;375:n2879


3. Welcome and introductory statement

3.1 Patrizia TOIA, MEP and STOA Panel member

Patrizia Toia worked as Director of the Planning Service at Lombardy Region. She served as regional councillor, Member of the Chamber of Deputies and of the Italian Senate as well as Undersecretary of State for Foreign Affairs and Minister for European Affairs and for Relations with Parliament.

In 2004 she was elected at the European Parliament. Member of the S&D Group, she is Vice-Chair of the ITRE Committee.

Patrizia Toia was born in Pogliano Milanese (Milan); she is graduated in Political Science at the University of Milan. She worked as Director of the Planning Service at Lombardy Region. She was regional councillor in Lombardy, with different responsibilities (Health, Budget).

She was Member of the Chamber of Deputies and in 1996 she was elected at the Senate of the Republic. She held various institutional positions: Undersecretary of State for Foreign Affairs with responsibility for Latin America, Asia and Oceania, Relations with the United Nations, Human Rights, Migration and Italians abroad, in 1999 she was appointed Minister for European Affairs and Minister for Relations with Parliament.

In 2004 she was elected at the European Parliament, confirmed in 2009, 2014 and 2019 Member of the Group of the Progressive Alliance of Socialists and Democrats (S&D), she is Vice-Chair of the Committee on Industry, Research and Energy. She is also substitute member of the Committee on Development and of the Committee on Transport.

KEY MESSAGE

It is absolutely crucial in the areas of healthcare, infectious diseases and health crises, that policymaking be guided by scientific and clinical evidence. As in previous crises, the Covid-19 pandemic has exposed weaknesses and highlighted the added value of a coordinated EU health response. The pandemic has demonstrated that there is a need for the EU to improve its capacity to respond to crises and build resilience to future shocks, both generally and in specific relation to health.

The pandemic has challenged global, national, regional, and local capacities to react and prepare. Calls to improve resilience to health threats have been made at each level. It is important that the EU should learn from the experience and take action to improve preparedness planning for future epidemics. The present pandemic, by far the biggest public health crisis of the EU's history, could catalyse the largest developments yet. Such collective action should progress incrementally, with the necessary input from all levels, i.e. international organisations, individual Member States, and local health institutions.
3.2 Etienne BASSOT, Director, Members' Research Service, Directorate-General for Parliamentary Research Service (DG EPRS), European Parliament

Étienne Bassot has been a manager in the field of research for the European Parliament for thirteen years.

He is currently Director of the Members' Research Service at EPRS.

The Members' Research Service responds to specific requests from individual Members for information, analysis and research and provides briefing notes and other analysis and research for Members collectively on policies and issues.

Prior to taking up this position, Mr Bassot directed the Policy Department of the European Parliament’s Directorate-General for External Policies.

Within the Parliament, he previously held positions in the secretariats of the Committees on Internal Market and on Development.

He served as advisor to former European Parliament President Nicole Fontaine from 2000 to 2002.

He is graduate and post-graduate of the Universities of Nancy and Saarbrücken in law and European studies.
3.3 Kristian KNUDSEN, Director General, Directorate-General for Personnel (DG PERS), European Parliament

Kristian Knudsen has 19 years of management experience in the European Parliament, at Head of Unit, Director and Director-General level. Since December 2016, he has been in charge of the Directorate-General for Personnel.

He started his career in the European Institutions as a lawyer-linguist, worked as a référendaire to the Danish Judge at the Court of First Instance, before joining the European Parliament. He was actively involved in the setting-up of the Directorate for Legislative Acts of the European Parliament, where he became Director in 2010.

In 2014, he took over the responsibility for the Directorate-General for the Presidency, and in 2016 he was Head of Cabinet to Martin Schulz, President of the European Parliament. Kristian Knudsen holds a law degree and was admitted to the bar (High Court) before joining the Institutions. He has taught civil law and company law at university.

KEY MESSAGE

When the Covid-19 pandemic hit the World early 2020, few had predicted that we would see a crisis of that scale. Nevertheless, the European Parliament was able to adapt to the situation and continue almost immediately its functions as a legislator. This was first and foremost due to the high level of agility and creativity within the organisation.

Agility will also be key for future crises in order for us to adapt quickly to new and unexpected situations. We already have come a long way during the pandemic but there is still room for manoeuvre. If we look back at what we could have done better, there were situations where society could have reacted faster. Therefore, we need to strengthen Parliament’s foresight capacity and develop a reliable methodology to address crises that can be adapted in an agile way to a concrete crisis and prepare appropriate solutions to guarantee business continuity.

From an early stage we should have an idea as to not only how we enter into a crisis management mode but also how we get out it again. It is also important to have a global view on a crisis situation and take into account not only the immediate threat but also “side effects”. For example, during the COVID-19 pandemic, it became clear only after some time that the crisis had long-term mental health consequences because of isolation, etc.

Although we should enhance our foresight, there will always be crises that we cannot predict. However, the experience gained during the COVID-19 pandemic will stand us in good stead when we develop a methodology to react to future crises.
4. Moderator & Speakers

4.1. Erika LANDI-GIETEMA, Director, Directorate for HR Support & Social Services, Directorate-General for Personnel (DG PERS) (moderator)

Erika Landi is the HR Support and Social Services Director in DG Personnel since August 2016. Her responsibilities include occupational health services, absence management, social services, prevention and wellbeing, equal opportunities, diversity and inclusion. Projects of her Directorate include early support and return to work after long illness, early conflict resolution, mental health management strategies, risk analysis, psychosocial support, gender mainstreaming and women in management, disability and diversity management. Erika Landi is the Director responsible for Coronavirus support and care for the EP community.

Erika Landi has an extensive experience in the field of human resources. She led the Training Unit in the European Parliament from 2009 until 2016, with a team of 35 staff in Luxembourg and Brussels. During this time, she successfully introduced projects on talent management and leadership development, executive coaching, and revamped the eLearning and Learning Management System. She also redesigned the EP learning offer including training for accredited parliamentary assistants, induction training, management training and inter-institutional cooperation programmes.

Her career in the European Institutions began in 1988 as a Translator in the Dutch translation team with working languages German, Italian, English, French and Greek, into Dutch. In 2000, Erika joined the Director General for Personnel as an Advisor and was responsible, in the framework of the revision of the Staff Regulations in 2004, for working groups on working time and leave, disciplinary procedures, invalidity, individual entitlements, and on staff missions.

Erika’s academic background comprises a master in German language and literature and a bachelor in philosophy from the Leiden University in the Netherlands, and she is a Chartered Fellow of the British Chartered Institute of Personnel and Development.
4.2. Luca RAGAZZONI, Scientific Coordinator of CRIMEDIM, Center for Research and Training in Disaster Medicine, Humanitarian Health and Global Health, WHO Collaborating Center of the Università del Piemonte Orientale, Novara, Italy

Luca Ragazzoni, MD, PhD, is the Scientific Coordinator of CRIMEDIM – Center for Research and Training in Disaster Medicine, Humanitarian Health and Global Health, World Health Organization (WHO) Collaborating Center of the Università del Piemonte Orientale, Novara, Italy.

Professor Ragazzoni is a medical doctor specialized in Anaesthesiology and Intensive Care, and PhD in Disaster Medicine. He has been deployed to several disasters-stricken areas and humanitarian response efforts as head of mission or training advisor for the United Nations, Governmental, and Non-Governmental Organizations.

Professor Ragazzoni is director of the European Master Disaster Medicine (EMDM), an advanced master jointly organized by the Università del Piemonte Orientale and the Vrije Universiteit Brussel.

He is the principal investigator of several European founded projects and international research studies in the field of disaster medicine, humanitarian aid and global health in collaboration with regional, national, and international institutions and organizations, United Nations Offices and Agencies.

Professor Ragazzoni is member of the team of experts designated by the Italian Ministry of Health with the task of guiding the process of monitoring, evaluation and updating the national strategic-operational plan for preparation and response to a 2021 - 2023 influenza pandemic.

He is the author of more than 100 peer-reviewed articles published in international scientific journals and widely presented at national and international congresses.

**KEY MESSAGE**

**Question 1.** The emergence of complex global health crises such as disasters and climate change, conflicts and humanitarian emergencies, migrant and refugee surges, outbreaks of emerging infectious diseases and the global rise of antimicrobial resistance is expected to result in an unprecedented increase in direct and indirect morbidity and mortality in the next years.

Despite the emergence of these complex global challenges, their varied health consequences are usually not considered and managed under a unified disaster/crisis approach. Studying and managing different types of disasters and crises with a strong focus on health as requested by the Sendai Framework for Disaster Risk Reduction will be of paramount importance during the next years. Besides, the number of policy makers, managers, practitioners, and research scientists with specific competencies in achieving this goal is currently very limited at global level.

As a matter of fact, if we analyse the COVID-19 pandemic through the lens of disaster medicine,
which means applying the founding principles of this discipline to the current pandemic, we can understand what went wrong and what to improve in preparing for a possible future global health crisis. Applying the founding principles of disaster medicine to the current pandemic means ensuring a systematic approach that helps to improve the response. The pandemic has taught us that in the future it will be essential to focus our efforts on disaster mitigation and preparedness.

**Question 2.** According to my personal experience and the results of research studies we performed during the pandemic, the shortage of healthcare workers was the main challenge experienced during the pandemic. The importance of having an adequate centralized management of human resources to guarantee coordination and integration of healthcare workers at multiple levels was a fundamental lesson learned.

The lack of adequately trained healthcare workers on the correct use of PPE and on general principles of disaster medicine, especially at the beginning of the pandemic. These challenges were experienced by hospitals as well as primary care centres. Several difficulties in ensuring workplace safety during the pandemic were reported, mainly due to the shortage of PPE and the inadequate IPC measures.

The contact-tracing activities put in place by the public health authorities to contain the spread of the virus was inadequate. The dearth of healthcare workers and a lack of coordination/integration among primary care centres and public health services emerged as possible reasons for the weakness of the public health campaigns. The weakness of the primary care system has been a crucial issue throughout the pandemic. The lack of interaction between hospitals and primary care has led to sub-optimal outpatient management.

**Question 3.** The foremost 2-3 elements that I would like to see implemented to better deal with a new pandemic are as follows:

- The establishment of a unified disaster/crisis approach which takes into consideration the health consequences, the health systems and the health workforce for all the types of disasters and health crisis. Health must be included in the disaster risk management processes at any level for any disasters.
- The development of a new generation of health crisis managers with advanced competencies for performing disaster and global health crisis-related management, research and development.
- The introduction of disaster medicine and global health teaching in medical, nursing and health professional school programs worldwide in order to create a future well-trained health workforce.
4.3. Gerald ROCKENSCHAU, Regional Emergency Director, World Health Organisation (WHO) Europe, Copenhagen, Denmark

Dr. Gerald Rockenschaub is a medical doctor with a medical degree from the University of Graz in Austria. As Regional Emergency Director (RED) he is coordinating WHO Europe’s work on emergencies, supporting Member States in their efforts to build sustainable prevention, preparedness, response and recovery capacities, and to strengthen health system resilience.

He joined the World Health Organization in 2004 as Regional Adviser and Program Manager; for over 10 years he oversaw emergency preparedness and humanitarian response activities for the WHO Regional Office for Europe.

From 2014 till 2021, he was the head of the WHO office for the occupied Palestinian territory (West Bank and Gaza Strip), and more recently he served as the WHO Representative in Albania.

Prior to that he supported medical relief operations for the Red Cross in Ethiopia, and managed health programs for NGOs and the Austrian development cooperation in the Middle East and in Balkan countries.

During his clinical career he trained as primary care physician and completed a specialization in general surgery, followed by several years of clinical work in surgery and emergency medicine. He has a master’s degree in public health (MPH) from Boston University, with a focus on Health Services Management.

KEY MESSAGE

Question 1. The key issue from my perspective is governance – we need to ensure that based on the lessons learned from the pandemic we build robust global, regional, national and local governance arrangements that are grounded on equity, inclusivity and coherence. It is essential for everyone to understand that solidarity is crucial to meet the challenges of the current - and a potential future pandemic, and we need a new global and regional architecture to ensure that accountability.

Question 2. Apart from the lack of solidarity - a major challenge was and is around communication, with an info-demic related to misinformation getting into the way of science and evidence based facts. Risk communication and community engagement are crucial.

Question 3. We need highest level of political commitment, a renewed emphasis on preparedness and readiness with sustainable investments to strengthen specific health system capacities and capabilities, and a flexible health workforce that can adapt to newly evolving challenges.
4.4. Isabel DE LA MATA, Principal Advisor for Health and Crisis Management, DG Santé, European Commission

Isabel de la Mata is currently the Principal Advisor for Health and Crisis management in the European Commission.

Previously, she worked as Counsellor for Health and Consumers at the Permanent Representation of Spain to the EU, as Deputy Director General for Health Planning at the Spanish Ministry of Health, as Advisor to the Vice-minister of Health and several other posts at the Ministry of Health of Spain and the Regional Departments in the Basque Country and in Madrid.

In addition, Dr. De la Mata has been a member of the EURO-WHO Standing Committee of the Regional Committee, and has worked with the Pan American Health Organisation, the Inter-American Development Bank and the Spanish Agency for International Cooperation.

Dr. De la Mata graduated in Medicine and Surgery at the University of Basque Country in 1983 and holds post-graduate degrees from the University of Leuven and Paris VI in Public Health, Hospital Administration and Statistics.

She is a specialist in Preventive Medicine and Public Health.

**KEY MESSAGE**

**Question 1.** This is one of the main lessons drawn from the pandemic, the need to strengthen health systems resilience. The crisis exposed many structural weaknesses and vulnerabilities of the national health systems, the chronic underinvestment, the workforce shortages, the weakness of information systems. But also innovative solutions, as the fast-track introduction of digital and telemedicine tools and the transformation of health care delivery pathways. Adequate governance is key.

It is necessary to ensure that financing is the right one, that service delivery operates as intended, that we work across sectors and across national borders. This is something this pandemic has shown us, that it is has not been an isolated health problems, but that has affected all social and economic sectors and that the dichotomy between health and economy was not right.

There has been, and still is, a need to prioritise health and investment in strong and well governed health systems, of high quality, with a strong public health and primary health care; to invest in well trained, supported, recognised and paid workforce, in the adequate numbers; and increased use of digital health. There have been several EU initiatives to support Member States during the pandemic, not only the quick activation of the Early Warning and Response System, the Health Security Committee and the Integrated Political Crisis Response System or the Emergency Support Instrument.

The European Health Union Package, the creation of the Health Emergency Preparedness and Response Authority, the new European Health Data Space and the use of the Recovery and Resilience Facility, for investment and reforms aimed at mitigating the economic and social impact of the pandemic and making European economies and societies more sustainable, resilient and better prepared for future challenges and opportunities, have been helping the Member States to come on their feet again and better prepare to avoid or better respond to any new threat.
Question 2. For the first time in many years, a health crisis has become a world crisis, affecting all sectors of life and economy. And one of the main challenges has been to protect public health while keeping society and economy open and resilient. And this was not always easy to manage. This is why continued efforts and EU wide coordination of health preparedness and response have been pivotal. It was also challenging that all countries were affected at the same time, so all needed support, equipment, medicines and it became clear that we all needed to find the way out together and that mutual support was the only solution.

Question 3. I would like not to have to deal with a new pandemic or health crisis, but this is difficult. In health we have been often reactive and not proactive and this is what we need to change: to be prepared. It is difficult to convince for investments when there is no threat, when we are in peace times. This is why even if we always say prevent is better than cure, we dedicate very few financing to prevent and almost everything to cure. This is the opportunity to change.

We need to adapt surveillance and intelligence gathering strategies (move from emergency to integrated surveillance systems, agree on common criteria for case identification and continue to collect and share reliable and timely data from integrated surveillance systems); we need to intensify the fight against mis- and disinformation (monitor, address, community engagement, behavioural studies); we need to invest in the recovery and resilience of healthcare systems, especially in the workforce.

Yes, we need more health professionals and there where they are needed, and flexible enough to adapt to new and emerging needs. We also need to invest more in the global dimension of health and understand that we are all linked and that human health is also connected to animal health, environment, climate.
4.5. Raed ARAFAT, Secretary of State, Head of the Department for Emergency Situations, Ministry of Internal Affairs, Romania

Being specialized in anesthesia and critical care and having a European Master in disaster medicine, Dr. Raed Arafat is the founder of Mobile Emergency Service for Resuscitation and Extrication (SMURD), that was established in 1990. Starting in 2007, he coordinated the activity of many institutional structures and strategic programmes for Emergency Situations, among them: Healthcare System for Emergencies and Disasters in the Ministry of Health, as well as the Department for Emergency Situations that coordinates the General Inspectorate for Emergency Situations, General Inspectorate of Aviation, Emergency Medical Services and Mountain Rescue in the Ministry of Internal Affairs.

Dr. Arafat has a wide experience in operational coordination of emergency services, he participated and organized numerous training courses and seminars in the field of emergency medical care, control and coordination of emergency services, emergency management, etc.

On the same line, Dr. Arafat is a member of several scientific and professional organizations in the field of emergency medicine and disaster medicine (both at domestic and international level), as well as the author and co-author of several textbooks, books, documents and articles.

Dr. Raed Arafat received academic titles and distinctions conferred by prestigious, national and international organisms, such as Legion of Honour at the class of Chevalier offered by the President of France, International Emergency Medicine Leadership Award from American Academy of Emergency Medicine, National Order For Merit at the class of Chevalier and Officer offered by the President of Romania for the whole scientific and research activity, for the outstanding contribution to the development and promotion of information technology and communications in Romania, “Commander of the Order of The Lion of Finland” conferred by his excellency the President of Finland, 2017, “Ordine della Stella d'Italia, nel grado di Grande Ufficiale” conferred by his excellency the President of Italy Sergio Mattarella, in 2020.

KEY MESSAGE

Question 1. I believe that it is a shared philosophy among states that good governance leads to great decision making. The COVID-19 pandemic has taught us that when facing a high impact – low probability disaster, preparedness should be crucial and response must come as a result. For this to be accomplished, countries must promote a multi-sectoral, whole-of-government decision-making, which includes all actors and stakeholders, especially the civil society, military and health services. Engagement at the policy level is therefore essential in accurately making preparedness efforts and developing good governance of health emergencies.

During the COVID-19 pandemic, governance in Romania has incorporated actors and stakeholders from every field with authority on managing or supporting with the pandemic. This and the highly dynamic pandemic situation have led to the issuance of 113 National Emergency Situations Committee decisions, 3344 Orders and Decisions of the Action Commander Order, Head of Emergency Situations Department which had the operational command and was delegated to take all means necessary to manage the pandemic. Many decisions were needed to create the legal framework that allowed further financial decisions, acquisitions, mitigation measures, hiring and...
dispatching health personnel, to ensure the needed workforce, flexible services and stable supply chains.

**Question 2.** As far as the main challenges that we experienced are concerned, the lessons learned from the pandemic have shown us that you cannot face a large scale emergency with ordinary tools and legal framework that is either lacking or leading to blockades when swift response is crucial. During emergencies, the prospects of shortages among health workforce are always to be considered. Therefore, strategies need to be in place to ensure that a multi-sectoral workforce is available, trained and deployed to respond to potential events of international concern at all levels of health systems.

Moreover and probably the most important aspect when dealing with emergencies in general, is that you can never succeed alone. Crisis management is a joint effort, synergies must be created so that unity can be achieved in a coordinated response. Thus, joint frameworks of cooperation need to be developed between all sectors, in order to identify and map the technical and operational roles and capabilities. Last, but not least, informing and educating the public, as well as countering misinformation and the spread of fake news, have been a top priority in managing the pandemic and advertising the vaccination scheme.

**Question 3.** Looking back to the harsh reality that this pandemic has made us face and moving forward towards an improved and sustainable way of responding to future health crises, I believe that the most important step to highlight and improve the key strategies mentioned above would be an updated and upgraded contingency plan, which should include better legal tools to facilitate not only response, but all phases of the disaster management cycle, increase the flexibility and adaptability of all key strategies in order to avoid procedural slowdowns, as well as to extend stockpiling capabilities.
4.6. Erika Vlieghe, University Hospital Antwerp, Belgium

Professor Erika Vlieghe is an Infectious Diseases clinician with professional experience within and outside Belgium (UK, Uganda, Ecuador, Cambodia). She studied medicine at the Leuven Catholic University (1996), Tropical Diseases at the Antwerp Institute of Tropical Medicine (ITM, 1997) and specialized in internal medicine and infectious diseases at the Leuven Catholic University (2004).

From 2004 to 2017 she has been working as a senior staff member and researcher at the ITM. Since 2017 she is heading the Department of General Internal Medicine, Infectious Diseases and Tropical Medicine at the University Hospital of Antwerp (UZA); she teaches tropical medicine and infectious diseases at various undergraduate and postgraduate courses at the University of Antwerp and the ITM.

Over the past few years she has been involved in research and capacity building in the field of antibiotic resistance in low and middle income countries; she obtained a PhD in this field in 2014 and has an H-index of 20.

From October 2014 – October 2015 Erika Vlieghe was appointed ‘National Ebola-coördinator’ in Belgium.

Since the beginning of the COVID-19 crisis she has been heading several scientific comités advising the federal government on the pandemic management. She is also a member of the Royal Flemish Academy of Medicine.

**KEY MESSAGE**

**Question 1.** Governance with effective leadership is of course the core of effective pandemic preparedness and response, and has been the challenge throughout the past 2 years in many countries, including Belgium, where the challenges were even enlarged by the complicated state structure. Yet, the organizational structure of the COVID-Commissariat, set up in October 2020 as a structure building bridges between scientific advisory groups, the administrations and political cabinets of the key involved departments, was felt as a key improvement in the preparation of decisions, and in the coordination of their implementation. After the acute crisis, care should be taken to build and maintain a comparable strong coordination and connecting structure, which can organize genuine pandemic and health crisis preparedness.

Financial stability within health systems is largely dependent on the specific health care financing mechanisms. This seems particularly true for a fee-per-activity system. During a crisis, the ‘peace time-balance’ between different medical activities may be completely changed, which can translate into abrupt income losses (e.g. for elective surgery), and which may jeopardize solidarity between medical disciplines. In addition, hospitals face a huge increase in costs due to extra staffing, equipment and protective materials. This way, hospitals admitting higher numbers of infected patients may feel punished for their solidarity by less income, higher expenses and more conflicts between providers, unless new, complementary types of financing for infectious diseases and infection prevention are installed (e.g. fee for performance/quality-type). During and after peak activities, negative or perverse (dis)incentives need to be identified and corrected.
Ensuring a stable health work force is obviously the backbone and the bottleneck of the health care system’s crisis response. Health care work force needs to be protected physically (e.g. vaccination, availability of good quality personal protective material, etc.) but also mentally by ensuring sufficient rest and by explicitly communicating societal and political appreciation.

Proper remuneration and working conditions are essential, but e.g. limiting the size of new pandemic waves by proper measures in society (NPI and vaccination) is equally important. In addition, explicit investment should be done in attracting and training a new generation of health care workers by guiding students towards health care professions and by offering attractive continuous medical education schemes through e-learning and bedside teaching. Also, in order to keep the strain on the health care system feasible, study work on a revision of the indications for ICU-care as well as on the diversification in levels of critical care needs to be done in ‘peace time’.

Regarding flexibility in delivering health care services: certain seasonal flexibility could be considered for elective activities, but this seems not possible for emergencies and unforeseen pathology. Surge-strategies need to be thought over and developed for all lines of the health care system, including (temporary) task shifting. Last but not least, such a large health care crisis affecting the very elderly, the ethical debate on end-of-life care, and where/how this is to be given should be held extensively and respectfully within the health care sector and within the broader society.

**Question 2.**
1. Lack of sense of urgency among policy makers, each time at the beginning of a new wave.
2. At first wave: too long emphasis on reassuring the population and being over-zealous on the nation’s state of preparedness, lack of any/worst case scenario thinking.
3. Lack of pandemic preparation, in nursing homes and first line health care even more so than in hospitals.
4. Lack of coordination of activities, fear for taking bold and drastic decisions, lack of courageous leadership.
5. Lack of data and early sharing of objective information. This issue was gradually alleviated when more testing capacity became available and more collaboration among administrations grew.
6. Collaboration between administration-based and academia-based experts was also a gradual process of learning to know each other strengths and weaknesses, and how to work as complimentary as possible.
7. At each wave: forecasting the near future based on partial information and evolving insights.
8. Throughout the pandemic: maintaining awareness and preparedness for unpleasant scenarios, clear communication to the general public.

**Question 3.**
1. Genuine pandemic preparedness plans, regularly updated, written by multidisciplinary team and regularly revisited.
2. Investment in communication with general public in many different ways (including debunking fake news).
3. Investment in adequate ventilation in all public buildings, and in well-known IPC-procedures in all (health) care settings.
Claudia Chatelus works at Hopital Louis Pasteur and at SIS 68 (Service Incendie et Secours) in Colmar, France. She is an MD specialized in emergency medicine, a firefighter physician working as a medical expert for the fire brigade, and a reserve MD in the army.

Dr. Chatelus graduated in Medicine and Surgery at Strasbourg University. After an earthquake hit the city of L’Aquila, in central Italy in 2009, where she was doing her Erasmus studies, she decided to dedicate her professional career to disaster medicine. She has worked in various capacities, settings, and institutions within emergency medicine, disaster medicine, and crisis management medicine.

She has carried out a number of training activities. In particular, she has worked on the EU Module Exercises (EU MODEX), financed by the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO).

These modules are part of a series of exercises within the EU Civil Protection Mechanism. The main exercise objectives for the participants are to improve interoperability, procedures, and coordination. EU MODEX also gives the opportunity for certification as European Emergency Response Capacity (EERC). She had an active role in the healthcare response, during the COVID-19 pandemic in the spring of 2020, at the Pasteur Hospital in Colmar and at the Haut-Rhin Department, France. She shared this experience in a book entitled, Ma guerre du Covid, and through a number of national and international conferences.

**KEY MESSAGE**

**Question 1.** Governance can no longer be solely administrative, it must be more medically and clinically oriented. During the crisis, the governance of the hospital has been simplified and this method must be kept in the future, with an approach more patient oriented and less bureaucratic. At national level, actions have been implemented in order to improve the primary care level. The national and local governments provided a guarantee of more funding during the crisis. In addition, specific work commissions have been created to develop innovative financing methods, based on specific health indicators.

Ensuring a stable health workforce requires a better recognition of the health professions, increasing attractiveness, loyalty and flexibility: for example, doctors should able to delegate certain tasks to nurses and nurses to other paramedical workers. In addition, it is necessary to develop more training courses, which must be more practically oriented and more adapted to the everyday work. These and other actions can improve the working conditions and the quality of life of health workers. Due to the urgency during the crisis, hospitals were able to find a certain mobility (of posts, staff, beds) to adapt to the flows. This approach must be continued, finding staff flexibility, with shared objectives so that it can become an integral part of daily life, and can be implemented and maintained in the medium to long term.

**Question 2.** The major challenges were of three types: i) organizational challenges; ii) lack of equipment; iii) the management of and relationship with health personnel.
Organisational challenges. The organisation of the hospital was completely revised and adapted to the needs of the large flow of patients affected by COVID, transforming the hospital into a large emergency department. The stocks of protective equipment quickly reached saturation. Other solutions had to be found, creating partnerships (with fire and rescue services, companies, local authorities, etc.) and actions had to be pragmatic rather than bureaucratic. In only a few days the flow of patients moved from the emergency to other units of the hospital (Intensive Care Units, etc.). The hospital had to be transformed into an enormous advanced medical post. The cross-border transfer of critically ill patients was quickly undertaken by the Franco-German local authorities, decongesting our hospital.

Lack of medical equipment. At the start, the challenge was the lack of protective equipment and oxygen - elements often forgotten during the preparation and anticipation of a crisis. We had to be creative, adapting the systems to address the lack of equipment, and avoid shortages.

Health personnel. It was necessary to manage the anxiety of the health personnel, taking into account the major risks to health workers, and managing fatigue and daily stress. An additional problem was that staff were often infected by COVID or personally affected by COVID deaths.

Question 3. The foremost elements that I would like to see implemented to better deal with a new pandemic and more generally deal with a new health crisis are as follow:

At the hospital level. In the hospital setting, a more spread out ‘crisis management culture’ should be developed, and become part of everyone's business. We need more pragmatic and systemic organisations of health systems (allowing the organisation to develop by adapting), in order to be more reactive and efficient in response to future health crises. The pandemic crisis taught us (I hope...) to have a more horizontal and less bureaucratic approach in our work at hospital.

At European level. The COVID-19 pandemic undoubtedly demonstrated the need for better coordinated actions at EU level to respond to health emergencies. It revealed gaps in foresight, including demand/supply dimensions, preparedness and response. For example, it is essential to create a synergy between the European Health Emergency Preparedness and Response Authority (HERA) and the European Civil Protection Mechanism (ECPM).

This linkage is essential at operational level, because the ECPM has rescEU capabilities. rescEU establishes a new European reserve of resources (the ‘rescEU reserve’) which includes a fleet of firefighting planes and helicopters, medical evacuation planes, as well as a stockpile of medical items and field hospitals that can respond to health emergencies. This link is crucial in order to react more quickly and effectively to future crises.
4.8. Petra CLAES, Head of the Medical Preparedness and Crisis Management Unit (MPCMU), Directorate-General for Personnel, European Parliament

Dr Petra Claes is Medical Advisor and Head of Unit of the European Parliament’s (EP) Unit for Medical Preparedness and Crisis Management (MPCMU) and former Head of Unit of the EP Medical Service in Brussels in which she has worked since 2009.

She has been directly involved in the EP’s internal crisis and business continuity management throughout the COVID-19 crisis, advising top management and working closely together with other senior medical advisors and occupational safety and health services. In 2022, she was appointed Director ad Personam and charged with the organisation of the new MPCMU unit. She is Chairwoman of the Interinstitutional Medical Board (IMB) of the EU Institutions and member of its Risk Prevention and Management (RPM) group.

She obtained degrees as specialist in internal medicine and emergency medicine at the Brussels Free University (VUB) and has gained extensive experience in emergency medicine and infectiology in the UZ-Brussels university hospital, including in the Aids Reference Centre, Travel Medicine Clinic and in-patients’ clinic. She obtained a degree in Tropical Medicine at the Institute of Tropical Medicine in Antwerp. Having studied Disaster Medicine, she was involved in medical crisis management in Brussels and surrounding region, for which she was on duty as Director of Medical Operations (Dir Med) in case of major incidents. She also worked in the public health sector as health inspector for infectious diseases and outbreak management, and deepened her knowledge in Epidemiology at Bielefeld University.

**KEY MESSAGE**

**Question 1.** Having had (i) effective leadership right from the very onset of the crisis has proven to be of utmost importance. The Secretary General headed the pre-established Crisis Management Team, combining all Directors General and the Head of the Legal Service around one (virtual) table. Given the nature of the crisis, an internal medical advisor was involved in direct line, thus avoiding any administrative hurdles. The internal governance system has de facto adopted principles of medical disaster management, with a clear command and control structure, coordination of all key disciplines including safety, medical, security & regulations, logistics and communication and close involvement of key stakeholders.

We strongly recommend workplaces to include medical experts in their top-level crisis management teams when dealing with a health crisis, and to make sure medical disaster management principles are implemented by design. Sufficient training in this field should be foreseen upfront. This approach has not only allowed effective crisis management from a business continuity perspective, in close connection with the political hierarchy at the level of the President, it has also supported the in-house occupational health system. Unprecedented services were deployed including in-house COVID-19 testing facilities, contact tracing procedures, epidemiological surveillance, vaccination centres and support networks.
This was made possible by budgetary provisions (ii) guaranteeing financial stability (through transfers from underused financial posts such as international travel and missions) and adapted (iii) health workforce, with temporary posts created in the beginning of the crisis and interim agents and a large group of volunteers included during the vaccination campaign. The experience of involving trained internal Mental Health First Aid (MHFA) providers (volunteers in all departments) has also been very positive and we highly recommend this to other organisations. From the beginning of the crisis, a lot of (iv) flexibility was shown in the organisation of the health care services an example of which are the telemedicine consultations and 7/7 case management and contact tracing.

**Question 2.** For the medical services of the EU Institutions and Agencies and their doctors united in the Interinstitutional Medical Board, one of the biggest challenges was the initial lack of international guidelines and risk assessments and regular updates thereof. The initial doubts concerning the usefulness of masks and the long hesitancy to communicate on the ability of the virus to spread via aerosol have fuelled a lack of trust. For future crises, having a consensus between ECDC and WHO-Europe guidelines, and regular planned updates would be most welcome.

Another challenge has been to navigate between on the one hand active listening and open dialogue, and on the other hand not providing a forum for misinformation and harmful messages to be spread. More recently, as most of the measures could be suspended in the light of the improved epidemiological situation and people enjoy their newly gained freedom, the new challenge is to maintain vigilance as specifically warranted by the ECDC and the WHO. Testing remains essential for surveillance. Isolation of cases is a challenge when people are no longer being tested. Reducing transmission in the workplace is difficult in the absence of sufficient testing and contact tracing. In the EP, the test facilities will therefore be maintained.

**Question 3.** The one most important element in viral spread is human behaviour, and to positively influence this, we need the right communication and information and the right tools. One of the elements we missed in the beginning of the crisis were simplified guidelines and information in clear language, preferably with infographics, ready to be shared with the public. We would also welcome an international consensus on crucial elements such as when to organise the next COVID-19 vaccination campaign and which groups to target.

As health care and public health systems we were prepared to communicate on the disease, its spread, the epidemiological situation and on the measures needed to mitigate the risk, both for the individual and for the overall community. Even conveying the message of changing scientific guidelines to the public in the light of the rapidly growing body of evidence was feasible when done in an honest and open way. We were however not prepared to deal with the infodemic and misinformation spread via social media and negatively influencing (parts of) the public opinion. As the crisis further developed, some of it even changed to downright “science denialism” and harsh opposition against life sparing measures. Under the pretext of freedom of speech and wanting to be heard on equal footing in debates, this movement has lowered public trust in and adherence to scientific medical advice.

Large-scale operations such as contact tracing are time critical and extremely labour intensive when done manually. When a new variant or a new surge of infections necessitates a reintroduction of contact tracing and testing + quarantining of close contacts, we hope this will be facilitated via an IT tool or linked to corona alert apps, taking into account all legal, privacy and data protection regulations.
5. Closing remarks

Eva KAILI, Vice-President of the European Parliament, responsible for STOA

Eva Kaili is a Member of the European Parliament (MEP), part of the Hellenic S&D Delegation since 2014. In January 2022, she was elected as Vice-President of the European Parliament for the second half of the 9th legislature. Her responsibilities include the Parliament’s ICT Innovation Strategy, Informatics & Telecommunications, European Strategy and Policy Analysis System, the Panel for the Future of Science and Technology (STOA), Corporate Social Responsibility, and replacing the President for business associations, Middle East, and multilateral bodies, including the UN and the WTO.

Eva is the first woman to chair the STOA Panel and the Centre for Artificial Intelligence (C4AI). She is a Member of the Committees on Industry, Research and Energy, Economic and Monetary Affairs, Budgets, the Special Committee on Artificial Intelligence in a Digital Age, and the recently created Committee of Inquiry into the use of the Pegasus Spyware. Eva has worked intensively on promoting innovation as a driving force of the European Digital Single Market. She has been the draftsperson of legislation in the fields of blockchain technology, online platforms, big data, fintech, AI, cybersecurity, as well as EFSI2, the InvestEU programme, and FuelEU Maritime.

She is also a member of the delegation to the ACP-EU Joint Parliamentary Assembly (DACP), the delegation for relations with the Arab Peninsula (DARP), and the delegation for relations with the NATO Parliamentary Assembly (DNAT). Prior to her election as MEP, she was a Member of the Greek Parliament (2007-2012). Before her political career, she worked as a journalist and newscaster. Eva holds a Bachelor’s degree in Architecture and Civil Engineering, and a postgraduate degree in International and European Affairs.

KEY MESSAGE

Throughout the pandemic response, scientific advice has been needed to guide policy decisions. Countries and health institutions have relied on existing authorities to collect and translate emerging evidence into action. The pandemic has revealed serious shortcomings in preparedness and response to health emergencies at global, national, and local levels. Governance at all levels has faced an unprecedented need to interconnect the various complex aspects of society and health systems to manage an appropriate reaction.

The pandemic highlighted the importance of digital services in the health domain. Reliable health data were of pivotal importance in developing effective treatments and vaccines timely. The European Health Data Space (EHDS) proposal of the European Commission will constitute a breakthrough in the way patients access and control their health data on top of deciding themselves on the extent of their anonymised data being used for research. The EHDS will create a truly interoperable and easily accessible health data space accessible throughout the Union.
6. About the Medical Preparedness and Crisis Management Unit (MPCMU)

The coronavirus pandemic has illustrated that new health crises can rapidly emerge at any time, posing a significant risk to individuals, society, private and public institutions and workplaces alike. As part of its response, the European Parliament (EP) is increasing its resilience and preparedness for future crises. Within the Directorate for HR Support and Social Services of the Directorate General for Personnel (DG PERS), a new Medical Preparedness and Crisis Management Unit (MPCMU) was created, alongside the existing Medical Services in Brussels and Luxembourg with which it collaborates closely.

The MPCMU team consists of a medical advisor/head of unit, an administrator, two medical advisors (keeping a clinical activity in the medical services in the respective places of work), and an assistant. It has preparatory, coordinating and advisory roles in areas of medical crisis management and response, medical crisis preparedness and occupational health.

Crisis management and response
MPCMU directly advises and assists top hierarchy in the crisis management of the ongoing COVID-19 pandemic, to protect the safe work environment and to enable business continuity. Hand in hand with the medical services in Brussels and Luxembourg, it coordinates the in-house case surveillance and contact tracing procedures; it analyses and reports on the in-house and regional epidemiological situation; it coordinates the efforts to maximise access to and promote COVID-19 vaccination for all MEPs and EP staff. Crisis response and recovery are dynamic processes, partially overlapping in time. Expert advice is necessary in all stages to rapidly assess the risks, introduce the right risk mitigating measures, safely suspend measures when possible, and timely reintroduce them when necessary.

Crisis preparedness
The MPCMU analyses the ongoing COVID-19 response and builds on the lessons learned from this and previous crises to strengthen the EP’s future preparedness and resilience. It contributes to the necessary blueprints for the management of different types and scenarios of major incidents.

The MPCMU works closely together with the Medical Services in the different places of work, the Prevention and Protection at Work Unit (PPWU), the Directorate General for Safety and Security, the Risk Crisis and Business Continuity Unit (for the work on the three main places of work) and the Crisis Cell (for international delegations). The MPCMU is strengthening collaborations with public health services and experts in the EP’s host countries and cities and its medical advisors participate in the work of the Interinstitutional Medical Board of the EU Institutions and the Medical Council of the Joint Sickness and Insurance Scheme.

Another priority of the unit is to develop partnerships with other international institutions, such as the European Health Emergency preparedness and Response Authority (HERA), the EU Scientific Advice Platform on COVID-19, the European Centre for Disease Prevention and Control (ECDC), the Organization for Economic Co-operation and Development (OECD), WHO Europe, etc.

Occupational health
At occupational health level, the MPCMU, together with the other partners, advises on and contributes to a structured and comprehensive mental and physical health approach of occupational health with the focus on primary prevention and the design a new health surveillance.
and support model and coordinates in its fields of competence. The unit also contributes to best practice guidelines and benchmarks with other international institutions and private/public institutions.
7. About STOA

7.1. Mission

The Panel for the Future of Science and Technology (STOA) forms an integral part of the structure of the European Parliament. Launched in 1987, STOA is tasked with identifying and independently assessing the impact of new and emerging science and technologies.

The goal of its work is to assist, with independent information, the Members of the European Parliament (MEPs) in developing options for long-term, strategic policy-making.

The STOA Panel

The STOA Panel consists of 27 MEPs nominated from eleven permanent parliamentary committees: AGRI (Agriculture & Rural Development), CULT (Culture & Education), EMPL (Employment & Social Affairs), ENVI (Environment, Public Health & Food Safety), IMCO (Internal Market & Consumer Protection), INTA (International Trade), ITRE (Industry, Research & Energy), JURI (Legal Affairs), LIBE (Civil Liberties, Justice and Home Affairs), REGI (Regional Development) and TRAN (Transport & Tourism).

Eva KAILI is the European Parliament Vice-President responsible for STOA for the second half of the 9th parliamentary term. The STOA Chair for the second half of the 9th parliamentary term is Christian EHLER with Ivo HRISTOV and Ivars IJABS elected as 1st and 2nd Vice-Chairs respectively.

The STOA approach

STOA fulfils its mission primarily by carrying out science-based projects. Whilst undertaking these projects, STOA assesses the widest possible range of options to support evidence-based policy decisions. A typical project investigates the impacts of both existing and emerging technology options and presents these in the form of studies and options briefs. These are publicly available for download via the STOA website: www.europarl.europa.eu/stoa/.

Some of STOA’s projects explore the long-term impacts of future techno-scientific trends, with the aim to support MEPs in anticipating the consequences of developments in science. Alongside its production of ‘hard information’, STOA communicates its findings to the European Parliament by organising public events throughout the year. STOA also runs the MEP-Scientist Pairing Scheme aimed at promoting mutual understanding and facilitating the establishment of lasting links between the scientific and policy-making communities.

Focus areas

STOA activities and products are varied and are designed to cover as wide a range of scientific and technological topics as possible, such as artificial intelligence, blockchain, 5G, genetic engineering, antibiotics resistance, internet addiction, face recognition, pollution, sustainable agriculture, COVID-19 and health in general.

These activities are clustered within three main thematic areas: Artificial intelligence & other disruptive technologies, The new Green Deal, and Quality of life. In addition, STOA’s work addresses four cross-cutting policy areas: Science, technology and innovation; Societal and ethical challenges; Economic challenges; and Legal challenges.
ESMH

The European Science-Media Hub (ESMH), operating under the political responsibility of the STOA Panel, is a platform to promote networking, training and knowledge sharing between the European Parliament, the scientific community and the media. The ESMH creates a network among policy-makers, scientists and media involving science, academia, educational and research entities, and professional associations of journalists and scientists.

For journalists and media representatives, the ESMH organises training sessions and workshops on current technological developments, both as subjects of their reporting and as means of facilitating their work. Via media monitoring and media intelligence tools, the ESMH follows the most popular topics in the field of science and technology on different platforms including journals, newspapers and social media.

The ESMH makes information available to journalists, other media and citizens about new scientific developments, as well as about scientific topics that attract media attention, and promotes information based on evidence.

Centre for AI (C4AI)

To intensify its activities in the field of artificial intelligence (AI), STOA has launched its Centre for AI (C4AI). C4AI was established by decision of the STOA Panel on 19 December 2019, and was announced at the high-level STOA workshop 'The Future of Artificial Intelligence for Europe', which took place on 29 January 2020 at the European Parliament in Brussels.

Within the context of STOA and based on decisions of the STOA Panel, C4AI produces studies, organises public events and acts as a platform for dialogue and information exchange on AI-relevant topics within the Parliament and beyond. In particular, it provides expertise on the possibilities and limitations of AI and its implications from an ethical, legal, economic and societal perspective. Through these activities, C4AI aims to contribute to the quality and coherence of discussion and policy-making as the EU seeks to coordinate its efforts and influence global AI standard-setting.
7.2. STOA Panel members

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JURI: Legal Affairs  
LIBE: Civil Liberties, Justice and Home Affairs  
REGI: Regional Development  
TRAN: Transport and Tourism
7.3. STOA administration

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