Non-Paper by Austria, Belgium, Croatia, Cyprus, Czech Republic, Estonia, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Portugal Romania and Slovenia on Health and Climate Change

Introduction

Climate change has been high on the EU agenda for at least the last two decades and it is correct to state that climate change has now become a climate crisis. To date EU action has focused on cross sectorial efforts to address the causes of anthropogenic global warming¹. Some of the projected effects of global warming are materializing and becoming visible and evident to all, across the globe including within the European Union. Europe has indeed experienced a relatively accelerated rate of warming over the past three decades as reported by the EU's Copernicus Climate Change Service on 6 September 2023². The Intergovernmental Panel on Climate Change (IPCC) projects the events witnessed in the recent years to recur with increased frequency and intensity in the coming years.

Climate change and health

It is well documented that higher temperatures, changes in precipitation patterns (including floods and droughts), and extreme weather events are having and will increasingly have a negative impact on human health and potentially on the provision of health services. The impact includes increased morbidity and mortality from heat-related exposure and other extreme weather events, exacerbation of the effects of air pollution³ and increased noncommunicable diseases (including cardiopulmonary and respiratory illnesses), food, water & vector borne diseases, stress and mental health consequences. Extreme weather events also include floods and fires, which also result in an increase in health service demand. In addition, climate change means many infectious diseases expand into previously safe areas and could increase pandemic risk⁴. Outbreaks of infectious diseases, in particular zoonoses and vectorborne diseases, have risen over time and are expected to increasingly emerge as climate change worsens. Europe is experiencing a warming trend where heat waves and flooding are becoming more frequent and severe, and summers are getting longer and hotter. This creates more favourable conditions for invasive mosquito species such as Aedes albopictus and Aedes aegypti. Ten years ago, in 2013, the Aedes albopictus mosquito was established in 8 EU/EEA countries, with 114 regions being affected. Now in 2023, the mosquito is established in 13 countries and 337 regions.

Climate change and related events already pose a tangible burden on health services across the European Union, and this effect will persist for years to come, likely worsening as extreme weather events become a business-as-usual scenario. It is important that the EU responds in a timely manner to this threat and is well prepared. Global coordination and exchanges of best practices will be highly relevant to tackle these challenges in the future.

Current EU framework

¹ Noting that in 2021 the Commission adopted a Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" in which the impact on health services was highlighted. ² Surface air temperature for August 2023 | Copernicus

³ No. 3 – September 2023 (wmo.int)

⁴ A. Costello 'Climate change threatens our health and survival within decade'; The Lancet, Volume 401, Issue 10371, 14–20 January 2023, Pages 85-87; https://doi.org/10.1016/S0140-6736(22)02353-4

The EU has a strong basis to address this climate crisis. The recently adopted Regulation 2022/2371 of 23 November 2022 on serious cross-border threats to health, includes "threats of environmental origin, including those due to the climate" within its scope. This Regulation strengthens the preparedness of the Member States to address the emergence of serious cross border threats and provides for a coordinated, EU response for these threats through the Health Security Committee.

The Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European Centre for Disease Prevention and Control (ECDC) which has been recently revised, provides a strong surveillance system for vector borne diseases, and empowers the ECDC to provide science-based recommendations and scientific and technical expertise to the Member States and to the Commission. In addition, the Regulation reinforcing EMA's role in crisis preparedness and management of medicinal products and medical devices became applicable as of 1 March 2022.

Furthermore, Regulation (EU) 2021/836 on a Union Civil Protection Mechanism provides a strong tool for cooperation states on civil protection to improve prevention, preparedness, and response to disasters. Coordination of medical support also falls within the scope of the regulation.

The European Health Emergency Preparedness and Response Authority (HERA) aims to strengthen Europe's readiness to prevent, detect, and respond rapidly to health emergencies. It focuses on making sure Member States have the necessary medical supplies and countermeasures, coordinating efforts between EU Member States, industry, and other stakeholders. In its threat prioritization exercise, HERA identified health threats arising from climate change and in particular vector-borne diseases. As an example, in a partnership with CEPI, HERA is funding research on Chikungunya vaccines.

Applicability and suitability of the current framework

It is undisputed that Regulation 2022/2371, Regulation (EU) 2022/123 and Regulation 851/2004 provide a strong framework to address serious cross border health threats; however, it is important that these are complemented by other initiatives to cater for current challenges experienced by Member States as a result of climate change and also to prevent and prepare for future challenges.

Climate change is likely to increase the incidence of infectious diseases (including those related to food-borne illness), the potential for autochthonous transmission (outbreaks) of novel and existing pathogens (including those causing climate-sensitive vector-borne diseases such as Chikungunya fever and West Nile fever), and mortality from the exacerbation of non-communicable diseases (heart failure, asthma), among others.

Communicable Diseases

Changes in temperature and precipitation patterns make the EU region susceptible to climatesensitive vector borne diseases. The EU has already seen unprecedented outbreaks of vectorborne diseases over the past decades. These events are likely to become more frequent, as alterations in temperature and humidity patterns within the EU give rise to ecological conditions allowing the proliferation of disease vectors. Certain vector insects might also become more resistant to insecticides, and this further increases the risk. Extreme weather events, such as floods, also increase the risk of transmission of infectious diseases. Regulation 2022/2371, Regulation (EU) 2022/123 and Regulation 851/2004 provide for a robust surveillance and preparedness framework to monitor communicable diseases. To date the data provided by the ECDC is not alarming. However, unless proactive measures are taken, it is a matter of time before certain preventable infectious diseases, which are currently more prevalent in other regions, become increasingly common occurrences within the EU.

Surveillance in humans and animals of infectious diseases, in particular vector-borne diseases and zoonoses, needs to be strengthened in order to ensure that the necessary capacity (including public health, veterinary, entomological, meteorological and laboratory and data support) is available to monitor the distribution patterns and spread of the vectors, the pathogens as well as the diseases, taking a One Health approach. In this regard, it is acknowledged that, applying a One Health approach, in February 2021 the Commission launched the European Climate and Health Observatory⁵. This partnership between the Commission, the European Environment Agency, the ECDC, the European Food Safety Authority, and other organisations supports policy- and decision-makers to respond to the impacts of climate change on health by providing access to relevant information and tools and by facilitating information exchange, and cooperation between relevant actors.

It should be noted that the EU currently largely lacks the medical counter measures (MCM) to prevent and treat some of these diseases, in particular in view of possible emerging diseases. In some cases, effective MCM are yet to be developed. Therefore, it essential that the EU proactively establishes thorough risk assessments, including by implementing the Regulation on serious cross-border threats to health, while acquiring the necessary knowledge and the infrastructure to produce essential MCM to face communicable diseases. Vector control measures should be developed and implemented across the EU. The EU must prioritize this strategic planning to prevent being caught unprepared in the face of a potential health crisis.

Non Communicable Diseases.

During the month of July 2023, many Member States experienced an unprecedented increase in hospitalizations and deaths resulting from a sustained heat wave, which placed an added significant strain on the timely delivery of health services. It is likely that these events will repeat themselves with increased frequency and intensity because heatwaves are projected to occur more frequently, last longer and at higher temperatures.

Concurrently, other Member States like Slovenia were also experiencing extreme precipitation resulting in floods.

There is little data on the effects of extreme heat events on the health systems of the Member States. Such an exercise falls outside the scope of Regulation 851/2004. When it comes to the burden of health systems resultant from extreme precipitation the applicability of Regulation 851/2004 is limited to the surveillance of infectious diseases in the resultant flood-affected areas. However, the required health provisions including care relating to non-communicable diseases resulting from climate change or similar, is not captured within the scope of the Regulation.

It is highly questionable whether non-communicable diseases resulting from extreme weather conditions fall within the scope of Regulation 2022/2371 considering the requirement that the threat should have potential to spread or entail a significant risk of spreading across the national borders of Member States, is unlikely to be satisfied. Nevertheless, addressing non-

⁵ European Climate and Health Observatory (europa.eu)

communicable diseases is key towards achieving a healthier population overall, with citizens and health systems less burdened and more resilient to the effects of climate change and communicable diseases.

Whilst it remains the responsibility of the Member States to develop national heat-health action plans as part of their overall national climate change adaptation plans, to organize their healthcare systems, to enhance a regional and local structure on health governance in climate adaptation and mitigation, with the aim to provide healthcare efficiently during extreme weather, there is an added value in Member States working together to develop such plans, with the support of the Commission.

Conclusions

Austria, Belgium, Croatia, Cyprus, Czech Republic, Estonia, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Romania and Slovenia therefore call on the Commission, and on the ECDC when and where appropriate: -

- to analyse threats to health (including both non-communicable and communicable diseases) and healthcare systems as a result of extreme weather events on the basis of data gathered by Member States,
- to develop preparedness plans for infections, in particular zoonotic and climatesensitive vector-borne diseases, in order to empower Member States to make more informed planning decisions and increase health system preparedness and resilience in this regard,
- to further develop capacity for surveillance and prevention of vectors that have the potential to cause vector borne disease in the EU, and strengthen the EU's early warning and response system across MS,
- to coordinate a common EU approach to steer national communication campaigns, together with a joint approach to training health care workers across MS on how to deal with the human health effects of climate change,
- to ensure the preparedness of the EU to supply medical countermeasures which may be required by Member States to prevent and treat medical conditions which are likely to arise because of the consequences of climate change.