Disclaimer: We kindly ask to acknowledge that due to the diverse and heterogeneous nature of the questions and dynamic situations they pertain to, some of the information might be incomplete or only correct for the time being. Thus, please consider the date and date of last update with the below information. All available information was provided by a country representative from the PHIRI network during or in connection to the respective meeting.

Date: 08.05.2023 Last Update: 05.06.2023

Table 1: Country responses: Health crisis procedures and exercises

Country	 Topic: Health crisis procedures and exercises We are interested to learn more about your organisation's different roles in case of a health crisis emergency (for example an infectious disease outbreak). If your organisation is involved in management of a public health crisis, what are your duties? Did your organisation ever simulate these emergencies for an (internal or joint) exercise? If yes, what are your experiences with this health crisis simulation and are you willing to share some documents? A wide range of crisis exercise scenarios is welcome: accidents with chemical or biological agents, infectious disease outbreaks,.).
Albania	 As a research organization our role is mainly supportive. In case of emergencies we provide support in order to educate/inform the population. Additionally, in some cases we can train healthcare providers (such as the case of COVID-19) on protective measures etc. No.
Austria	• In case of a health crisis emergency the Austrian National Public Health Institute GÖG has automatically no active task or strategical function. It only becomes actively involved through a specific assignment with an allocated budget from the Ministry of Health, which fully owns the GÖG. During the COVID-19 pandemic GÖG was in charge with a large host of tasks in pandemic management in areas such as forecasting, evidence synthesis, risk assessment and data management.
Belgium	 As of yet, we were not engaged in such simulation exercises. Responsibilities are quite scattered in Belgium. Sciensano has placed a crisis team very centrally in the organization. So a lot of new things have to be developed. A procedure has been drafted in the form of a manual describing how we must behave and organize ourselves in the event of a new crisis, a kind of internal management tool to be practiced internally now.
Bulgaria	 The National Center of Public Health and Analyses (NCPHA), Bulgaria is a structure of the national health care system and carries out activities on: Protection of public health, Health promotion and disease prevention, Information provision of healthcare management. The mission of the National Center of Public Health and Analyses is to combine these diverse activities in the interest of better public health. NCPHA is not directly involved in the health emergency crisis management. The first line institution responsible for the management of a health crisis emergency (for example an infectious disease outbreak) is the Bulgarian Ministry of Health. The other institution with a direct role in an infectious disease outbreak is the the National Centre of Infectious and Parasitic Diseases (NCIPD), the national center in Bulgaria, responsible for the for the fight with infectious diseases. The National Center of Infectious and Parasitic Diseases (NCIPD) is a national institution with the status of scientific organization under the Ministry of Health. Its aim is to develop the scientific foundations of the fight against infectious diseases and methods for its implementation. This determines the intensive research on etiopathogenesis, immune reactivity, epidemiological features, laboratory diagnostics, treatment and immunoprophylaxis of bacterial and viral, including nosocomial, and parasitic infections. NCIPD is the only non-university institution in the country that has been accredited since 1999 by the National Evaluation and Accreditation Agency (NEAA) at the Council of Ministers of the Republic of Bulgaria, as a university in the field of infectology with the rights to train PhD students and conduct postgraduate training in epidemiology, microbiology, virology, parasitology, and immunology and allergy. Lon





The NCIPD hosts all National Reference Laboratories (NRLs) for various bacterial, viral, and parasitic infections. Laboratory test Complex (LTC), which is for now the only in our country accredited by the Bulgarian Accreditation Service (BAS) in 2003 under the European requirements of standard BS EN ISO 17025 for quality of work. NRLs are under permanent international external laboratory control of the German accreditation system Instand. Since 1998 the NCIPD, through the National Reference Laboratories, is conducting a National External Laboratory Control for the Quality of Laboratory Diagnostics carried out by all Microbiological, Virological and Parasitological Laboratories in the country, which, upon successful outcome, allows them to conclude contracts with the National Health Insurance Fund.

In 2007 NCIPD was designated by the European Center for Disease Control (ECDC) in Stockholm as the leading, competent national organization, etc. "National competent body" in the field of infectious and parasitic diseases.

NCIPD, together with the Ministry of Health, performs daily extensive antiepidemic and organizational - methodical activity based on highly qualified expert and consultative assistance, specialized laboratory diagnostics, organization of workshops, seminars, etc., the issue of specialized research and scientific journals as Problems of Infectious and Parasitic Diseases, newsletter and other informational and educational materials.

In the NCIPD laboratory-production activity are several original biological derivates for the national healthcare and export needs: allergen preparations for diagnostics and immunotherapy of allergic diseases, monoclonal antibodies to determine the blood group substances and lymphocyte markers and preparations for the diagnosis of parasitic infections. They are produced under Good Manufacturing Practice conditions, according to the requirements of the European Pharmacopoeia and ISO 9001/9000 standard.

The NCIPD implements a broad international cooperation in the field of research, postgraduate education and anti-epidemic surveillance of communicable diseases with WHO, ESC, UN Global Fund, Phare, Copernicus, Interreg, Tempus, NATO and a number of foreign universities and institutes on a bilateral or multilateral basis.

All of the above mentioned convincingly shows the very important and responsible position occupied by NCIPD in the national and international healthcare systems and fully corresponds to the motto, perceived and implemented daily by its associates: "In the name of science – for the good of the people".

NCIPD is the oldest scientific and practical institute in the field of healthcare in Bulgaria. Established in 1881, immediately after Bulgaria's liberation from Ottoman domination, it launched the modern struggle against contagious and parasitic diseases in the country based on the latest achievements of world science. Construction and equipment of the current NCIPD building done with the financial support of the Rockefeller Foundation in 1932-1935 significantly contributes in this respect.

On the basis of more than 139 years of development, the broad national and international reputation, built through the years, NCIPD today is a major national health unit, whose collaborators are developing scientific bases and methodical approaches for successful control of communicable diseases – their etiopathogenesis, epidemiology, laboratory diagnosis, immunotherapy and specific and non-specific immuno-prophylaxis, according to the latest achievements of science and the requirements of the WHO and the European Union.

In this respect, many long-standing traditions, continuity, broad international contacts and very good laboratory facilities at NCIPD have contributed to this, as well as the high requirements to be met by the specialists working there. All these facts make the NCIPD a very authoritative and respected national and international research and applied research institution. Special attention should be made on the complex, multidisciplinary approach in solving all scientific and practical problems and tasks in the fight against infectious and parasitic diseases based on the close cooperation between specialists from different fields: epidemiologists, microbiologists, virologists, parasitologists, immunologists, chemists, biochemists, veterinarians and others working in the NCIPD, which is a guarantee of success.

The main activities of NCIPD include:

- Research activity;
- Training of students and mainly graduate and doctoral students in the line of SDO;
- Reference laboratory diagnosis and expertise;
- Organizational and methodical assistance to Regional Health Inspectorates (RHIs) and all other healthcare facilities in the country and publishing activities in the field of infectious diseases;
- Production of certain biological preparations for diagnostics, therapy and immuno-prophylaxis.

No.



Croatia	• In the case of the COVID-19 pandemic / health crisis the Government and the Ministry of health have established the National Civil Protection Authority. Legislation on which it's duties are based on can be found in English on the following link: https://leap.unep.org/countries/hr/national-legislation/law-civil-protection-system Within the National Civil Protection Authority representatives from the National Institute of Public Health (CIPH) have been active. The duties of CIPH
	within that consortium and health crisis management can be defined within the three main tasks:
	- Scientific advisory – CIPH has monitored indicators related to the pandemic and published evidence-based guidelines
	- Testing – the microbiology department has provided human, technical and other resources and organised additional testing sites
	- Vaccination – CIPH was in charge of the distribution and organisation of mass vaccination aswell as public campaigns to motivate citizens for vaccination uptake
	• Regarding the simulation of future health crisis events, there were no exercises done on a national level nor on a level of CIPH in a coordinated manner.
	Only few individuals have done such exercises within the scope of their additional educations (for example various summer school, congresses etc.)
Finland	In case of a health crisis the Minister of Health obviously has the main responsibility, but THL is working as a national expert to support the Ministry and
	regional authorities on all decisions. In Finland, THL responsibilities in case of infectionous diseases are stated in the Communicable Disease Act
	https://www.finlex.fi/en/laki/kaannokset/2016/en20161227. It provides quite a lot of responsibilities for THL.
	Due to the NATO membership, there will be many changes in legislation in the upcoming years, including health issues and the role of THL in managing and responsibilities in a crisis.
Hungary	 Yes, and the different charts was communicated on county level. But there was no differentiation in the restrictions, every provisions scope was
	countrywide. In some cities and smaller towns, there was attempts to behave differently (of course in these towns the restrictions were stricter, and it
	was allowed by the Hungarian government), but there was always big resistance inside the population, so these directions were soon withdrawn.
	Mask wearing, and Curfew, and authoristion of other different public activities was managed by these numbers.
	Mostly investigated the number of new cases as a percentage of the population, and the concentration of the viral materials in the wastewater (in bigger
	towns, and cities).
	The governmental organistaions still sampling the wastewater. Ireland has not previously arranged an exercise for emergencies but it is something that is being considered. The Strategic Emergency Management
Ireland	Guideline 6 - Planning and Exercising may however be of interest, which provides a guide for government departments and agencies, to plan for and
	exercise strategic emergency response arrangements.
	Concerning health crisis emergency in Italy, and more specifically in case of infectious disease outbreak such as flu, a National Strategic Operational
Italy	Plan for Pandemic Influenza Preparedness and Response (PanFlu) 2021-2023 was developed
	(https://www.salute.gov.it/portale/influenza/dettaglioContenutiInfluenza.jsp?id=722&area=influenza&menu=vuoto;
	https://www.salute.gov.it/portale/documentazione/p6_2_2_1.jsp?id=3005). The roles of the National Institute of Health/Istituto Superiore di Sanità-ISS
	are multiple; more specifically: 1) to sign an agreement with the Ministry of Health and Universities for the implementation of the epidemiological
	surveillance; 2) to set up/update the surveillance system, the National Influenza Centre (ISS-NIC) (INFLUNET -
	https://www.epicentro.iss.it/influenza/influnet; https://w3.iss.it/site/RMI/influnet/Default.aspx); 3) to survey the network of laboratories with relative levels
	of biosafety and the possibility of implementing diagnostic research in the event of a pandemic (together with the Center of Disease Prevention and
	Control-CCM of the Ministry of Health and the Regions; 4) To ensure the rapid distribution of diagnostic tests, when available; 5) to rapidly characterize
	the virus responsible for human infection, in collaboration with WHO reference centres; 6) to collaborate internationally to evaluate the pathogenicity of
	the virus in humans; 7) to continuously collect and share viral isolates and information needed to develop or adapt diagnostics, to develop candidate
	viruses for vaccine production/prototype strains, and to monitor the emergence of anti-viral resistance; 8) to timely share virus isolates with WHO to
	enable potential pandemic vaccine development and reagent upgrades; 9) to verify the compliance of the laboratories with the biosafety measures
	necessary for the level of risk associated with the handling and transport of the samples
	As far as is known ISS did not simulate pandemic emergencies as an exercise.





In Malta, public health crisis preparedness, which therefore covers all types of crises, falls under the responsibility of the so-called Superintendent of Malta Public Health. This is the legally appointed official in charge of the public health regulatory function. From what I understand, the pandemic and preparedness plan is being revised within that department. There are several simulations that are done on a regular basis. At least it used to happen regularly pre-covid as well, and these are usually not just public health exercises but coordinated ministerial exercises with the emergency services, police, military et cetera. In terms of my specific organization, we are part of that complex of the pandemic preparedness plan when it comes to surveillance. In particular, in term of mortality surveillance we have always focused on monitoring the daily number of deaths as a crude, but basic indicator of a potential crisis and threat to life. The Norwegian Institute of Public Health (NIPH) has a central role in national and global health preparedness and as a knowledge provider to the health **Norway** system. Emergency preparedness is performed in close collaboration with national and international authorities, and scientific communities. The NIPH is the national infection control institute, with associated functions and responsibilities. This includes responsibility for the purchase, storage, distribution and follow-up of vaccines in the immunisation programmes. There has been carried out some simulation exercises through number of international cooperation programmes especially the Global Health Preparedness Programme: see examples The Global Health Preparedness Programme in Ghana - NIPH (fhi.no), https://www.fhi.no/en/qk/global-healtcollaboration/global-health-security/our-partner-countries/malawi/ Link to the report: https://www.fhi.no/en/publ/2021/global-health-preparednessprogramme-2016-2021---final-report-to-norad/ The roles of public administration bodies in crisis situations are included in the National Crisis Management Plan (Krajowy Plan Zarzadzania **Poland** Kryzysowego - KPZK). For the purposes of the KPZK a report about threats to national security is prepared. The report indicates the most important threats by creating a risk map (the report is a classified document). Ministers leading different government administration departments develop crisis management plans (PZK), which in particular take into account: - analysis and assessment of the possibility of threats; - detailed ways and means of responding to threats, as well as limiting and eliminating their effects; - organization of risk monitoring; - organization of tasks in the field of critical infrastructure protection. The PZK constitute functional attachments to the KPZK. Threats in which the role of the minister responsible for health is indicated in the KPZK include; epidemic, epizootic, disruption of the functioning of ICT systems and networks, collective public nuisance, flood, drought/heat, chemical land contamination, strong wind, sea catastrophy (shipwreck). radioactive contamination, severe frost/intensivesnowfall, terrorist events, large-area fire. The PZK of the Minister of Health takes into account the competencies of the organizational units of the Ministry of Health, supervised bodies and units subordinated and supervised by the Minister of Health. The above-mentioned bodies and units have developed their functional annexes to the PZK of the Minister of Health, which in detail precise the tasks of these authorities and units in the event of a crisis situation. According to the KPZK, the main task of the minister responsible for health matters is ensuring public health security (https://www.gov.pl/web/rcb/krajowy-plan-zarzadzania-kryzysowego). This task is carried out by: - Supervision of the State Medical Rescue (PRM) system in the country, including Air Rescue Service (LPR). Providing the people in an emergency health risks with the relevant health care services. - Launching and supervising the implementation of the action plan of the public blood service. - Coordination of availability and safety of medicinal products and devices and monitoring of free hospital beds. - Ensuring sanitary and epidemiological safety in the country. - Support for activities aimed at restoring and ensuring operational continuity of critical infrastructure under the responsibility of the minister. The Minister of Health participates in exercises, national and international trainings in the field of crisis management. The conclusions from the exercises are used during the updating process of PZK, and KPZK. The last exercise (17 - 19 April 2023) in which the Minister of Health took part were exercises organized by the National Police Headquarters together

with the American FBI. These exercises tested the reaction in the event of a terrorist attack with chemical and radiation hazards.





	We do not have any documents from the exercises in which the Ministry of Health participated to be made available.
Portugal	Portugal has been running several exercises, and even our team has been part of foresight studies, but there is nothing official with a website link. There is the National Commission for Future Epidemics, and we can assume that it is working on it, but in our Ministry of Health there is nothingcomparable to our DGS website. In Portugal, we do not have PHI like in many other countries, but there is the Directorate General of Health, and below that there is a common organization for health data that needs to be linked. So the military was responsible for all these organizations working together to achieve, for example, vaccinations, and not competing with each other.
Romania	 The National Institute of Public Health through the National Center for Surveillance and Control of Communicable Diseases (CNSCBT): coordinates the control activities of communicable disease outbreaks and epidemics, in epidemiological situations of national and international interest ensures the methodological coordination of the early warning and rapid response system in the field of communicable diseases in collaboration with the epidemiology sections of the CRSP and the epidemiology services of the county DSP No.
Slovenia	 The Communicable Disease Act includes several articles defining the tasks and obligations of the National Institute of Public Health (NIJZ): Article 5: The National Institute of Public Health (NIJZ) shall monitor and study the epidemiological situation of infectious diseases in accordance with the obligations assumed by international agreements and in accordance with the programmes of the World Health Organization, and on this basis and in accordance with the health care plan of the Republic of Slovenia, shall prepare programmes for the prevention, control, elimination and eradication of infectious diseases (eradication). Article 17 - Epidemiological investigation: Epidemiological investigation shall identify the sources of infection and the routes of transmission and shall include epidemiological enquiry, investigation and microbiological diagnosis. The epidemiological inquiry shall be ordered by the doctor referred to in Article 12(1) of this Law or by the competent health-care institution on the basis of the report referred to in Article 14 of this Law. The findings of the epidemiological inquiry shall be communicated to the health inspectorate by the National Institute of Public Health and the competent health care institutions. Regulations on the notification of communicable diseases Article 6: Within three to six hours of the discovery of a suspected epidemic or epidemics of communicable diseases, the doctor shall inform the Health Protection Service and shall cooperate in the control of the epidemic. The HIA shall immediately inform the NIJZ of the epidemic. The NIJZ shall determine and participate in the implementation of measures to control the communicable disease epidemic. In the event of an epidemic of a Group 1 (defined in the annex of CD Act) communicable disease and an epidemic involving two or more areas, the NIJZ (namely, the Centre for Communicable Diseases) has participated in simulation exercises ourselves for s

