

COUNTRY PROFILE Hungary

The Hungarian Constitution guarantees the right to a healthy environment and optimal level of physical and mental health, as well as income maintenance benefits in the form of social security. While the central government is responsible for social welfare and healthcare provision, other actors also play a role in operating the healthcare system. Hungary's healthcare system is a single-payer system; the recurrent expenditure on healthcare services is primarily funded through compulsory, non-risk-related contributions made by eligible individuals or from the state budget. Out-of-pocket payments also play an important role. The central government has almost exclusive power to determine the strategic direction of the system and to issue and enforce relevant regulations.

During the COVID-19 pandemic, the Ministries of the Interior and Human Capacities jointly led Hungary's response to the pandemic. In January 2020, the Hungarian government established an 11-member Operative Corps, headed by the Interior Minister and the Minister of Human Capacities. Other members include the Chief Medical Officer of the National Public Health Centre and the Director-General of the National Ambulance Service. The Operative Corps was responsible for organising the medical and epidemiological measures taken in response to the COVID-19 pandemic – such as testing and allocating physical and human resources. .(from State of Health in the EU Hungary Country Health Profile 2021 https://health.ec.europa.eu/system/files/2021-12/2021 chp hu english.pdf)

In 2020 the Ministry of Innovation and Technology set up the Mathematical Modelling and Epidemiology Task Force, a scientific advisory body, to provide scientific support for the COVID-19 pandemic response measures. The primary tasks of this project were twofold: firstly, to establish a novel approach to monitoring and analysis of the epidemiological situation of the SARS-CoV-2 pandemic, and secondly, to develop mathematical models to improve understanding of how the virus spreads and its transmission dynamics in Hungary. The task force constituted a multidisciplinary team, integrating the work of professionals with a wide range of competencies (mathematician, biostatistician, medical doctor, epidemiologist, sociologist, etc.) to support decision-makers in evidence-informed decision-making. The epidemiological updates and modelling results incorporated regular risk assessments, drawing upon a range of data sources and utilising mathematical modelling techniques, forecasting methodologies, and scenario analysis. This comprehensive approach aimed to inform data-driven decision-making processes, thereby fostering informed policy and strategic decision-making in the context of the pandemic. In 2022, the Task Force underwent a restructuring within the framework of the National Laboratory for Health Security. One of its primary responsibilities is to develop the scientific foundations for improved preparedness for pandemics. (https://www.eglab.hu/en/)

The Chief Medical Officer (CMO) heads the National Centre for Public Health and Pharmacy (NCPHP) (Hungarian: NNGYK), established in 2018 and expanded in 2023 by merging the previous public health and pharmaceutical authorities. Until 2022, the CMO reported to the Ministry of Human Capacities, and later to the Ministry of Interior, via the undersecretary for health.

The CMO's core responsivities include Health Security & Public Health oversight. In general, the CMO recommends, alongside the Minister of Interior, whether to declare a state of health care crisis, which activates special protocols for disease control and care entitlements. The CMO holds supervisory and inspectional authority over public health matters, including surveillance, outbreak response, institutional compliance, and health regulations enforcement. Through the NCPHP's Department of Health Administration, the CMO authorizes and monitors health care providers, oversees diagnostics and medical services (e.g., transplantation, genetic testing), and carries out specific tasks of research oversight.

Concerning Pandemic Preparedness & Response, the CMO was a key member of the government-led Operative Corps, established in early 2020 and co-chaired by the Interior and Human Capacities Ministers. This multi-agency task force coordinated pandemic response, including emergency planning, policy measures, and public health directives. An epidemiological deployment unit, led by the Deputy CMO, was responsible for rapid regional deployment to hotspots when immediate interventions were needed.

In addition, the CMO plays a central role in developing and delivering public health messages, including press briefings and risk communication during epidemics and pandemics. The CMO's task is to share infection trends, variant updates, and vaccine advice alongside and infection prevention recommendations for the general population, healthcare workers and the vulnerable groups.

The national Chief Medical Officer serves a critical coordinating role in Hungary's public health infrastructure. She ensures readiness for pandemics through legal authority, surveillance and regulatory oversight, coordinated crisis response, and clear

public communication. The role ensures Hungary can implement epidemiological interventions, declare healthcare emergencies, and guide both health professionals and the public during outbreaks.

The CMO-led NCPHP is responsible also for overseeing healthcare-associated infection prevention and control, and antimicrobial resistance (AMR). With regard to AMR, Hungary's antibiotic consumption levels are significantly lower than the EU average. However, as one indicator of antibiotic resistance highlights, Hungary had levels of registered bloodstream infections due to methicillin-resistant Staphylococcus aureus (MRSA) above the EU average among patients with tested blood samples 2021. (from State of Health in the EU Hungary Country Profile 2023 https://health.ec.europa.eu/system/files/2023-12/2023 chp hu english.pdf)

The National Research, Development and Innovation Office (NRDI Office) is the key institution in the field of research and innovation funding. It was established under Act LXXVI of 2014 ("RDI Act") and serves as Hungary's legally defined central body for coordinating government R&D&I policy and funding. The institution was established by statute to provide a stable institutional framework for the government's coordination of research, development, and innovation. The formation and operations of this institution are governed by the Government Decree 344/2019 (XII.23.), which delineates its role and its connection to the National Research, Development and Innovation Fund. The Office is subject to the oversight of the Ministry of Culture and Innovation. (https://nkfih.gov.hu/about-the-office)

The NRDI Office is the central agency responsible for the formulation and implementation of Hungary's national R&D&I strategy. The primary function of the fund is to ensure that public investments in research and innovation are delivered in a manner that is both efficient and transparent. Furthermore, it is designed to ensure that these investments are aligned with broader economic and policy goals. The Office is tasked with ensuring the predictable funding of RDI, as well as the efficient, transparent, and value-creating utilisation of public resources. The mandate of the organisation encompasses the coordination of R&D&I policy across government and public research institutions.

R&I Policies and Strategies

The information is not exhaustive and should be updated regularly.

Country has a dedicated strategy for research and innovation related to pandemic threat? **No** R&I strategy URL.

Country has an open science portal with information on publicly financed scientific research? Yes R&I portal https://nkfih.gov.hu/english-2017/funding-schemes/funded-projects

Country has R&I webpage on COVID-19; Other WHO viral risks; Antimicrobial resistance (AMR)

Website open science/ open data initiative with respect to pandemic threats, such as COVID-19 open

Name URL Short Description

Center for Epidemiology and Surveillance https://terepi.semmelweis.hu/en

The Center for Epidemiology and Surveillance at Semmelweis University was established in October 2020 with to contribute to the prevention of infectious diseases and the reduction of the burden of non-communicable diseases in Hungary through scientific research methods. It operates 'Spatial EPI' which is a specialised system that provides downloadable indicators and health maps to understand the health status of the population living in a specific area at national, county, district and municipality level, to analyse mortality, demographic conditions and socio-economic disparities and their trends over time. During the COVID-19 pandemic, it developed methodology for the geographical identification of vulnerable groups, the tracking of the spatial and temporal spread of SARS-CoV-2, and the evaluation of the impact of measures, see also https://semmelweis.hu/esk/

National Laboratory for Health Security https://www.eglab.hu/en/

The National Laboratory for Health Security is a network of scientific research groups that collaborate closely to provide the scientific basis for data and analysis-based decision making in the fields of health, disease control and ecosystems in Hungary to protect the health of the population. Within this scientific network, new synergies are created through

National Laboratory of Virology

https://www.nemzetilaborok.nkfih.gov.hu/national-laboratory-of-virology/about

The aim of the National Laboratory of Virology is to increase the research performance and R&D activities of the complex virology laboratory unit of the Szentágothai János Research Centre of the University of Pécs, and to unite virology research in Hungary and to build a Hungarian research network

COVID-specific topics

Hungarian Academy of Sciences

https://mta.hu/mta hirei/az-mtahu-osszeallitasai-a-koronavirus-helyzetrol-110465

A source of scientific publications related to the coronavirus pandemic, digital teaching materials, and distance learning procedures: a continuously updated collection of articles on the website of the Hungarian Academy of Sciences.

National Research, Development and Innovation Office

Research funded by the NRDI Fund on COVID-19

https://nkfih.gov.hu/for-the-applicants/research-funded-by-the https://nkfih.gov.hu/english/nrdi-fund/covid-fund-2020-211-ed

Country has coordinating structures to link public health needs and research needs? No Coordinating structures URL

R&I Infrastructures, Initiatives and Clinical TrialsThe information is not exhaustive and should be updated regularly.

Country has the following research infrastructure for infectious diseases and outbreaks available, or under construction

BSL 3; BSL 4; emergency intervention units; clinical trial units; high level isolation units; high level isolation transport; open genome deposits for viruses; open genome deposits for bacteria; open genome deposits for AMR; reference centres of excellence, National Laboratory for Health Security

Name Infrastructure Type Infrastructure

LIRI

BBMRI-ERIC Hungarian

National Node

https://researchinfrastructures.hu/health-food/bbmri-eric-hungarian-national-node

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Biological Research Centre (BRC), Szeged genome deposits,

https://www.brc.hu/en

Biosafety Level 4 Virological Laboratory And Research Center

BSL4

biobank

 $\underline{\text{https://researchinfrastructures.hu/health-food/biosafety-level-4-virological-laboratory-and-research-center}\\$

Hungarian Centre for Excellence in Molecular

Reference centres of excellence

http://www.hcemm.eu

Medicine

National Biosafety Laboratory (NBL) BSL3-4

https://researchinfrastructures.hu/health-food/national-biosafety-laboratory

National laboratories

Pharma R&D biotechnology, ...

https://www.nemzetilaborok.nkfih.gov.hu/fields-of-operation?foldid[]=20100

National Laboratory for

Health Security

Public Health

https://www.eglab.hu/en/

National Laboratory for Infectious Animal Diseases, AMR, Vet

Https.//

https://www.nemzetilaborok.nkfih.gov.hu/national-laboratory-for-infectious-animal-diseases/about

National Centre for Public

Health and Pharmacy

BSL4 https://www.nnk.gov.hu/

Protein Modelling Research Group

https://researchinfrastructures.hu/health-food/protein-modelling-research-group

Semmelweis University -Biobank Network

https://researchinfrastructures.hu/health-food/semmelweis-university-biobank-network

Virological Research Group

https://szkk.pte.hu/en/research groups/molecular biology cluster/virological research group 0

National Laboratory for Virology

BSL4

https://vnl.pte.hu/

Country supporting the participation to the following ESFRI initiatives relevant for infectious diseases

BBMRI; ECRIN; ERINHA; ELIXIR; Euro-Biolmaging; EMBL; ICGEB; CESSDA; ...(see

 $\underline{https://nkfih.gov.hu/english/international-cooperation/international-organisations/international-research-infrastructures/summary}$

Website network of clinical trials (e.g. to facilitate the access to clinical trials) the country is involved in

https://eu-response.eu/

https://ecrin.org/

 $\underline{https://nkfih.gov.hu/english/international-cooperation/international-organisations/international-research-infrastructures/summary}$

https://neku.org.hu/

https://www.combacte.com/

https://vaccelerate.eu/

Budget mobilisation mechanisms and funding sources The information is not exhaustive and should be

updated regularly.

Basic Research

url www.nkfih.gov.hu

https://nkfih.gov.hu/english/nrdi-fund/forefront-research-excellence-programme-kkp-22/call-for-applications

https://nkfih.gov.hu/english/nrdi-fund/establishment-and-complex-development-of-the-national-laboratories-2022-211-nl/call-for-

applications

https://mta.hu/poszt-covid-jelensegek-kutatasara-iranyulo-tamogatas/tamogatott-kutatok-112259

funding for basic research accessible for industry? No source of funding Public (research) agencies

Applied Research

url https://nkfih.gov.hu/palyazoknak/nkfi-alap/covid-alap-2020-211-ed

https://nkfih.gov.hu/english/nrdi-fund/covid-fund-2020-211-ed/call-for-applications

https://nkfih.gov.hu/english/nrdi-fund/investment-in-the-future-2020-116-jovo/call-for-project-proposals

https://nkfih.gov.hu/english/nrdi-fund/fast-track-2021-114-gyorsitosav/call-for-applications

funding for applied research accessible for industry? Yes

source of funding Public (research) agencies

Translational Research

url

funding accessible for industry?

source of funding

Clinical Research (in general)

url

funding accessible for industry?

source of funding

phase funded?

Clinical Research (in pandemic phase)

url

funding accessible for industry?

source of funding

phase funded?

Innovation Projects

url https://nkfih.gov.hu/palyazoknak/nkfi-alap/covid-alap-2020-211-ed

https://nkfih.gov.hu/covidea-en

 $\underline{https://nkfih.gov.hu/english/nrdi-fund/fast-track-2021-114-gyorsitosav/call-for-applications}$

funding for innovation projects accessible for industry? Yes

source of funding Public (research) agencies

Flexible funding possible in case of emergency e.g. https://nkfih.gov.hu/english/nrdi-fund/covid-fund-2020-211-ed

R&I actors, authorities and activated processes that are activated in case of a

health threat The information is not exhaustive and should be updated regularly.

R&I actors, authorities and ministries involved in case of an outbreak; existing) national or regional structures that advise governments on R&I during emergencies; mobilisation processes of research forces; mechanisms to identify promising therapies or medical products for pandemic preparedness that are in the pipeline; other actors, authorities or processes

Name Description url

Ministry of Interior, Health State Secretariat The Ministry of Interior is responsible for managing the healthcare

system, including health security and pandemic preparedness and

https://2010.2014.les

https://2010-2014.kormany.hu/en/ministry-of-interior/organisation

Ministry of Culture and Innovation The Ministry of Culture and Innovation is responsible for a wide range of

tasks related to innovation, and higher education. Key areas include overseeing research and development and managing vocational and higher

education.

https://kormany.hu/kulturalis-es-innovacios-miniszterium

National Research Development and Innovation Office
The NRDI Office is the central agency responsible for the

formulation and implementation of Hungary's national R&D&I strategy.

https://nkfih.gov.hu/

National laboratory for Health Security Scientific research to support pandemic preparedness and response

https://www.eglab.hu/en/

Hungarian Academy of Sciences Scholarships, calls for applications

https://mta.hu/palyazatok/az-osszes-palyazat-105933

Hungarian Association of Public Health Training and Research Institutes (HAPHI)

HAPHI supports the development and implementation of evidence- based public health interventions by training of public health professionals, research and

consultancy

https://nepegeszsegugyi-egyesulet.hu/en/about-us

National Centre for Public Health and Pharmacy (NNGyK)

Public health and healthcare authority of Hungary. NNGYK's role is to improve the health status of the population. To do this, it carries out several essential public health functions, such as surveillance, control of communicable diseases, health promotion, organized screening programs and vaccination programs and health communication.

NNGyK and the Chief Medical Officer has a central role in pandemic preparedness and response.

https://www.nnk.gov.hu/

Version September 2025



BE READY is responding to the call: HORIZON-HLTH-2021-DISEASE-04-06 "Building a European partnership for pandemic preparedness" under grant agreement 101057795. Starting date: 01.06.2022. ¦ End Date 31.05.2025

BE READY PLUS is responding to the call: HORIZON-HLTH-2024-DISEASE-17 "Pandemic preparedness and response: Maintaining and enhancing the preparatory work for a co-funded European partnership for pandemic" under grant agreement 101195079. Starting date: 01.01.2025. ‡ End Date 31.12.2025