

**Ministry of Health
Republic of Hungary
Office of the Chief Medical Officer**

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Dr. Székely Tamás
Minister for Health

NATIONAL INFLUENZA PANDEMIC PREPAREDNESS PLAN

**Plan of actions and measures
to respond to an influenza pandemic**

**A version of the plan originally approved in October, 2005 extended in accordance with
the recommendations provided by ECDC**

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CHAPTER ONE

INTRODUCTION

The influenza pandemic

Of the common pandemic pathogens, influenza viruses remain a serious cause of morbidity every year worldwide, which, due to the structure and animal host range of one of its new subtypes, may evolve into a subtype which can cause a global epidemic.

An influenza pandemic occurs when a rearrangement of genes between human and avian influenza virus strains takes place, for which mankind is susceptible. When a new influenza virus subtype having the capacity to cause influenza pandemic appears, no one in the population is immune against either haemagglutinin (H) or neuraminidase (N), or in the worst case, against both of the virus surface antigens. When this occurs, the range of population groups at risk, and in need of protection, will be expanded considerably.

Influenza pandemics are likely to have severe public health and economic implications. In 1918, the pandemic, so-called “Spanish flu” due to the death of a member of the Spanish Royal Family and intense reporting by the Spanish media, caused about 20 million deaths worldwide. On average pandemics causing high morbidity and mortality occurred every 25 years during the last century, whereas the last pandemic took place more than 30 years ago. Information on the pandemic is contained in *Annex No 1*.

Elaborated in 1997 and revisited in 2001, the Hungarian pandemic preparedness plan needed to be reviewed in keeping with the documents that were adopted by the World Health Assembly as well as the guide published by the European Union on 23 December 2004 (Commission Working Document on Community Influenza Pandemic Preparedness and Response planning).

In preparation for influenza pandemics, certain Member States have developed systems of national influenza pandemic planning based on the WHO guidelines adopted in 1999. Because of the characteristics of pandemics, however, and the special features of the European Union area in which people, animals and products circulate freely, the question of the need for Community action to co-ordinate preparedness and response in the EU had become critical.

From the point of view of animal health, mention must be made of Council Directive 92/40/EEC introducing Community measures for the control of avian influenza, which defines the Community control measures to be applied by Member States’ competent authorities in the event of an outbreak of avian influenza. Furthermore, the Commission urges Member States to step up surveillance of avian influenza and to introduce strict measures in order to prevent animal-to-human spread of the disease.

Background information on the avian flu is contained in *Annex No 2*.

Advance preparation for the pandemic will create the groundwork for effective response, for

decreasing morbidity and mortality related to the influenza epidemic to the smallest possible level and for preventing disruptions in delivering health care to the population.

Overarching goal of the National Influenza Pandemic Preparedness Plan

The overarching goals of the Plan are to

Inform measures of preparedness for the influenza planning;

Put in place and make ready for deployment a well established response mechanism to contain and eradicate the pandemic and to see to it that cases presenting in masses are provided appropriate health care;

Ensure that planned actions and measures contribute to decreasing the number of influenza cases, cases with complications and deaths;

Promote, on the basis of a communications plan, information of the public at large and healthcare workers on issues related to the pandemic, prevention of panic and active involvement of the public in implementing preventive measures;

Attain, through the implementation of actions and measures set forth in the plan, that the country's national economy continues to be operational, its public administration is maintained and its national security and defence are ensured.

The objectives of the Plan are to

Ensure that estimates based on statistics and preliminary forecasts make it possible to assess the expected magnitude of cases during a potential pandemic, to define the size of population groups at risk due to their health status, to identify the occupational groups to be protected with a view to maintaining the economic viability of the country and to define the number of individuals in those groups;

Identify the specific measures to be taken during the preparedness period, the public health institutional, material and human resources as well as organisational and information systems needed to contain and eradicate the pandemic;

Inform the advance elaboration of measures that are required to contain the pandemic and will need to be imposed in the event of a pandemic, and inform the coordination of intersectoral division of tasks;

Define conditions for the supply of a new vaccine needed for mass vaccination, promote fast-track licensing of the vaccine, setting medical priorities in vaccine use and outlining rules of vaccine distribution;

Promote elaboration of guidelines for the prevention of the disease and treatment of cases, for the period between the launch of vaccine production and beginning of vaccination with the vaccine produced;

Develop actions and measures to be taken in order to control and contain the disease in a

breakdown by the individual phases of the pandemic as defined by WHO, and identify the actions to be taken by the agency and organisations concerned in the eradication of the epidemic;

Link the technical management scheme of epidemic eradication at the national, regional and local levels to the disaster management command and control systems at the Governmental and sectoral levels; provide the basis for multisectoral cooperation required to contain and eradicate the epidemic;

Ensure that the costs required to prevent and contain the outbreak as well as budgetary allocations needed may be planned for in advance;

Facilitate harmonisation of domestic activities with actions taken by WHO, the EU and other international organisations;

Promote preparation of communications concerning the pandemic according the individual pandemic phases taking into account specific target groups.

Impact of the pandemic on the healthcare system

In the event of an influenza pandemic, if preventive measures fail to control and contain spread of the infection, and when high morbidity rates are seen, there will be a significant excess need for care at all sectors and levels of the healthcare delivery system (outpatient services, specialist services, inpatient care, as well as rescue and patient transportation services).

Primary health care will see cases in the highest numbers. In addition to overcrowded family practitioners' offices and clinics, the number of home calls and visits may increase considerably. This may be further increased if, for considerations of preventing the spread of infection, health authorities urge that preference be given to providing care at patients' homes.

The emergency ambulance services will have to expect both emergency medical care and patient transportation activities in volumes many times exceeding the average on an ongoing basis. During a pandemic, alternative ambulance and patient transportation service providers will have to expect significant excess demands.

Inpatient facilities will need to put in place and operate capacities to accommodate patients with infectious diseases, beyond 100 percent utilisation of infectious disease wards and services, in the event of a failure to contain further increases in morbidity by applying preventive measures.

Depending on the appearance of expected complications, intensive care capacities will have to meet significant excess needs, even if the totality of intensive care capacities would be deployed to care of influenza cases.

The potential pandemic will have a fundamental impact on the professional operation of inpatient care institutions. In keeping with the provisions outlined in emergency health plans, during the pandemic period only patients who are absolutely in need of inpatient care may continue to be in hospitals and only such patients may be admitted. Non life-saving interventions and examinations should be postponed until the pandemic has subsided, and all

efforts should be made to ensure that the length of stay of justified cases does not exceed the medically acceptable minimum number of days.

Executives of healthcare institutions will need to take account of growing demands on radiological diagnostic and laboratory units, due to cases with complications.

In order to contain the spread of the epidemic, hospital visiting will have to be prohibited, which may result in a further disruptive impact on patient care as there might be an increased volume of phone calls to inquire about patients by relatives and next-of-kin denied access to the institutions.

During the pandemic, the need for human resources is increased substantially.

In the case of preventing the pandemic using preventive measures fails, health care professionals would most probably experience physical and psychological stresses never encountered before as a result of the need to provide health care functions more intensively than before on a permanent basis for weeks.

Should the pandemic scale up to larger dimensions, there is a possibility to announce the health care disaster situation. In such cases health care professionals can be redirected. Since no human resources can be withdrawn from primary care, therefore hospitals will need to solve the redirection of their doctors and professional health care workers within the institution, and the establishment of a work schedule which fits more appropriately to the current situation.

The situation is further aggravated by the fact that in spite of a timely vaccination of the health care workers having direct contact with the patients is completed, it must be assumed that part of the workers will fall ill and therefore temporarily lost for job assignments.

Due to the aforementioned reasons situations may arise when certain institution will be compelled to introduce two long shifts on a temporary basis instead of the ordinary three shifts a day.

In the event a pandemic of disastrous dimensions occurred, when prevention is not efficient enough, the significance of civil support will be appreciated more than ever. Health care can be supported on a voluntary basis by retired former health care professionals, activists of the church and charities as well as students of health care education institutions.

Volunteers holding non-medical or not health care professional qualifications may assist in patient care and nursing with their contribution having acquired the minimum necessary training to do so.

The impact of a pandemic on the national economy and the need for intersectoral preparedness

Materials issued by the WHO and the EU make it clear that in the event of occurrence of a pandemic for a relatively short period of time, i.e. for a couple of months the great number of people out of work may even cause serious troubles in fundamental services and, as a consequence, in a number of other areas in life.

Both the WHO and the EU have repeatedly call upon the governments that an influenza pandemic may exert material adverse impacts on all sectors of the national economy in addition to the epidemiological consequences.

As a result, any preparedness to a pandemic must include all sectors, business organisations involved in the functioning of the national economy, the maintenance of fundamental services, public order and public security, defence ability and the functionality of the state as well in order to secure the functional well being of the society.

Areas of preparedness in relation to an influenza pandemic and its consequences must include the sectors of power supply, gas and fuel supply, drinking water supply, district heating services, public transport, goods transport, banking services, fundamental food security, communications industry, state administration, public security and national defence and it was expedient to develop a methodology to eliminate or mitigate adverse consequences.

As services providing fundamental services to the public belong to the scope of critical infrastructure, preparedness is indispensable from this point of view as well.

Chapter Two

CHAPTER TWO

ORGANISATIONS WITH PRIMARY RESPONSIBILITY FOR PANDEMIC PREPAREDNESS AND RESPONSE AND THE LEGAL FRAMEWORK OF THEIR INVOLVEMENT

Responding to and containing the influenza pandemic or an epidemic emergency are primarily the tasks of the healthcare sector from a technical point of view; however, the health sector in itself is not able to address all consequences and issues related to the epidemic. For preparedness and containment to be effective and efficient, the joint efforts and involvement of Government and society are required.

Organisations of Government control:

- the Governmental Coordinating Committee (GCC) GCC Operative Staff (OpS)
- Outbreak Assistance Working Party (OAWP)
- National Influenza Pandemic Prevention Task Force (NIPPTF)

Healthcare organisations in charge of pandemic preparedness and response:

- Ministry of Health
- National Public Health and Medical Officers' Service (NPHMOS) Office of the Chief Medical Officer (OCMO)
National Epidemiological Centre (NEC)
Regional and district institutes of the National Public Health and Medical Officers' service
- Hungarian National Ambulance and Emergency Service (HNAES)
- National Organisation of Patient Transporters
- healthcare institutions.

Organisations collaborating in pandemic preparedness and response pursuant to effective legislation:

- Ministry of Agriculture and Regional Development (MARD) Agricultural Sectoral Administration Agency
- Ministry of Environment Protection and Water Management
- County (Budapest Metropolitan) and municipal (metropolitan district) defence committees
- Ministry of Local Governments
National Directorate-General for Disaster Management (OKF)
Civil protection services
- Ministry of Justice and Police Forces
National Police Headquarters (NPH)
- Ministry of Defence
Hungarian Army
- Ministry of Foreign Affairs
- Ministry of Education

The legal framework of pandemic preparedness and response:

Pandemic preparedness and response are provided for in the Health Law, in effective pieces of legislation concerning disaster medical services and contingency planning of healthcare institutions; concerning infectious diseases and response to and control of epidemics; concerning disaster management, as well as other legal instruments of state administration.

The list of effective relevant regulations and their complete or abstracted contents are contained in *Annex No 3*.

Chapter Three

PANDEMIC PHASES IN RELATION TO HUNGARY, IN ACCORDANCE WITH THE WHO'S DEFINITION

The National Influenza Pandemic Plan will be implemented as required by the **epidemiological situation**, which may be divided into the **following phases**, taking into account the World Health Organisation's Global Influenza Preparedness Plan, published in April 2005 (WHO/CDS/CSR/GIP/2005.5):

INTERPANDEMIC PERIOD

- PHASE 1** No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
- PHASE 2** No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

PANDEMIC ALERT PERIOD

- PHASE 3** Human infection(s) are caused by a new subtype of the animal influenza virus, but no human-to-human spread, or at most rare instances of spread by a close contact.
- PHASE 4** Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans
- PHASE 5** Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

PANDEMIC PERIOD

- PHASE 6** New influenza virus subtype spreads with increased and sustained transmission in general population.
- Level 6/a** Spread of the new influenza virus subtype in initially affected country.
- Level 6/b** New influenza virus subtype appears in other countries.
- Level 6/c** New influenza virus subtype appears in Europe.
- Level 6/d** First verified cases caused by the new influenza virus subtype in Hungary.
- Level 6/e** New subtype causes regional outbreak in Hungary.
- Level 6/f** New subtype causes national outbreak in Hungary.
- Level 6/g** First wave of pandemic subsides in Hungary.

Level 6/h Second/third wave of pandemic in Hungary.

POSTPANDEMIC PERIOD

Return to interpandemic period.

CHAPTER FOUR

PREPAREDNESS PERIOD

The preparedness period includes phases 1, 2, 3, 4 and 5 of the pandemic according to WHO's categorisation.

INTERPANDEMIC PERIOD

PHASE 1

No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Objectives:

1. To develop and maintain national influenza pandemic contingency plans which are in harmony with international plans.
2. To promote national capacity to respond to early reports of new influenza virus strains.
3. To develop effective mechanisms for mobilization and rapid deployment of resources to areas of need.
4. To develop effective mechanisms for decision-making and subsequent actions regarding national and international responses to influenza related health emergencies, by strengthening intersectoral and intergovernmental cooperative arrangements.

Actions:

Operated by the Ministry of Health, the Outbreak Assistance Working Party (OAWP) meets at least twice every year, in keeping with its Rules of Procedures (*Annex No 4*) During its meetings,

- OAWP reviews the country's epidemiological situation and discusses current issues and tasks related to pandemic preparedness.

The head of OAWP may order a pandemic exercise, taking into account the annual plan of action of the Governmental Coordinating Committee (GCC) as well as the annual exercise plan of the Health Security Committee (HSC) of the EU Directorate General for Health.

- The Chief Medical Officer in his capacity of deputy head of OAWP will operate the National Influenza Pandemic Prevention Task Force (NIPPTF) as an interdisciplinary technical subcommittee of OAWP.
- NIPPTF will hold its meetings with a frequency and at dates set by the Chief Medical

Officer as required by the tasks to be accomplished, and shall make recommendations and provide advice concerning preparedness.

- The Ministry of Health (MoH) shall inform GCC on the process of preparedness in the frames of the annual reports.
- MoH, with the collaboration of the Office of the Chief Medical Officer (OCMO) shall ensure the availability of vaccines needed for free-of-charge vaccination against seasonal influenza and shall see to it that population groups at high risk are vaccinated.
- Seasonal vaccination levels of populations in the risk groups must be elevated on a continuous basis until the level corresponding to the recommendation by the WHO will have been reached.
- MoH see to determination of the composition and quantity of antiviral drug stockpiles, procurement and storage of stocks.
- Establishing a strategy of use for antiviral preparations in order to ensure optimum use of available stocks.
- According to the position taken by the Professional College of Infectiologists stockpiling of antiviral drugs by business organisations can not be objected provided such stocks are used only in times of pandemic announced by the Senior Medical Officer.
- MoH suggests the involvement of GCC to start preparations for intersectoral preparedness, monitors and provides professional assistance to the preparation of other sectors.
- Pandemic preparedness plans of the sectors involved constitute a part of the National Influenza Pandemic Preparedness Plan.

In Hungary, the National Epidemiological Centre is in charge of epidemiological surveillance; as part of this, it

- maintains a surveillance service in periods of seasonal influenza.
- assesses morbidity of influenza-like disease on an ongoing basis.
- during the operation of the surveillance service, issues a weekly report not later than 12 noon on each Wednesday.
- monitors the spread of influenza viruses and the rapid identification of pathogens responsible for influenza-like disease.
 - ~ studies resistance to antiviral drugs
 - ~ ensures supply of reagents to regional virological laboratories
 - ~ liaises with the European Influenza Surveillance Scheme (EISS) and WHO
 - ~ forwards isolated strains to WHO to allow for monitoring of changes in antigen structure
 - ~ collaborates with animal health organisation in order to exchange information and isolated strains.

Maintaining the avian surveillance scheme is the task of the Ministry of Agriculture and Regional Development (MARD), which provides information to OCMO-NEC on an ongoing basis.

- OCMO updates guidelines concerning influenza with the involvement of NEC. The

- guideline currently in force is contained in *Annex No 5*.
- The institutes of the National Public Health Service prepare their respective pandemic preparedness plans in accordance with the guidance received from Ministry of Health OCMO.
 - Inpatient institutions develop and regularly update institutional influenza pandemic plans in order to supplement the epidemic preparedness planning section of their respective contingency plans.
 - The supplements to the institutional contingency plans are reviewed and approved by the competent medical officers.
 - Requirements of contents for the influenza pandemic preparedness plan of institutions are contains in **Annex No 6**.
 - The executive management of healthcare institutions must ensure that the institutional contingency plan is regularly updated. The updating exercise is reviewed and controlled by the competent county (Budapest Metropolitan) chief medical officer, who initiates repeated coordination with other involved agencies at the regional defence committee, as appropriate.
 - District institutions of the National Public Health Service make the family doctor service providers and occupational health care service providers prepare their own pandemic preparedness action plans.
 - It must be ensured that healthcare workers are properly informed and advised about pandemics during the interpandemic period. This takes place in the form of continuing education courses, professional journal, publications, conferences and internet websites.

In the course of preparedness, but also during the period of response, communications at appropriate levels, with adequate messages and of sufficient duration are of equal value and importance as are technical activities, in order to maintain regular contacts with all target groups.

Interactive communication with the public supports preparedness effectively and it is suitable to prevent panic and spontaneous reactions as well as to establish proper cooperation with the population.

Communications during the period

Information to professional and technical staff

- Familiarization with pandemic plan and related activities
- Preparation of information materials (CD-ROM) that will be disseminated by professionals on the basis of common criteria

Information to the public

- Direct communication (professionals at NPHMOS, family practitioners, website etc.)
- Indirect communication (media, radio, television, newspapers, electronic media).
- Publications (leaflets and brochures).
- In accordance with the risk assessment and evaluation prepared by National Epidemiological Centre and the Office of the Chief Medical Officer, OAWP provides information on the potential of getting infected, on the recommended, necessary and ordered

preventive or other actions to be taken.

Communication infrastructure

In order to implement the information strategy, the following infrastructure network is available:

— e-mail, intranet, telephone, fax.

Health and medical websites that are available include the homepage of the Ministry of Health — www.eum.hu; the health information system of the Ministry of Health — www.drinfo.eum.hu; the homepage of NPHMOS — www.antsz.hu; and the homepage of the National Epidemiological Centre — www.oek.hu.

In order to enhance communication efforts towards the population at large, contacts should be taken up and possibilities of collaboration should be explored and developed with nongovernmental organisations (Red Cross, charity organisations, churches, students of health training schools etc.), as a result of which it is expected that websites in support of our communication will be expanded to include information on the pandemic.

Persons in charge of information contacts

Minister of Health, Secretary of State of the Ministry of Health (head of OAWP), Hungary's Chief Medical Officer (deputy head of OAWP), Deputy Chief Medical Officer, Director-General of the National Epidemiological Centre, Head of the Department of Epidemiology at the Office of the Chief Medical Officer. Ministry of Health keeps contact with persons coordinating pandemic preparedness in other ministries.

Communication channel towards the EU and WHO

Formal communication links with the EU and WHO will be maintained by the National Epidemiological Centre and MoH.

Phase 2

No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

In addition to the activities carried out in Phase 1:

- MoH takes action with Government to make available budgetary resources required for preparedness
- OCMO draws up plan for distribution of vaccines and medicinal products that will become necessary if a pandemic occurs
- OCMO, with the involvement of Hungary's Chief Pharmaceutical Officer, plans expected needs of supplies from other medicinal products required for the treatment of influenza cases if a pandemic occurs and explores arrangements to meet such needs.
- NEC ensures procurement of pandemic virus strain appropriate for the production of the new vaccine. To this end, it gets into contact with the National Institute for

Biological Standards and Control (NIBSC, UK).

- The Ministry, with the involvement of the Chief Medical Officer, takes measures to ensure the adequacy of the process of domestic manufacturing and marketing of the pandemic vaccine and medicinal product.

PANDEMIC ALERT PERIOD

PHASE 3

Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

Following reporting of phase 3 to WHO,

- In case of avian influenza the MoH NPHMOS reviews activities and measures of pandemic response related to human incidence that necessitate the collaboration of organisations in other sectors.

As part of this:

- ~ they monitor potential outbreaks of influenza-like diseases on poultry farms
- ~ should it come to killing and destruction of poultry holdings, they provide technical support in order to ensure the protection of persons carrying out the task and to enforce public health requirements.
- NEC continues (epidemiological and virological) routine surveillance.
- NEC monitors incoming or obtained international information, and updates the Chief Medical Officer as deputy head of OAWP on an ongoing basis.
- From the date of announcement by WHO, the Ministry, OCMO, and NEC provide regular information to professional and technical organisations and the public at large on the situation as it evolves, as well as on measures and actions taken and planned.
- OAWP reviews the professional potential for further stockpiling of antiviral drugs and initiates to raise the level of stocks.
- With the involvement of the National Epidemiological Centre, MoH reviews the possibilities of providing protection to children at an age of 6 to 36 months and the issue of their eventual vaccination.
- NPHMOS institutions collaborate closely with animal health unit of the Agricultural Sector Administration Agency.

Communication:

In addition to the information provided by the MARD and the official bodies responsible for animal health care provisions NPHMOS shall inform the population in the areas affected by the avian influenza outbreak as well as those involved in disease control on the methods of protection and the rules of proper conduct.

PHASE 4

Small cluster(s) with limited human-to-human transmission but spread is highly

localized, suggesting that the virus is not well adapted to humans

PHASE 5

Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

Actions in Phases 4 and 5

- MoH NPHMOS reviews and evaluates preparedness status (stocks of drugs for chemoprophylaxis, availability of monovalent vaccine etc.) and makes proposal to the head of OAWP regarding necessary actions.
- The Chief Medical Officer takes initiative at MoH to obtain budgetary resources in order to allow for the implementation of actions and measures as identified in the Pandemic Preparedness Plan and falling within the ambit of NPHMOS.
- Taking into consideration the qualification levels, both MoH and OCMO-NEC mutually inform each other on the contents of the documents received with regard to the influenza outbreak from EU EWRS (Early Warning and Response System), under the WHO IHR (International Health Regulations and from National Directorate-General for Disaster Management, and the Ministry of Foreign Affairs, respectively.
- NEC shall continuously evaluate arriving international data and other pieces of information affecting Hungary and Europe
- MoH NPHMOS holds extended meeting with heads and epidemiologists of institutes of NPHMOS attending in order to clarify and fine-tune tasks of pandemic preparedness and response.
- The National Institute of Inventory Management reviews stockpiles of antiviral pharmaceuticals, and supplies of health materials and equipment in the National Medical Stockpiles which may be deployed to treat complications emerging in the case of a pandemic to support healthcare institutions in the event of a pandemic, and reports the quantities and availabilities to the Ministry.
- NPHMOS reviews its own plans and checks the pandemic preparedness plans of hospitals and other health care service providers concerned.
- NPHMOS coordinates and clarifies with NDGDM the scope of tasks that require the involvement of disaster management agencies.
- NEC reinforces routine surveillance, furthermore, NPHMOS introduces, without any delay, epidemiological measures concerning persons coming from the country of origin of the new virus subtype and related to diseases that might be imported from said country.
- Institutes of the NPHMOS shall reinforce virological surveillance levels and increase sampling frequency for virology within the influenza monitoring service by 50% in all age groups and regions, irrespective of the current state of epidemic domestically.
- The Senior Secretary of State in the Ministry of Health calls upon the president of the Governmental Coordination Committee to get the Police, Customs Office and National Directorate-General for Disaster Management prepared to cooperation with the health care authorities in accordance with the established plans and to start get prepared to the tasks related to the pandemic.

- NPHMOS, in collaboration with the Police, implements controls of persons coming from areas of outbreak, the identification and isolation of persons suspected of having influenza, at the designated border crossing stations and points.
- NPHMOS designates institutes for the epidemiological observation and provision of care to suspected cases of influenza identified at border crossing stations and points and contacts of persons newly infected with the virus.
- OCMO takes the necessary measures to ensure that the production of a new vaccine against the pandemic virus provided by WHO is launched.
- MoH approaches Government to request that funds are released to allow the production of the new vaccine in order to protect the population.
- MoH provides technical support to MoFA to organise protection of staff at foreign representations from the outbreak, and makes vaccines available for use in staff at foreign representations.
- Ministry of Education collaborates in order to ensure that information leaflets and brochures on influenza made available by NEC are disseminated to educational institutions.

Communication:

- Based on the information received from the incidence of influenza, MoH and OCMO provide regular information to the health care service providers and the media.
- MoH to inform the population on the risk of epidemic, the method of aspecific prevention and the rules of procedure to generate and supply vaccines.

CHAPTER FIVE

THE PANDEMIC PERIOD

PHASE 6

New human influenza virus type spreads with increased and sustained transmission in general population.

The pandemic period is divided into different levels according to the geographical areas that are affected by the outbreak and the size of the outbreak.

Level 6/a Spread of the new influenza virus subtype in initially affected country.

Level 6/b New influenza virus subtype appears in other countries outside Europe.

Level 6/c New influenza virus subtype appears in Europe.

- NEC enhances integrated epidemiological and virological surveillance.
- When the virus subtype appears in Europe outside the seasonal influenza period, the Chief Medical Officer issues orders to activate influenza surveillance.
- NPHMOS shall reinforce its laboratory capacity in order to be able to carry out typing and antigen as well as genetic characterisation of the strains in all cases.
- NPHMOS is to order reporting on unusual and inexplicably severe outcome acute respiratory illnesses and mortality out of turn and especially with regard to persons having risk exposure and in particular in respect of health care workers.
- NPHMOS orders that pathological and virological tests be carried out in influenza-like in all cases with all fatal outcome.
- OCMO maintains regular contacts with heads, pandemic specialists and epidemiologists of institutes of NPHMOS attending in order to clarify and fine-tune new measures.
- With contributions from the Police, NPHMOS shall intensify control of persons arriving from areas in danger of epidemic at the border crossing points, screening and isolation of suspect influenza cases in accordance with the relevant recommendation from the WHO and the European Communities ECDC.
- The ministry orders, through the Chief Medical Officer, that the bed volume of infectious disease wards be specified that are available for the treatment of influenza cases and that may be reassigned temporarily for the duration of the pandemic.
- Health care institutions obliged to prepare a disaster relief plan shall update their respective disaster relief plans having special regard to epidemiological functions and furthermore they assess in advance who would undertake to carry out work of their former employees now retired in the case of a pandemic situation.
- OCMO reviews and updates the plan for distributing vaccines required to vaccinate high-risk population groups and population groups to be provided increased protection. Furthermore, it reviews and updates the therapeutic antiviral stockpiles and their concept of use, and as function of the review, further defines distribution plans.

- NPHMOS orders that vaccination of healthcare workers and employees of sectors providing essential services shall begin.
- In the event of the non-availability of the necessary vaccines, NPHMOS considers the launch of antiviral prevention for healthcare workers and for employees working on key areas essential for the operation of the national economy, until such time as vaccination may begin.
- OCMO, with the collaboration of NEC, takes the necessary steps to ensure that diagnostics are procured in the necessary quantities and regional laboratories are supplied with reagents.

Communication plan.

The MoH and OCMO are to publish the announcements from the WHO and the positions, recommendation from the EU-ECDC.

The MoH and OCMO as well as the institutes of the NPHMOS shall enhance and intensify the dissemination of information to the population on the importance of aspecific disease control and its ways of doing with the involvement of all possible nationwide and local means of communication .

The MoH and the health care administration bodies hold regular briefing sessions on the epidemiologic measures taken with special regard to the actions concerning cross-border movements.

Ongoing information provided on web surfaces for both the general public and the professionals about the state of the influenza and the domestic measures already taken and those expected to be taken.

Level 6/d First verified cases caused by the new influenza virus subtype in Hungary.

Level 6/e New subtype causes regional outbreak in Hungary.

Level 6/f New subtype causes national outbreak in Hungary.

Measures to be introduced at level 6/d

- NPHMOS is to order the operation of the pandemic surveillance service and to extend the data supplied by the influenza reporting service with the reporting of those hospitalised for reasons of influenza-like diseases, the deceased and the cases confirmed positive for influenza.
- Upon initiative of the chief medical officer, the Senior Secretary of State of MoH advises the head of the GCC to mobilize OAWP. He will inform the head of GCC Operative Staff without any delay that OAWP has been mobilized.
- The head of OAWP mobilizes OAWP and begins operative management of epidemic response. OAWP shall assess and evaluate the situation as it evolves and takes measures with a frequency as set by the head of OAWP.
- The Governmental Coordination Committee, within its scope of authority defined in the relevant legal provisions, takes measures and coordinates the continuation of operations with a responsibility of special sectors and necessary to maintain the functionality of the national economy (such as energy supply, transportation, drinking water supply, and so on.) in order to allow for the security and operational safety of minimum required services.

- The health care administration body
 - orders to start vaccination of risk groups and to secure continuous distribution and delivery of free influenza vaccines. Provides for the safeguarding of the operation by the police when necessary.
 - orders the distribution of antiviral drugs necessary for the treatment of patients. Provides for the safeguarding of the operation by the police when necessary.
- NPHMOS heightens its laboratory capacities in order to be able to carry out, in all cases, typifying and antigenic structure and genetic characterisation of strains.
- OCMO provides information and updates on the epidemic situation and measures taken to relevant international organisations on an ongoing basis.
- NPHMOS provides continuous information on domestic and international epidemic situation to the profession and the public at large via EPINFO, the intranet network of NPHMOS and via the internet. MoH and NPHMOS hold regular press conferences on the development of the epidemiological situation.
- If made necessary by the course of the epidemic, upon initiative of the chief medical officer, the Minister of Health may declare state of public health emergency in counties affected by the outbreak or for the entire territory of the country, and informs the president of GCC and the head of GCC Operative Staff accordingly.
- The regional Chief Medical Officer makes arrangements when necessary to modify the primary health care districts and to organise mobile family doctor services on duty.
- If the epidemic increases, the Minister of Health proposes to the Government, upon the initiation of the head of OAWP and with the agreement of the president of GCC, the declaration of epidemic emergency.
- In the event that international assistance becomes necessary, the minister of health proposes to the Government the initiation of requesting international assistance,
- In an epidemic emergency situation, the National Directorate-General for Disaster Management, in accordance with the decision made by the Governmental Coordinating Committee, provides assistance with the application of specialised suitable subunits of civil defence to carry out the activities required by the NPHMOS.
- The dispatching unit of HNAES is tasked with setting rescue and patient transportation assignments for ambulance and rescue organisations and patient transportation businesses outside HNAES.
- Healthcare institutions deliver their activities in keeping with their contingency plans.
- They increase their infectious disease care capacities by putting in extra beds, making beds available through discharges, temporary profile modification, limiting of admissions while applying specific priorities, rescheduling elective interventions and by reassigning staff.
- If necessary, retired physicians and allied health personnel who volunteered in advance are called in to work.
- Individually reporting volunteers or voluntary nursing personnel from charity organisations as well as students at medical and health training institutions are dispatched to healthcare institutions by NPHMOS.

- The National Institute of Inventory Management operates a permanent emergency duty service so that National Medical Stockpiles may be used to dispatch immediately the necessary tools and medical materials and drugs used by hospitals to treat patients.
- In case of necessity, the Minister of Health with the approval of the government shall order to support hospitals at the cost of the National Medical Stockpiles, and the installation of emergency medical institutions, for which the collaboration of the cognisant country defence committees shall be taken into account.
- The Ministry, through the NPHMOS shall order to report on a daily basis by hospitals the free bed capacities furthermore the free capacities of medical equipment available for the purposes of providing health care to the influenza patients.
- MoH invites Hungarian Red Cross, as well as civil and faith-based charity organisations to enhance their attention and assistance activities towards elderly persons in need of support (shopping, purchase of drugs etc.).
- The health care administration body, if necessary, prohibit visiting in healthcare institutions, and urge patient care at home rather than in clinics or doctor's offices. When necessary, it will also restrict operation of educational institutions and the visits to places of entertainment with a great number of audience.
- The National Chief Pharmaceutical Officer shall monitor the movements and stocks of preparations and antiviral drugs used for the treatment of influenza and its complications. In order allow for the continuity of supply, he or she shall make all the necessary arrangements, draw up recommendations and informs the OAWP thereof on an ongoing basis.
- NPHMOS issues orders to provide vaccination to those who have not been vaccinated yet, with due regard to priorities set.
- The Chief Pharmaceutical Officer monitors the provision of vaccine supplies to the network of retail pharmacies, on an ongoing basis against influenza and pneumococcosis, respectively.
- Regional medical officers shall monitor the disposal of corpses of dead persons and propose the securing of the necessary storage capacities at the disease control committees.
- When necessary, NPHMOS shall request the assistance of the police to enforce the epidemiological disease control measures taken by the health care administration authority, and in order to provide security for health care service providers.

Communication plan:

- The National Epidemiological Centre provides continuous information to both the profession and the general public on the domestic and international epidemic situation with the help of EPINFO, the internal communication network of the NPHMOS and the internet.
- The MoH and the NPHMOS hold regular press conferences on the developments in the epidemiological situation.
- The MoH as well as the OCMO NEC shall provide ongoing information on the state of the epidemic and the measures taken to the Ministry of Foreign Affairs, as well as the cognisant international organisations: the WHO and the EU ECDC.

- The NPHMOS makes sure that all personnel involved in providing health care and the public in general be trained and regular communication activities be maintained.

Level 6/g First wave of pandemic subsides in Hungary.

In the event of an influenza pandemic, the recovery period, unlike other emergencies, includes activities of preparedness for a subsequent pandemic wave, in addition to activities related to end of events and return to normal situation.

POSTPANDEMIC PERIOD; END OF THE FIRST WAVE OF PANDEMIC IN HUNGARY

- As proposed by OAWP, NPHMOS declares the end of the epidemic, the Minister of Health declares lifting of a status of public health emergency and the Government declares the end of an epidemic emergency.
- MoH, OAWP, NPHMOS and NEC assess and evaluate experiences gained and lessons learnt with epidemic control and response, based on which they will update and reassess the tasks and documents for subsequent preparedness.
- NPHMOS and NEC carry out epidemiological analysis of the outbreak, and analyse data on morbidity, mortality, as well as the use of vaccines and antiviral preparations.
- NPHMOS takes measures to vaccinate persons at risk, but not yet vaccinated with monovalent vaccine, as well as to revaccinate chronic patients.
- The hospitals' activities gradually resume regular operation characteristic of inter-pandemic periods. Executive managements of the healthcare institutions assess and evaluate experiences gained during the epidemic within one week following end of the outbreak, and take measures to review, and update as necessary, institutional pandemic plans.
- OAWP prepares consolidated report for the Minister of Health, in which it evaluates preparedness and actions and measures taken. Based on this report, the Minister informs the Government, through GCC, on control and containment of the epidemic.
- The Minister of Health takes initiative with the Government to reimburse extra costs not yet compensated to those taking part in pandemic response and control, as well as restocking the supplies used up from the from the National Medical Stockpiles.
- In the postpandemic period, tasks in the preparedness period are put on the agenda. MoH NPHMOS reviews issues concerning a possible second wave of the pandemic and defines further actions and measures of preparedness.

Level 6/h Second/third wave of pandemic in Hungary.

The actions and measures as defined in the first pandemic wave are implemented.

All other activities, evaluation and assessment exercise, reporting and notification as well as processing of experiences take place with identical objectives and contents as was the case in the preceding pandemic phase

CHAPTER SIX

POSTPANDEMIC PERIOD

The recovery period in the event of an influenza pandemic includes actions and measures to ensure return to the usual situation.

- WHO declares end of the pandemic.
- As proposed by OAWP, NPHMOS declares the end of the epidemic, the Minister of Health declares lifting of a status of public health emergency and the Government declares the end of an epidemic emergency.
- OAWP, NPHMOS and NEC assess and evaluate experiences gained and lessons learnt with epidemic control and response, based on which they will update and reassess the tasks and documents for subsequent preparedness.
- NPHMOS and NEC carry out epidemiological analysis of the outbreak, and analyse data on morbidity, mortality, as well as the use of vaccines and antiviral preparations.
- The hospitals' activities gradually resume regular operation characteristic of interpandemic periods. Executive managements of the healthcare institutions assess and evaluate experiences gained during the epidemic within one week following end of the outbreak, and take measures to review, and update as necessary, institutional pandemic plans.
- OAWP prepares consolidated report for the Minister of Health, in which it evaluates preparedness and actions and measures taken. Based on this report, the Minister informs the Government, through GCC, on control and containment of the epidemic.
- The Minister of Health takes initiative with the Government to reimburse extra costs not yet compensated to those taking part in pandemic response and control, as well as restocking the supplies used up from the National Medical Stockpiles.
- In order to be able to test the pandemic preparedness plan appropriately, OAWP shall organise simulation drills once in every three years with the purpose to carry out parts of the functions included in the plan.

All other activities, evaluation and assessment exercise, reporting and notification as well as processing of experiences take place with identical objectives and contents as was the case in the pandemic phase 3.

CHAPTER SEVEN

MAINTENANCE OF THE PANDEMIC PEREPAREDNESS PLAN AND ITS CONNECTIONS TO INTERSECTORAL PLANNING

- In collaboration with NPHMOS through the Disease Control Office the MoH shall review the pandemic preparedness plan once a year before 31st May, in accordance with the guidance and indicators developed by the EU ECDC, completing the accurate definition of the changes which have occurred in the meantime, and with the contribution of OAWP the state of preparedness is evaluated as well as further actions needed to enhance the level of preparedness are determined.
- Maintenance of the plan is coordinated by the senior civil servant managing the OAWP approving minor amendments to it and the action plan related to the preparedness plan, and pending on the contents and scope of amendments he or she will decide upon the necessity of ministerial level approval.
- The sector plans developed as part of the preparedness between sectors and approved by the respective government officials supervising the sector concerned connect intimately to this preparedness plan in terms of their contents specific for the sector in question under the responsibility of the departments which have developed them.

List of abbreviations:

NIPT	Nemzeti Influenza Pandémiás Terv	NIPPP	National Influenza Pandemic Preparedness Plan
EU	Európai Unió	EU	European Union
EVSZ	Egészségügyi Világszervezet	WHO	World Health Organisation
NATO	Észak-atlanti Szerződés Szervezete	NATO	North Atlantic Treaty Organisation
KKB	Kormányzati Koordinációs Bizottság	GCC	Governmental Coordinating Committee
OpT	Operatív Törzs	OpS	GCC Operative Staff
EüM	Egészségügyi Minisztérium	MoH	Ministry of Health
JVM	Járványügyi Védekezési Munkabizottság	OAWP	Outbreak Assistance Working Party
NIPP	Nemzeti Influenza Pandémia Preven- ciós Bizottság	NIPPTF	National Influenza Pandemic Prevention Task Force
OTH	Országos Tisztifőorvosi Hivatal	OCMO	Office of the Chief Medical Officer
ÁNTSZ	Állami Népegészségügyi és Tisztiorvosi Szolgálat	NPHMOS	National Public Health and Medical Officers' Service
OEK	Országos Epidemiológiai Központ	NEC	National Epidemiological Centre
OMSZ	Országos Mentőszolgálat	HNAES	Hungarian National Ambulance and Emergency Service
OKF	BM Országos Katasztrófavédelmi	NDGDM	National Directorate-General for Disaster Management, Ministry of the Interior
ORFK	Országos Rendőrfőkapitányság	NPH	National Police Headquarters
EISS	Európai Influenza Surveillance Rendszer	EISS	European Influenza Surveillance Scheme
FVM	Földművelési és Vidékfejlesztési Minisztérium	MARD	Ministry of Agriculture and Regional Development
KÜM	Külügyminisztérium	MoFA	Ministry of Foreign Affairs
ECDC	Európai Betegségmegelőzési és Járványvédelmi Központ	ECDC	European Centre for Disease Prevention and Control

ANNEXES:

Annex No 1: Background information on pandemic

Annex No 2: Background information on avian influenza

Annex No 3: List of effective relevant regulations and their complete or abstracted contents

Annex No 4: Rules of procedure of the Outbreak Assistance Working Party

Annex No 5: Letter of methodology on the prevention and treatment of influenza and the influenza diseases

Annex No 6: Requirements of contents for the influenza pandemic preparedness plan of hospitals

Annex No 7: Requirements of contents for the influenza pandemic preparedness plan of institutes within the National Public Health Service

Annex No 8: Rules of procedure for control of pandemic disaster relief