

CERTIFIED  
by Minister of Health  
7 September, 2005 by  
Order No. V-686

## INFLUENZA PANDEMIC PREPAREDNESS PLAN

### I. GENERAL REGULATIONS

1. Influenza and other acute respiratory infections (hereafter – ARI) cause the most harm to residents' health and stipulate most social and economic waste of all communicable diseases. Increase of population incidence and mortality during influenza epidemic condition not only influenza and pneumonias, but also cardiovascular and other chronic diseases, the exacerbation of which is instigated by influenza infection. After increasing incidence of pneumonia and other chronic diseases, more patients are hospitalised. Different complications occur mostly and are more dangerous for elderly people and people suffering from chronic diseases. During influenza epidemic about of 80% of cause the death of elderly people (65 years and elder). There are registered from 40 to 190 thousand cases of influenza annually (in average – 100 thousand). Yearly about 500 million of people worldwide get sick with influenza.

2. Influenza pandemics (worldwide epidemics conditioning high incidence and mortality of population) occur every 10-40 years when, after influenza virus type A antigen shift, a new virus subtype forms for what the population has no immunity. Three influenza pandemics raised in XX century:

2.1. In 1918-1919 year: Spanish influenza, A (H1N1) – about 30 millions of death cases worldwide;

2.2. In 1957-1958 year Asian influenza, (A(H2N2)) – about 1 million of death cases worldwide;

2.3. In 1968-1969 year: Hong Kong influenza, A(H3N2) about 800 thousands of death cases worldwide.

3. Single cases when people are being infected with a new subtype of influenza virus from animals (mostly – from avifauna) happen over the world (mostly in Asia).

It is supposed that viruses are detected more often due to the improvement of influenza epidemiologic and virologic surveillance. Overall during the last 7 years there have been detected several new subtype viruses (H1N2, H5N1, H9N2, H7N7). From all known 15 influenza A virus subtypes, A (H5N1) is a matter of greatest concern. Subtype H5N1 has a feature of sudden change and causes severe forms of disease, outbreaks among humans and fates particularly high mortality. In 1997 had been registered increased activity of A (H5N1) virus in Hong Kong, when even for 18 people had been confirmed influenza caused by this virus (6 of them had died). However, it had not been confirmed by investigations that A(H5N1) virus had a feature to spread among people and this outbreak had been stopped after liquidation of the infection reservoir (birds in the markets of Hong Kong). Clusters of avian influenza A (H5N1) had been detected in aviary farms and markets of Vietnam, Thailand, Japan, South Korea, Thai van, Cambodia, Indonesia. For over 100 people the diagnosis of influenza A (H5N1) had been laboratory confirmed in Vietnam, Thai land and Cambodia and 50 cases of all were fatal.

4. Experts of the World Health Organisation and the European Commission investigating influenza virus circulation and antigen alteration in human and animal population do not discount the possibility of a new influenza A virus subtype occurrence what could spread among humans and cause a threat of a new influenza pandemic in the short run.

5. The European Commission indicated the following influenza pandemic criteria: influenza virus with new haemagglutinin (H) diagnosed in humans that was not common lately; this virus easily spreads among humans and is very pathogenic.

## II. INFLUENZA PANDEMIC PHASES AND ACTIONS

6. On purpose to reduce probable harm for human health during a new influenza pandemic there are foreseen in the plan urgent and necessary actions and measures that would be applied depending on the levels of the pandemic process.

7. **phase I** – no new strain of influenza virus has been detected for humans and there are no reports on cases caused by a new influenza virus subtype. Seeking to strengthen influenza pandemic preparedness worldwide, at regional, national and sub national levels it is necessary that:

7.1. the Ministry of Health and subject institutions coordinate measures for influenza pandemic preparedness, plan all actions that would be applied in later levels, supply available measures (for prophylaxis, treatment, influenza laboratory diagnosis, personal protection measures and others);

7.2. the Ministry of Health and subject institutions according to the recommendations of the World Health Organisation and the European Union and influenza epidemic situation in the world, revise and adjust the influenza pandemic preparedness plan constantly in cooperation with other departments independent of health system, that could render assistance during the pandemic when necessary;

7.3. responsible institutions ensure the pursuance of the influenza pandemic preparedness plan and the implementation of preparedness actions both at national and administration territory level, all chiefs of personal and public health care institutions are acquainted with the influenza pandemic preparedness plan;

7.4. personal and public health care institutions delegate and regularly train staff who will organise and pursue needful measures in the beginning of the influenza pandemic;

7.5. the Health Emergency Situation Centre under the Ministry of Health ensures stockpile of antivirals, personal protection measures, vaccines and laboratory diagnosticums;

7.6. responsible departments and institutions according to the influenza pandemic situation update plans for response to extreme health situations;

7.7. all institutions execute regulations of national legal acts regulating food safety and other public health factors linked to probably infected animals;

7.8. the Centre for Communicable Diseases Prevention and Control, Lithuanian AIDS centre and all health care institutions carry on influenza epidemiological surveillance (influenza and acute respiratory infection case registration and information communication, influenza epidemiological surveillance, based on clinical-virology diagnostics, influenza control and prevention measures) according to the rules of Influenza epidemiological surveillance, certified by the Minister of Health of the Republic of Lithuania by order No. V-802 of 12 November, 2004 (Žin., 2004, Nr. 167-6153);

7.9. the Lithuanian AIDS Centre implements influenza virology diagnostics with the purpose to detect most prevalent type, subtype and strains of the influenza virus;

7.10. the Ministry of Health estimates and ensures technical possibilities of the laboratory, for influenza virology diagnostics at the Lithuanian AIDS Centre seeking to implement the World Health Organisation's recommendations;

7.10. the Centre for Communicable Diseases Prevention and Control and public health centres in regions analyse the data of influenza epidemiological surveillance:

7.10.1. to estimate the intensity of morbidity: to calculate the incidence rate of influenza and ARI (cases per 100 000 population weekly), in comparison with the previous year's corresponding indicators. To calculate incidence rate by age groups (0-4, 5-14, 15-64 years and elder). Estimation criteria of incidence rate intensity are as follows:

7.10.1.1. low (incidence rate does not exceed the the basic level) ;

7.10.1.2. medium ( common incidence rate as registered in the country in accordance with the previous year's data);

7.10.1.3. high (incidence rate is higher than common in comparison with the previous year's data);

7.10.1.4. very high (incidence rate is very high in comparison with the previous year's data);

7.10.2. to estimate geographical dispersion by the following criteria:

7.10.2.1. None (cases of influenza and ARI may be registered, but the incidence rate remains at the basic level and influenza virus is not laboratory confirmed);

7.10.2.2. sporadic (epidemiologically unrelated laboratory confirmed influenza cases are registered or an outbreak is detected in one institution (for example: in a school or a nursing home); but incidence rate remains at the basic level);

7.10.2.3. local outbreak (activity of influenza and ARI increases in particular territories ( in cities, in regions or districts) or outbreaks occur no less than in two closed communities and influenza virus is laboratory confirmed; in the rest part of the country the incidence rate remains at the basic level);

7.10.2.4. widespread cases (influenza and ARI incidence rate exceeds the basic level in the territory inhabited with no less than 50% of the country's population; and influenza virus is laboratory confirmed);

7.11. personal and public health care institutions foresee restrictive measures for the spread of the influenza virus. These measures are to be applied in personal health care institutions, nursing homes and supporting treatment hospitals or departments and caring institutions where persons at risk are treated and nursed; also these measures are recommended for the public;

7.12. the Ministry of Health, State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control, personal and public health care institutions foresee and implement vaccination strategy against influenza:

7.12.1. to recommend and implement seasonal vaccination against influenza for risk group population:

7.12.1.1. for patients of nursing homes and supporting treatment hospitals or departments, caring institutions;

7.12. 1.2. for adults and children elder than 6 months, who are ill with chronic cardiovascular, lung, metabolic or (and) kidney diseases or (and) with immunodeficiency;

7.12. 1.3. for infants elder than 6 months, children and teenagers who use aspirin constantly;

7.12.1.4. for pregnant women who will be in 3d-9<sup>th</sup> month of pregnancy during influenza season;

7.12.1.5. for persons aged  $\geq 65$  years;

7.12.1.6. for the staff of personal health care institutions and caring homes;

7.12.1.7. for family members of risk group persons;

7.12.1.8. for the persons, constantly living in closed institutions;

7.12.2. the order for vaccination with the pandemic influenza vaccine is foreseen and population' risk groups are defined. As the production of pandemic influenza vaccine starts only after the detection of a new virus and it can last several months, it will be necessary to start mass vaccination as soon as possible at the beginning of the pandemic, it is necessary in advance to review the order of vaccines procurement and to evaluate possibilities to procure this vaccine on time. Also it is necessary to confirm the requirements of the storage of this vaccine, to define the order for organization of mass vaccination and the executing staff. At the beginning of the influenza pandemic it is recommended to vaccinate with the pandemic influenza vaccine these risk groups:

7.12.2.1. medical care providers, who have extremely high risk of contracting the disease (personal and public health care specialists);

7.12.2.2. employees of the institutions taking care of the essential needs of the population – energy supply (electricity and heating), supply of drinking water, etc.;

7.12.2.3. persons who make decisions on the implementation of the measures for reducing the impact of the influenza pandemic;

7.12.2.4. risk groups (patients of the nursing hospitals or departments, care institutions; adults and children over 6 months of age, who have chronic cardiovascular, pulmonary, metabolic or (and) renal diseases or (and) immunodeficiency; children over 6 months of age and adolescents, who constantly use aspirin; women, who will be pregnant in 3<sup>d</sup> – 9<sup>th</sup> month during influenza season; other persons 65 years of age and older and persons constantly living in closed institutions);

7.13. the Ministry of Health, State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control, personal and public health care institutions foresee and implement strategies of influenza antiviral therapy and prophylaxis. Antivirals, specifically acting on the influenza virus, can be used for prophylaxis (for short-term protection from the disease) or for treatment at the early stage of influenza (to shorten the period of the disease). Differently than vaccines, antivirals can be stored in advance and used straight at the moment when a threat for the population of contracting a new subtype virus arises:

7.13.1. on purpose to ensure an effective use of antivirals, is it necessary to determine in advance the underlying population groups, for which influenza prophylaxis will be provided during the pandemic; to prepare and to confirm algorithms of influenza antiviral therapy and prophylaxis; to calculate and to confirm a necessary stockpile of antivirals and antibiotics, the order for its storage (define premises), to foresee distribution and monitoring of the usage of these preparations during the pandemic;

7.13.2. at the beginning of the influenza pandemic prophylaxis is recommended for the population groups (personal and public health care specialists, interior system officers) which will provide help for ill persons;

7.14. county and municipal administrations foresee possibilities to provide medical help for a large number of patients;

7.15. the Ministry of Health, Health Emergency Situation Centre, personal and public health care institutions ensure the supply of personal health care institutions with devices, necessary during the pandemic;

7.16. the work of social institutions in case of high incidence and mortality of the population is ensured in the Influenza pandemic preparedness plans of the County and Municipality administrations.

**8. Phase II** – no new influenza virus subtypes have been detected in humans, however a circulating animal influenza virus subtype poses a substantial risk of human disease. On purpose to minimize the risk of transmission to humans and to detect and report such a transmission rapidly, if it occurs, it is necessary for:

8.1. responsible institutions to implement actions, planned for phase I;

8.2. the Ministry of Health, State Public Health Service, Centre for Communicable Diseases Prevention and Control, Lithuanian AIDS Centre closely collaborate with the State Food and Veterinary Service in exchange of information on animal health (particularly birds), virological diagnostics of influenza, circulated in animals.

**9. Phase III** – confirmed human cases with a new influenza virus subtype, but no evidence of human-to-human spread. On purpose to ensure rapid characterization of the new virus subtype and early detection, notification of new cases and implementation of prophylaxis and treatment against disease, is it necessary for:

9.1. personal and public health care institutions to provide information defined by the order of the Ministry of Health;

9.2. the Ministry of Health, State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control to ensure and coordinate a permanent exchange of information with the institutions of the European Union and the concerned countries on purpose to evaluate the nature and spread of a possible threat and response measures;

9.3. responsible institutions to implement actions as for the previous phases;

9.4. the laboratory of the Lithuanian AIDS Centre to evaluate possibilities of influenza virological diagnostics in the country. To inform the Ministry of Health and State Public Health Service under the Ministry of Health on the technical possibilities, available and not available diagnostic material for the detection of a new virus subtype.

10. **Phase IV** – small clusters with a limited new virus subtype human-to-human transmission, the spread is localized. On purpose to stop spreading of the new virus outside a cluster and to prepare to implement measures, to stimulate and accelerate production of the endemic influenza vaccine, it is necessary for:

10.1. the Lithuanian AIDS Centre to enhance virological diagnostics of influenza;

10.2. the State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control to review principles of information dissemination; to follow the reports of the World Health Organization and the institutions of the European Union, constantly inform the Ministry of Health, County Public Health Centres and media on the current situation;

10.3. personal and public health care institutions to ensure diagnostics and control of imported cases. If imported cases are expected, to prepare and confirm recommendations for personal and public health care institutions on the measures to be taken suspecting a new virus subtype disease;

10.4. responsible institutions to implement actions, planned for the earlier phases.

11. **Phase V** – the infection spreads in larger clusters, but the spread is localized, the virus is becoming increasingly better adapted to humans. On purpose to retard the spread of the virus and prepare properly for the implementation of influenza pandemic measures, it is necessary for:

11.1. responsible institutions according to the situation, to revise and to implement actions, foreseen in the Influenza pandemic preparedness plan;

11.2. the Centre for Communicable Diseases Prevention and Control, Lithuanian AIDS centre to evaluate the epidemiological surveillance, virological diagnostic and technical possibilities in the country;

11.3. responsible institutions according to the recommendations of the World Health Organization to foresee implementation and apply necessary measures and to ensure the process of management and control of these measures;

11.4. the Ministry of Health to nominate 2 – 3 responsible persons, who would constantly provide information for the media and health care specialists on the situation in the world and Lithuania, announce the newest data on the website of the Ministry of Health;

11.5. the Ministry of Health, State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control to exchange information with the institutions of the European Union and concerned countries, on purpose to evaluate the nature of a possible threat and to apply response measures.

12. **Phase VI** – the World Health Organization confirms, that pandemic has started (observed an increased and sustained virus transmission in the general population). On purpose to reduce the impact of influenza pandemic to the community, appropriate actions are performed, according to the situation in the world and Lithuania:

12.1. when a new subtype (pandemic) virus causes several outbreaks (epidemics) at least in one country, cases are registered in other countries, high incidence and mortality is registered in at least one population group, it is necessary for:

12.1.1. the Ministry of Health to accept decisions due to the procurement of pandemic influenza vaccine and vaccination of population with this vaccine;

12.1.2. the Ministry of Health to make decisions due to the supply of health care institutions with antivirals and antibiotics;

12.1.3. personal and public health care institutions to apply necessary measures reducing the spread of a new influenza virus;

12.2. when regional and multiregional epidemics are located in the world, but there are no features, that a new subtype (pandemic) virus is detected in the European Union, it is necessary for:

12.2.1. the State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control to analyze the pandemic influenza morbidity data (according information received from the World Health Organization and the European Union institutions) in the world;

12.2.2. responsible institutions to review the foreseen influenza prophylaxis and control measures (either measures for reducing the spread of the influenza virus);

12.2.3. the Ministry of Health to review algorithms of influenza antiviral therapy and prophylaxis;

12.2.4. the Health Emergency Situation Centre to coordinate the supply of personal health care institutions with antivirals and antibiotics;

12.2.5. the Health Emergency Situation Centre to coordinate the distribution of the pandemic influenza vaccine to health care institutions;

12.2.6. the Ministry of Health to ensure the supply of the laboratory of the Lithuanian AIDS Centre with the diagnostic materials for the identification of a new virus subtype;

12.3. after the detection of a new subtype (pandemic) influenza virus in a Member State (but not in Lithuania), responsible institutions further implement actions, planned for the previous phases;

12.4. after the detection of a new subtype (pandemic) influenza virus in Lithuania (when Lithuanian AIDS Centre' laboratory informs, that a new subtype of virus has been confirmed in Lithuania), it is necessary for:

12.4.1. the Ministry of Health, State Public Health Service, Health Emergency Situation Centre, Centre for Communicable Diseases Prevention and Control to review the methods of information flow to media; to inform the Government of the Republic of Lithuania, the World Health Organization, the European Union and the neighbour states, County Governors, Municipal Administrations, health care institutions and media about the new influenza virus strain detected in Lithuania;

12.4.2. responsible institutions to continue implementation of enhanced surveillance and protective measures as for the previous phases;

12.5. as the activity of a new influenza virus (pandemic) strain intensifies and becomes more widespread in the European Union it is necessary for:

12.5.1. the Centre for Communicable Diseases Prevention and Control to analyse morbidity data in Lithuania and the European Union and to keep responsible institutions informed;

12.5.2. the Centre for Communicable Diseases Prevention and Control to review the performance of epidemiological influenza surveillance in the country; strengthen influenza surveillance in Lithuania and extend the influenza surveillance season if necessary (for instance if pandemic influenza activity intensifies in spring);

12.5.3. the Health Emergency Situation Centre to coordinate the supply and distribution of antivirals, antibiotics and pandemic influenza strain vaccine among health care institutions;

12.5.4. responsible institutions to continue enhanced surveillance measures as for the previous phases;

12.5.5. responsible institutions to coordinate implementation of preventive measures reducing the spread of the pandemic influenza virus in the affected territories;

12.6. when the end of the first pandemic wave is announced by the World Health Organization (reduced influenza outbreaks in the countries first affected by a new influenza virus strain and still growing pandemic influenza morbidity in other affected countries) it is necessary for:

12.6.1. the State Public Health Service, the Centre for Communicable Diseases Prevention and Control to continue monitoring and evaluation of influenza morbidity in Lithuania and in the world; keep responsible institutions informed about the situation;

12.6.2. the Health Emergency Situation Centre to continue the coordination of supply and distribution of antivirals, antibiotics and the pandemic influenza strain vaccine among health care institutions;

12.6.3. the Health Emergency Situation Centre to assess the remnant pandemic influenza vaccine and to evaluate the possibility of it's use;

12.6.4. the Ministry of Health and subject institutions to review prophylactic and control measures which have been used during the first pandemic wave;

12.7. during the second pandemic wave (announced by World Health Organization) it is necessary for the responsible institutions to assess an impact of a second pandemic wave and implement all necessary preventive measures as for the previous phases;

12.8. at the end of the pandemics (announced by World Health Organization) it is necessary for:

12.8.1. the responsible institutions in cooperation with the World Health Organization and the European Union to assess the social and economical pandemic impact and evaluate the efficiency of the implemented measures;

12.8.2. the Ministry of Health and subject institutions to revise and adjust the Influenza Pandemic Preparedness Plan.

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