University Clinic of Respiratory and Allergic Diseases
Golnik, Slovenia

PANDEMIC INFLUENZA PLAN

A pandemic – or global epidemic occurs when there is a major change in influenza A virus so that all or at least most of the world's population has never been exposed previously and is thus highly susceptible to the virus. The virus should be able to:

- cause clinically apparent infection in humans,
- spread from human to human,
- cause disease in high proportion of infected people,
- spread rapidly worldwide since most people will have little or no immunity to the new virus.

During previous century we've seen sporadic occurance of new subtypes of influenza virus. The first pandemic - the Spanish Flu (influenza A, subtype H1N1), occurred in 1918 and caused 20 – 40 million deaths worldwide. The Asian Flu Pandemic of 1957 – 1958 (influenza A, subtype H2N2) and the Hong Kong Flu Pandemic of 1968 – 1969 (influenza A, subtype H3N2) also caused widespread illness but significantly less deaths than the Spanish Flu. Until now the longest interpandemic interval lasted 39 years. When the next pandemic is going to occur is impossible to predict, but experts predict next pandemic in the near future.

When preparing pandemic influenza plan we have to consider:

- huge workload for the healthcare system because of the nature of the illness;
- virus spreads rapidly, causes high morbidity and increases mortality;
- pandemic will occur in waves, the lenght of each wave is 6 – 8 weeks. The second wave occurs 3 – 9 months after the initial one and can cause a higher mortality;
- initially no vaccine will be available (development of the new vaccine will take 4 – 6 months), and even when production of vaccine will commence the amount of vaccine available will be limited;
- antiviral agents for treatment and prophylaxis will likely be in short supply.

Role and competence of healthcare providers according to Ministry of Health of Republic of Slovenia pandemic influenza plan are:

- preparation of work plan in case of pandemic,
- education and training of health-care workers (HCW) for working in case of pandemic,
- assurance of personal protective equipment,
- harmonising of plan with regional Institute of Public Health.

1. Tasks of Hospital Golnik – University Clinic of Respiratory and Allergic Diseases (UCRAD) management as defined in Pandemic Influenza Plan:

- leadership and coordination plan
- decision to abolish visits
- how to summon the employees

- to record the additional staff (e.g. retired HCW, medical students, volunteers)
- to prepare work schedules considering the length of pandemic
- to propose capacity shift to assure adequate care for influenza patients
- to prepare additional bed capacities
- hospital supply and assurance of adequate quantities of all goods necessary for uninterrupted funtioning of the hospital (drugs, medical accessories, protective equipment, food, etc)
- manner of notifying patients, relatives, employees)
- manner of communicating with the media and public
- to connect with other health-care providers in the region and regional Institute of Public Health
- to harmonize Hospital Golnik – University Clinic of Respiratory and Allergic Diseases Pandemic Influenza Plan with plans of other health-care providers in the region and with demands of regional Institute of Public Health.

2. Tasks of the Crisis Management Coordinator in cooperation with Hospital Golnik – UCRAD management and Infection Control and Prevention Committee as defined in Pandemic Influenza Plan:

- To organize admission to hospital of flu patients or patients suspected to have the flu
- To organize treatment of high number of patients
- To assure the movement of patients inside the hospital
- To get all employees acquainted with the Pandemic Influenza Plan
- To train all HCW
- To check the procedures from the Pandemic Influenza Plan
- To amend the plan

3. Tasks of the Infection Control and Prevention Committee (ICPC):

- To provide recommendations for detection of flu cases
- To provide recommendations for laboratory diagnosis of influenza
- To provide recommendations for flu patient isolation
- To provide recommendations how to use personal protective equipment
- To provide recommendations for vaccination and how to use antiviral drugs for treatment and prophylaxis
- To provide recommendations how to handle the deceased
- To provide recommendations for different goods and protective equipment stock
- To provide recommendations for additional medical equipment

PART I

1. Management and coordination plan

Objectives and aim of the plan are:

- Efficient action in case of emergence of a novel type of virus with potential for pandemic spread,
- To define key tasks and measures according to the WHO phase of pandemic,
- To limit the spread of novel virus with adequate measures,
- To ensure the supply of all materials, accessories and equipment needed for treatment of increased number of patients and for HCW protection,
- To ensure treatment of flu and potential complications,
- To prepare and execute education programme for HCW,
- To harmonize actions with other healthcare providers.

Bearers of execution of pandemic plan in Hospital Golnik – UCRAD

- director,
- assistant director for medical affairs,
- assistant director for nursing
- assistant director for personnel,
- assistant director for financial affairs,
- head of Infection Control Committee,
- crisis management coordinator.

Tasks of the aforementioned bearers

- to prepare and review the plan regularly,
- to determine ways of plan execution,
- to execute tasks according to the plan.

2. Decision to cancel all visits

As soon as Ministry of Health announces influenza pandemic, hospital director cancels all visits for the duration of the pandemic.

3. Ways to call a meeting

The director of the hospital calls a meeting with the heads of departments if necessary. In the shortest time possible the heads of departments have to disseminate the information they received to their co-workers. Depending on the need the hospital director can call other types of meetings concerning flu pandemic. Director's secretary is responsible for organization of the meetings and notification of the participants.

4. Notification of employees

Personnel management department prepares a records of retired HCW.
All HCW from our records not older then 70 years are asked for assistance in case of personnel shortage. According to their readiness, age and possible other criteria, personnel management department prepares lists of additional HCW and make them available to:

- Director secretary's office: physicians and laboratory technicians,

- Head of nursing department secretary: nurses, healthcare technicians, attendants, couriers, cleaners,
- Head of administration department: administration workers.

List of medical students and volunteers willing to assist us during pandemic is made in director secretary's office.
Considering the actual needs the draft of additional workers is approved by the director and they are notified by:

- Director's secretary: physicians, laboratory technicians and medical students
- Head of nursing staff's secretary: nurses and students of nursing, couriers, cleaners,
- Head of administration: administration workers.

5. Work schedules

Work schedules are managed as usual. They should include additional workers who joined as volunteers. In case of longer duration of pandemic at least a minimal vacation time should be allowed for the employees provided we have enough additional volunteer staff.

6. Reassignment of bed capacity

To respond to increased numbers of patients with influenza hospital director may decide to temporarily postpone certain activities which are resumed when pandemic is over. These activities include scheduled diagnostics, allergology testing, immunotherapy non-emergency consultations.

7. Additional beds

Regarding the acctual needs additional beds can be installed in all suitable hospital spaces. If available beds don't cover the needs hospital director approves purchase of additional beds.

8. Hospital supplies

Acquisition of medicines, medical accessories, protective equipment, etc, is processed as usual. If chosen suppliers is unable to secure required amount of means, hospital director may approve a purchase from other providers. Regarding the increased needs for medical supplies hospital director may approve an increase of hospital stock. Increased need for food should be covered by restaurant contractor which is agreed on in the contract or annex to the contract.

9. Modes of information distribution (to patients, relatives, employees)

<u>Employees</u>
Heads of departments and units are primarily responsible for information distribution to their co-workers. Additionally informations are spread by memos, e-mails; all informations should be made available on the intranet and bulletin boards.
<u>Patients and relatives</u>
A bulletin board will be placed at the hospital entrance where all relevant and important informations will be available (what should we know about flu, what to do when you get sick, how to act in the hospital).

Health-care workers inform patients.
Informations are spread to relatives, patients and potential patients through public announcements (TV, newspapers, radio).

10. Communication with the media

Reporters should be redirected to the Hospital Golnik PR person who is authorized to give information to the press.
PR person should:
- prepare the announcemenets and take care of their publication,
- call press conferences if needed,
- coordinate the information seekers and information givers.

In case of critical communication situation arising from events that may or already have jeoperdized hospital function hospital director will establish a communication team. Members of the Crisis Communication Team are hospital director, PR person, crisis management coordinator, assistant director for nursing, head of ICT. Information distibuted to the public is prepared exclusively by the Crisis Communication Team.

11. Connection to other healthcare providers in the region and regional Public Health Laboratory

On strategic level hospital director is responsible for cooperation with other healthcare providers in the region and regional Public Health Laboratory. On operational level the head of ICT and Crisis Management coordinator are responsible for cooperation with other healthcare providers in the region and regional Public Health Laboratory.
Contact person on behalf of regional Public Health Laboratory Kranj is regional epidemiologist **Brigita Peternelj, M.D., phone: 2017 100, 041 546-592, fax. 2017 113,** e-mail: brigita.peternelj@zzv-kr.si.

12. Harmonization of our pandemic plan with plans of other healthcare providers in the region and Ministry of Health

People responsible for harmonization of our plans are:
- Hospital director: on strategic level,
- Head of ICT
- Crisis management coordinator

PART II

Crisis management coordinator prepares following procedures for patient management in crisis situation:

1. Organization of admissions of patients proven or suspected of having influenza

In time of influenza pandemic primary care physicians should stratify patients according to severity of their illness before they're sent to hospital. In the emergency department of our hospital attending physician checks if admission to the hospital is indicated and makes severity assessment. Criteria for admission change on a daily basis and correlate with available bed capacity and number of available staff.
Alcohol hand rub, instructions how to perform hand disinfection and protective face masks that are obligatory for all entrants to the hospital, are placed at hospital entrance. Hospital receptionist asks the entrant whether he's seeking help because of the flu or other ailments. Patients having the flu will be examined in the present emergency room. All other patients will be redirected to the pulmonary out-patient clinic which will make available half of its capacity to these patients. Patients have to wear face masks during communication with the staff, should use paper handkerchiefs when coughing or sneezing and discard them in waste bags provided.

2. Organization of the increased workload

Triage of the large numbers of patients should be performed in the primary care facilities – physicians with the first contact to the patients should be informed on a daily basis about criteria for hospital admission which will change in correlation with the number of new cases. Communication with primary care physicians is responsibility of the director's secretary office.
In the emergency room at any given time physicians should be present in such a number that each of them examines 40 patients in an 8 hour shift. Each physician should have 1 nurse available. Number of active personnel in the ER is determined by the head of the ER and crisis management officer. Criteria for the discharge of the patients also change on the daily basis according to the needs of admission.

3. Movement of the patients inside the hospital

Wards should be assigned for the influenza patients. Rules of quarantine apply for those wards. Criteria for performance of diagnostic and other procedures outside those wards will be prepared by ICT. Visits on those wards shall not be permitted. A separate room in both hospital buildings will be arranged for visits where patients and visitors wearing face masks will be able to communicate through a glass barrier.

4. Introduction of the plan to HCW

In case of flu pandemic crisis management team calls a meeting of all employees and explains the activity of the hospital in a crisis situation. Pandemic plan is published on the hospital intranet and its execution is mandatory for all employees. The plan defines the level of protective measures, triage, needs for additional personnel in the ER, and basic statistical data on morbidity and mortality. The publication is updated daily.

5. Training of HCW

Education and training is lead and coordinated by the head of the ICT. All fulfilled education processes are reported to the crisis management team. Education and training is mandatory for all employees.

6. Auditing

Crisis management team reviews the actual execution of the plan and makes necessary adaptations on regular weekly meetings .

PART III

1. CLINICAL DEFINITION OF A CASE

In time of influenza presence in the population a sudden occurrence of fever and cough are a good predictor of influenza. Positive predictive value is even higher when fever >38°C and sudden onset (less then 48 hours after prodromal phase). Additional symptoms include sore throat, running nose, general weakness, chills, mialgia, headache.

a) probable case of influenza – patient probably has a pandemic influenza when following criteria are fullfilled:

- sudden onset of fever ≥ 38°C (except patients older than 60 years); **and**
- dry cough;

and

- positive epidemiological data (travel to a country with pandemic flu or contact with infected/ill person)

or

- positive result of a rapid microbiological test

b) definite case of influenza – patient definitly has influenza when infection is confirmed with laboratory tests.

2. CLINICAL FEATURES

a) ***Incubation*** – incubation period is tipically 2 days (range 1 – 4 days). Approx. half of the people exposed to the virus will become ill.

b) ***Transmission*** - there are three possible modes of transmission:

- droplet – the main route of transmission
- contact – direct or indirect, with respiratory secretions
- airborne – is possible, although less evidence is available on this mode of spread. It is produced by coughing, sneezing or even talking.

c) ***Infectivity*** – infected person can be contagious one day before onset of symptoms.Infected persons with minimal symptoms may still shed the virus and be contagious. Up to 50% of infected children can be asymptomatic. Viral shedding occurs for approx. 3 – 5 days in adults, and up to 3 weeks in children, and more than 3 weeks in severely immunocompromised persons. The amount of viral shedding correlates with the severity of illness and temperature elevation.

d) ***Clinical presentation*** – small portion of patients the symptoms are mild and are similar to a mild cold. Majority of patients will present with:

- Abrupt onset with chills
- Fever > 38°C
- Headache
- Myalgia
- Malaise

Running nose and non-productive cough are less prominent then constitutional signs and symptoms. Recovery period lasts 1 – 2 weeks.

e) ***Survival of the virus in different environments*** – survival of the virus outside the body varies with temperature and humidity. It usually survives:
   - 24 – 48 hours on hard, nonporous surfaces
   - 8 – 12 hours on clothes, paper, tissue
   - 5 minutes on hands

   Survival of the virus is enhanced under conditions of low humidity and in the cold.

f) ***Course of pandemic*** – influenza pandemic appears in waves, usually 2 or more in the same year or in two consecutive flu seasons. Each wave lasts approx. 6 weeks. Second wave appears 3 to 9 month after the first one and can cause higher morbidity and mortality than the original wave.

3. LABORATORY DIAGNOSTIC (APPENDIX 3)

The reference laboratory for influenza diagnostic in Slovenia is Laboratory for viruses and rickettsiae IVZ RS, **Bohoričeva 15, Ljubljana**.
Specimens most suitable for influenza diagnostic are:

- Nasal swab or washing
- Nasopharyngeal swab or aspirate
- Throat swab
- Broncho-alveolar lavage
- Transtracheal aspirate
- Lung biopsy

Specimens should be collected in such a way that they contain mucosal secretions and cells. Specimens should be collected not later then **4 days** after onset of symptoms.
Swabs are transported to the laboratory in a suitable transport medium at **4°C.**
Swabs are provided by IVZ – call mag. Prosenc, tel. 01/ 4342 613 or 01/ 4342 610

Rapid test for detection of influenza A virus in respiratory samples is performed at Laboratory for Respiratory Microbiology KOPA. If determination of virus subtype is desired, samples should be sent to the reference laboratory in Ljubljana.

4. ISOLATION MEASURES OF THE FLU PATIENTS

To successfully prevent the spread of influenza strict execution of isolation precautions is necessary.

Basic measure which should be carried out unconditionaly is **hand hygiene with alcohol hand rub** before and after every patient contact.

Additionally we should perform all contact, droplet and airborne isolation precautions which are defined in Recommendations for patient isolation at University Clinic Golnik – KOPA.

All control measures should be carried out throughout the infectivity period of each patient:

- In adults and children > 12 years - from the time of admissionod until 7 days after defervescence

- In children < 12 years - from the time of admissionod until 21 days after onset of the illness

5. USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

Face masks, gloves, gowns and aprons and goggles should be used as recommended in 2 documents of University Clinic Golnik – KOPA:

- Recommendations for patient isolation
- Surveillance and infection control in HCW

Summary and the chart are in Appendix 5.

6. VACCINATION

Vaccination against influenza is the most important measure for prevention of spread, to decrease the morbidity and mortality, and decrease the need for hospital treatment due to complications. Efficacy of the vaccine depends on the age and the immune status of each person, the agreement between the virus subtypes causing the disease and subtypes included in the vaccine. Efficacy of the vaccine in healthy adults < 65 years is 70% – 90% if agreement between aforementioned subtypes is good. In patients > 65 years the risk of hospitalization due to pneumonia or influenza is decreased after vaccination by 30% - 70%.
Vaccination in the interpandemic period is recommended for:

- Persons older than 65 years
- Persons with chronic cardiovascular disease, chronic lung, kidney or liver disease or metabolic disease
- Persons with congenital or acquired immune system deficiency
- HCW and other employees of essential services

These recommendations are defined as part of the Vaccination program for HCW at University Clinic Golnik – KOPA.

In case of new pandemic appropriate vaccine won't be available for some months. When it'll become available the Ministry of Health of Republic of Slovenia will define the priority groups of people who will receive the vaccine. Since the amount of vaccine available won't cover all needs vaccine will be given to employees of of essential services (e.g. HCW, military personnel, police, etc.)

7. USE OF ANTI-VIRALS (OSELTAMIVIR - TAMIFLU®, ZANAMIVIR - RELENZA®)

a) In the interpandemic period the hospital should provide the anti-virals for treatment of the patients. Therapy follows the guidelines of professional associations. In time of regular epidemics anti-virals are not used for prophylaxis.

b) In case of pandemic flu hospitals will receive the anti-virals from national reserves (distributed by Ministry of Health). During flu pandemic anti-virals will be used predominantly for prophylaxis and will be given to employees of of essential services (e.g. HCW, military personnel, police, etc.).

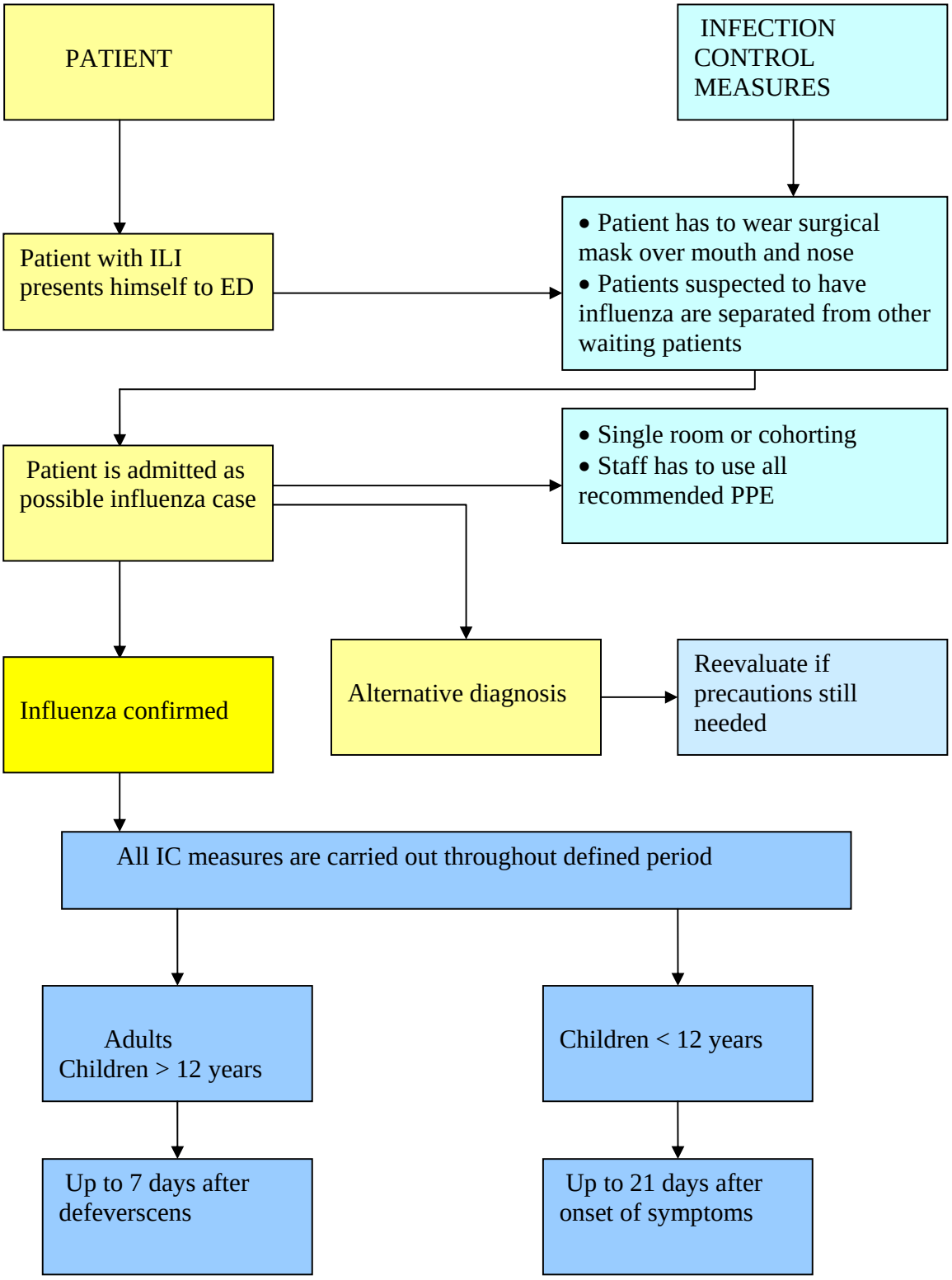
Reports on influenza A virus resistance to anti-virals should be followed regularly and recommendations for anti-viral treatment and prophylaxis amended accordingly.

8. MANAGEMENT OF THE DEAD

Corpses of probable or confirmed influenza cases are to be managed according to following guidelines:

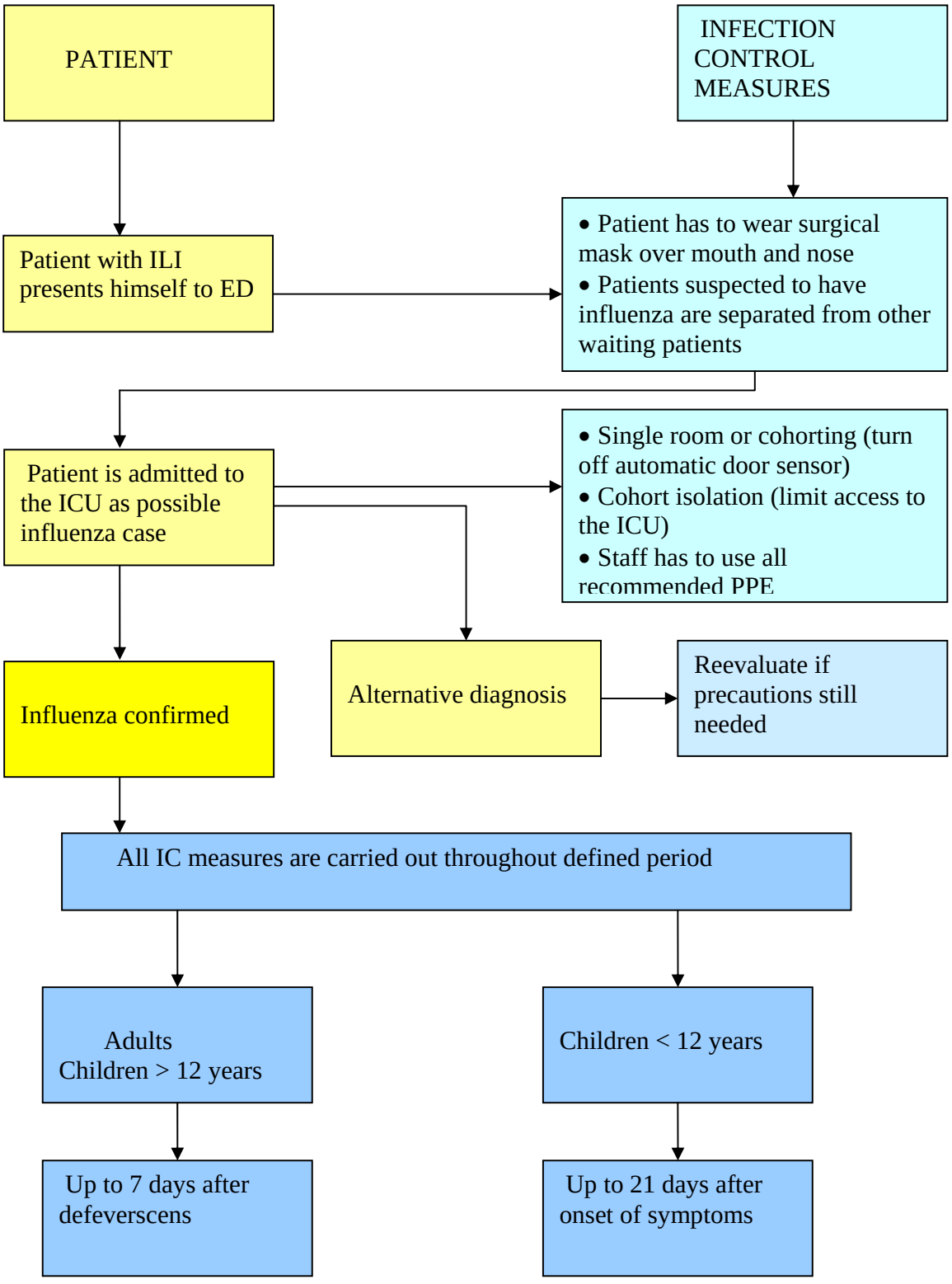
- HCW should bear in mind standard precautions
- If the patient died during the period of infectivity (less than 7 days after defervescence in adults or less than 21 days after onset of symptoms in children < 12 years of age) all recommended PPE should be used to prevent contact, droplet or airborne transmission
- Place the body in a body bag and transport it to the hospital mortuary as soon as possible
- Outer surface of the bag should stay clean and leakage of body fluids should be prevented
- If members of the family of the deceased want to see the body they should wear PPE if patient had died in the period of infectivity
- If the patient died in the period of infectivity and an autopsy should be performed medical examiner and assistant(s) should wear complete PPE. Generation of aerosols should be minimized (e.g. handling of lungs under water).

APPENDIX A
ADMISSION ALGORHYTM IN CASE OF INFLUENZA PANDEMIC



APPENDIX 2

ICU ADMISSION ALGORHYTM IN CASE OF INFLUENZA PANDEMIC



APPENDIX 3

COLLECTION, STORAGE AND TRANSPORT OF THE SPECIMEN

Rapid test for detection of influenza A virus in respiratory samples is performed at Laboratory for Respiratory Microbiology at University Clinic Golnik - KOPA. If determination of virus subtype is desired, samples should be sent to the reference laboratory in Ljubljana.

Appropriate samples: nasal swab or washing
nasopharyngeal swab or aspirate
throat swab
BAL
transtracheal aspirate
lung biopsy

How to collect a nasal or throat swab:

- Nasal swab should be performed using dry swab. Swab is inserted aprox. 2 cm into the nares (children 1 cm) . Firmly sample the membrane by rotating the swab. Withdraw the swab carefully not to touch the skin. Insert in a transport container.
- Throat swab – firmly rub the swab over tonsils and posterior pharynx. Insert swab in a transport container.

When the swabs are sent to Ljubljana, swabs should be **immediately** inserted into transport medium and **transported as soon as possible** to **Laboratory for viruses Institute for Public Health, Bohoričeva 15, Ljubljana, after preliminary notice to following phone number: 01/ 4342 611 or 01/ 4342 613.**

Storage: before transport samples should be kept refrigerated. If transport is delayed more than 2 days samples should be stored at -70°C.

Blood samples for serological testing:

- First serum sample (2 – 3ml of blood) is collected during acute phase of the illness
- Second serum sample is collected aprox. 14 days later.
- Samples of sera can be stored in refrigerator for 1 week, afterwards they should be stored at -20°C.

Transport: samples are inserted in a plastic bag marked „Biohazard“ and transported to the laboratory in Ljubljana on ice. Dry ice is not suitable, since it inactivates influenza viruses.

APPENDIX 4
INTERPANDEMIC AND PANDEMIC PHASES ACCORDING TO WHO

Table 1 **Comparison of phases published by WHO in 1999 and those in the present document**

PHASES AS PUBLISHED BY WHO IN 1999	NEW PANDEMIC PHASES	ADDITIONAL NATIONAL SUBDIVISIONS OF NEW PHASES
Interpandemic period **Phase 0**	**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[a] 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[a] of human disease.	Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 1: human case.	**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.	Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 2: limited human transmission.	**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.[b]	Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 3: spread in general population.	**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 (substantial pandemic risk).[b]	Affected or extensive travel/trade links with affected country.
		Not affected.
Pandemic period **Phase 1.** Multiple countries.	**Pandemic period** **Phase 6.** Pandemic phase: increased and sustained transmission in general population.[b]	Not yet affected.
Phase 2. Multiple regions.		Affected or extensive travel/trade links with affected country.
Phase 3. Subsiding in initially affected countries but not in other countries.		Subsided.
Phase 4. Next wave.		Next wave.
Postpandemic period **Phase 5.** Return to phase 0.	**Postpandemic period** Return to interpandemic period.	Return to interpandemic period.

[a] The distinction between *phase 1* and *phase 2* is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction would be based on various factors and their relative importance according to current scientific knowledge. Factors may include: pathogenicity in animals and humans; occurrence in domesticated animals and livestock or only in wildlife; whether the virus is enzootic or epizootic, geographically localized or widespread; other information from the viral genome; and/or other scientific information.

[b] The distinction between *phase 3*, *phase 4* and *phase 5* is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include: rate of transmission; geographical location and spread; severity of illness; presence of genes from human strains (if derived from an animal strain); other information from the viral genome; and/or other scientific information.

APPENDIX 5
RECOMMENDATIONS FOR THE USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. The use of PPE (masks, glovese, protective gowns and aprons, goggles) and hand disinfection are mandatory for all HCW.

2. Basic recommended PPE for contact with a probable or confirmed influenza case:
    - Fit tested masks FFP 2 or FFP 3
    - Protective goggles or face shields
    - Disposable long-sleeved gowns
    - Disposable gloves

3. Hand disinfection is mandatory:
    - Before and after contact with a patient
    - Before putting on or taking off other PPE (masks, gloves, goggles, gown)
    - Before leaving the isolation room
    - Before using personal items
    - Before leaving the ward

Use of PPE is defined in correlation with specific groups of people and different protection requirements. Levels of protection are defined in table 1. Different areas of the hospital are grouped into low, medium or high risk category according to likelihood of being exposed to influenza in those areas. Table 2 and 3 give the level of PPE recommended in different risk areas.

Table 1: Levels of PPE

LEVEL	COMPONENTS REQUIRED
0	Standard precautions
I	Surgical mask + standard precautions
II	FFP 2 or FFP 3 mask + standard precautions
III	FFP 2 or FFP 3 mask + disposable gloves, gown and goggles

Tabela 2: PPE requirements during WHO phase 3 – 5

	Category of People				
Area	HCW	Auxilliary staff	Cleaners	Technical support staff	Visitors
Low risk: no patient contact	0	0	0	0	0
Medium risk: • non-isolation wards, • non-microbiology labs, • pharmacy	0	0	0	0	0
High risk: • ED • Clinics • ICU • Isolation wards • Microbiology lab • Radiology dept.	II	II	II	II	I or II (isolation wards / ICU)

Table 3: PPE requirements during WHO phase 6

	Category of People				
Area	HCW	Auxilliary staff	Cleaners	Technical support staff	Visitors
Low risk: no patient contact	I	I	I	I	Not allowed
Medium risk: • Non-isolation wards, • Non-microbiology labs, • Pharmacy	II	II	II	II	Not allowed
High risk: • ED • Clinics • ICU • Isolation wards • Microbiology lab • Radiology dept.	III or IV (ED, ICU)	III	III	III	Not allowed

RECOMMENDED PPE IN CASE OF INFLUENZA

- ***Gloves (non-sterile) - latex***

- ***masks (FFP2 or. FFP 3)***

- ***disposable gowns***

- ***eye protection - goggles***

- ***caps (when high risk of aerosolization – aspiration, bronchoscopy)***

Who should use PPE?

- All HCW who attend patiens (physicians, nurses, physiotherapists, radiologists)
- All auxilliary staff (cleaners, delivery personnel, couriers)
- All laboratory personnel in contact with patients' samples
- All employees of sterilization unit decontaminating the equipment and accessories in contact with patients