

Emergency Guideline: Novel Respiratory Virus/Pandemic Flu Plan

Target Group: Cleveland Clinic – Main Campus		Original Date of Issue: Not Set	Version 1
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Purpose

The purpose of this Novel Respiratory Virus Plan and Pandemic-like Biological Plan is to prepare the Cleveland Clinic for the provision of care to large volumes of patients caused by an epidemic, pandemic, or biological threat, and to limit the transmission of the responsible agent. This plan will remain flexible and realize that an epidemiological or biological disaster condition has the potential to last for a long duration. This plan will help facilitate the prompt identification, segregation, and treatment of patients while protecting the non-infected population. This plan will also prepare for the possibility of needing more bed space for increased volumes of patients.

Guideline

Scope

The plan applies to all employees and departments located at the Cleveland Clinic Main Campus and associated sites.

Responsibility

Department Managers are responsible for implementation of the Novel Respiratory Virus Biological Plan. For Cleveland Clinic Main Campus, responsibility for overall management of the plan is delegated to the Chairman, Emergency Preparedness/ Disaster Medicine and Chairman of Department of Infectious Disease.

Novel Respiratory Virus Teams:

During a Novel Respiratory Virus the following teams will be formed:

- (Novel Respiratory Virus) Incident Management Team
- (Novel Respiratory Virus) Vaccine Distribution Team
- (Novel Respiratory Virus) Personal Protective Equipment Situation Team

Response; World Health Organization (WHO) Pandemic Phase and Severity Index

Phase 1:

No animal influenza virus circulating among animals have been reported to cause infection in humans

RESPONSE: Activate a Code Yellow External Advisory

Phase 2:

An animal influenza virus circulating in domesticated or wild animals is known to have caused infection in humans and is therefore considered a specific potential pandemic threat.

RESPONSE: Activate a Code Yellow External Advisory

Phase 3:

An animal or humans influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.

RESPONSE: Activate a Code Yellow External Alert

- ✓ A briefing will be called by Infectious Disease for the Incident Mgmt. Team
- ✓ Staff, Equipment and Supplies will be pre-positioned ON-SITE and additional resources will be checked

Phase 4:

Human-to human transmission of an animal or human-animal influenza reassortant virus able to sustain community-level outbreaks has been verified

RESPONSE: Activate a Code Yellow External Alert or Activation

- ✓ A briefing will be called by Infectious Disease for the Incident Mgmt. Team
- ✓ Staff, Equipment and Supplies will be pre-positioned ON-SITE and additional resources will be checked

Phase 5:

The same identified virus has caused sustained community level outbreaks in two or more countries in one WHO region

RESPONSE: Activate a Code Yellow External/ Internal Activation

- ✓ The Hospital Command Center is partially activated
- ✓ A briefing will be called by Infectious Disease for the Incident Mgmt. Team
- ✓ Staff, Equipment and Supplies will be pre-positioned ON-SITE and additional resources are monitored

(Highest Level)

Phase 6:

In addition to the criteria defined in phase 5, the same virus has caused sustained community level outbreaks in at least one other county in another WHO region.

RESPONSE: Activate a Code Yellow External/Internal Activation

- ✓ The Hospital Command Center is completely activated and the Incident Mgmt. Team will meet once a week depending upon the situation
- ✓ Incident Action Plans will be developed.

Equipment and Supplies

Emergency Cache of N95 Small Particle Masks

An emergency Storage of N95 small particle masks is located at the parker warehouse. A current Inventory List is in Materials Management and Supply Chain Management.

Emergency Patient Care Equipment and Supplies

Cleaning and disinfection of patient care equipment

1. Utilize disposable equipment when possible.
2. Clinical employees will clean and disinfect patient care equipment prior to removing from patient room.
3. Use standard precautions when cleaning equipment.
4. Carefully and thoroughly clean equipment with hospital approved disinfectant and allow to air dry. Apply disinfectant again until surface is moist and allow to air dry.
5. Place tape with date and initials of person who cleaned equipment.
6. Take clean equipment to clean storage area.

Maintaining Food, Water, Fuel

Maintain food, Water, Fuel is addressed in the Cleveland Clinic Emergency Operations Plan.

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Waste Management

Use Standard precautions for disposal of solid waste (medical and non-medical) that might be contaminated with a Novel Respiratory Virus.

Waste streams are managed under the direction and supervision of the Environmental Service Department, in accordance with the policies and Guidelines defined in the Cleveland Clinic Waste Management Plan.

Collection, Storage & Retention Guidelines are as follows:

Waste would continue to be thrown down the trash chutes in the various locations of the hospital until the chutes are filled.

Additional waste bins/receptacles will be delivered and placed in strategic locations of the clinical areas throughout the hospital and would become the central points of collection at the various locations.

When bins and receptacles are filled, staff from the labor pool will be instructed to bring them to storage and retention locations.

Storage and Retention Locations in the order that they would be utilized:

Main dock area- as much waste as possible would be stored in retention carts and the carts would be lined up on the dock.

Additional storage and retention locations such as non -essential offices and conference rooms could be used if necessary.

Dishes and eating utensils

Standard precautions are recommended for handling dishes and eating utensils used by a patient with known or possible Novel Respiratory Virus. Dishes are cleaned at appropriate temperatures to sanitize all the dishes and utensils used by patients. Hostesses are trained to use standard precautions when passing and picking up trays from patients. Carts that carry trays are sanitized 3 times a day after each meal

Education and Training

Coordinator of Education and Training Plan

A team will be developed by the Incident Management Team which will include but not limited to:

- Emergency Management
- Safety and Security
- Infectious Disease
- Infection Control
- Protective Services
- Patient Safety
- Nursing Directors

Cleveland Clinic Main Campus staff and other employees as appropriate will provide education that addresses the needs of staff, patients, family members, and visitors. Cleveland Clinic Main Campus regional staff education department is responsible for the coordination of the Novel Respiratory Virus education and training programs.

Staff Education

Inter-pandemic Period or High Threat Period:

1. Provide staff education annually to include:
 - Prevention and control of influenza
 - Implications of Novel Respiratory Virus
 - Benefits of annual influenza vaccination
 - Role of antiviral drugs in preventing disease and reducing rates of severe influenza and its complications
 - Infection prevention strategies for the control of influenza, including respiratory hygiene/cough etiquette, hand hygiene, standard precautions.

Pandemic Period:

1. Provide staff education through OLP and through Intranet to include:
 - Continue to provide education on above topics
 - Provide education on the day-to-day operation of hospital during Novel Respiratory Virus period
2. Provide staff education and training to include:
 - Train intake and triage staff to detect patients with influenza symptoms and to implement immediate containment measures to prevent transmission.
 - Work with Behavioral Health Services to supply social workers, psychologists, psychiatrists, and nurses with guidance for providing psychological support to patients and hospital personnel during an influenza pandemic
 - Provide “just-in-time” training of non-clinical staff who might be asked to assist clinical personnel (e.g., help with triage, distribute food trays, transport patients), students, retired health professionals, and volunteers who might be asked to provide basic nursing care (e.g., bathing, monitoring of vital signs); and other potential in-hospital caregivers (e.g., family members of patients).
3. Education of patients, family members, and visitors:
 - Work with Ohio Department of Health and Cleveland Clinic Health System to provide education through mass media.
 - Provide information to be distributed at all entrances to the Health System.
 - Provide language specific and reading-level appropriate educational materials for Hand Hygiene, Respiratory Hygiene, and precautions specific to Novel Respiratory Virus.
 - Materials will be developed based on information from ODH, CDC, WHO and APIC.

I. Selection of Respirators

Respirator selection shall be in accordance with Guidelines issued by the Department of Environmental Health and Safety; only approved respirators shall be used. Air purifying respirators shall not be used for hazardous chemicals with poor or inadequate warning properties unless approved by the Director, Environmental Health and Safety or his/her designee.

If an employee is not able to wear a particular style or size of respirator, alternate styles and/or sizes shall be made available.

II. Medical Evaluation

Before an employee is fit tested or required to use the respirator in the workplace, a medical evaluation shall be performed to determine the employee's ability to use the respirator. Medical evaluations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee.

The content and frequency of the medical evaluation and the conditions requiring additional medical evaluations shall be determined by the responsible Occupational Health Department physician. Respirator assignment and use shall be in accordance with the physician's findings.

III. Fit Testing

Fit testing shall be conducted in accordance with Guidelines issued by the Department of Environmental Health and Safety. The Supervisor shall ensure that an employee is fit tested prior to initial use of a respirator and whenever a different make or size respirator is used and refitted at the frequency specified by the Department of Environmental Health and Safety.

The employee shall be refitted as necessary, such as when visual observations are noted regarding an employee's conditions which could affect respirator fit.

Conditions include facial scarring, cosmetic surgery or an obvious change in body weight.

If the respirator becomes unacceptably uncomfortable at any time, the employee shall be given to opportunity to select a different respirator and be refitted.

IV. Use of Respirators

Respirators shall be used in accordance with standard operating Guidelines issued by the Department of Environmental Health and Safety.

Supervisors shall not permit the use of negative pressure, pressure demand or positive pressure respirators which, for effective performance, depend on a tight face piece-to face seal by employees with conditions that prevent such fits. Examples of these conditions include facial hair that interferes with the face piece seal, absence of normally worn dentures, facial scars or headgear that projects under the face piece seal. If an employee wears corrective glasses or goggles, the supervisor shall ensure that they are worn in such a manner that they do not interfere with the seal of the face piece to the face of the wearer. The supervisor shall ensure that each employee, upon donning a tight-fitting respirator, performs a face piece fit check prior to entering a work area where respirators are required.

Employees may leave the respirator use area to wash their face and respirator face piece as necessary to prevent skin irritation associated with respirator use. Employees must leave the respirator use area to replace the respirator or the filter, cartridge or canister elements. If employees detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece, they must leave the respirator use area. The Supervisor must ensure that the respirator is replaced or repaired before allowing the employee to return to the area.

V. Maintenance and Care of Respirators

The supervisor shall ensure that respirators are cleaned, disinfected, stored, inspected and repaired, in accordance with Guidelines issued by the Department of Environmental Health and Safety.

In accordance to the care of respirators policy

VII. Training and Information

Supervisors shall ensure that all affected employees attend training provided by, or approved by, the Director/Environmental Health and Safety, or designee, prior to the initial use of a respirator and when otherwise specified in Guidelines issued by the Department of Environmental Health and Safety.

Affected employees shall be provided a copy of this policy and a copy of the applicable regulation (e.g., OSHA, EPA, USNRC, etc.) requiring respiratory protection.

VII. Recordkeeping and Access to Records

- A. Medical Evaluations: The Occupational Health Department shall retain records of medical evaluations and make records available in accordance with 29 CFR 1910.120.
- B. Fit Testing: The Department of Environmental Health and Safety shall retain records of qualitative and quantitative fit tests. The record shall include the following:
 - 1. The name or identification of the employee tested;
 - 2. Type of fit test performed;
 - 3. Specific make, model, style and size of respirator tested;
 - 4. Date of test;
 - 5. The pass/fail results for QLFT's or the fit factor and strip chart recording of the test results for QNFT's;
 - 6. The hazard assessment.

Fit test records shall be retained for respirator users until the next fit test is administered.

Respirator Program: The Department of Occupational Health and Safety shall retain a written copy of the current respirator program.

Communication

Contact for Communication with Public Health Authorities

The primary contact with public health authorities will be conducted by the Infection Prevention Department. All information will be documented and storage in the Hospital Command Center. Communication will be done by the types of communication identified in the Cleveland Clinic Emergency Operations Plan.

Internal and External Communication by PIO

The Public Information Officer (PIO) within HICS is responsible for communicating information with the media and public information as well as internal information related to the emergency.

The Marketing/Community Relations Department has working relationships with local, state, and national media. The Department provides communication with staff and hospital personnel. The Marketing/Public Relations Department provides communication with staff and hospital personnel in coordination with the Media Relations Department.

Coordination of participation in Joint Information Center (JIC)

The PIO will work with Public Information Officers from other agencies in a Joint Information Center (JIC) to coordinate public information in community or regional emergencies. The PIO will communicate directly with local and national media for emergencies that impact only Cleveland Clinic Hospital.

Regular Employee and Medical Staff Communication

Hotlines may be established for regular employees and medical staff. Recorded messages will be conducted by the PIO and will provide current updates.

Establishment of the Employee Healthline during a Pandemic

If an absence is flu-related, after following standard call-off Guidelines, exempt and non-exempt employees should call the **Employee Flu Healthline** at **216.448.2400**. Occupational Health nurses will interview callers regarding symptoms and make determinations about employees staying home to get well. Occupational Health also will give callers instructions to check in with the healthline again when their flu symptoms have resolved. Employees will be cleared to return to work 24 hours after resolution of CDC recommended symptoms.

Important point: Employees must continue to follow standard call-off Guidelines for their department in addition to calling the Employee Flu Healthline as instructed.

Managers will access a daily report of flu-related absences, generated from the Employee Flu Healthline, for staff planning and point forgiveness purposes. Managers also will receive a daily report of employees who have been cleared to return to work.

Signage for Entrances and Specific Patient Areas

Signage will be approved by the Public Relations and Marketing Department.

Triage, Treatment, Admission

Inpatient/ Outpatient diagnosis and Treatment Protocols

These protocols will be developed by the Incident Management Team according to the Ohio Department of Health and the CDC.

Triage

Triage should be conducted to identify persons who might have Novel Respiratory Virus:

- Separate them from others to reduce the risk of disease transmission
- Identify the type of care they require (home care or hospitalization)

Initial triage personnel will be stationed at the entrance to the emergency department. Anyone presenting with CDC recommended symptoms will immediately be given a surgical mask to wear and asked to be seen at the ED Flu triage station located off the ED.

Family/visitors will also be assessed for CDC recommended symptoms and given masks if they possess the symptoms.

Patients with non- CDC recommended symptoms will be cohorted in the emergency department waiting room.

Each patient that is triaged to the CDC recommended related illness emergency department will be quickly and efficiently evaluated by an emergency physician and Infection Prevention. Influenza testing will be conducted as necessary based upon CDC recommendations. Patients requiring direct admissions will be taken directly to an open negative pressure room.

Upon recommendation from the Ohio Department of Health, all individuals entering the hospital will be screened for CDC recommended illness.

Registration of Patients

Registrants will wear PPE to curtail transmission of the agent as determined by the Incident Management Team. Patient registration will be completed once the patient is triaged to a specific treatment area. The registrants will obtain the information and place it into the Cleveland Clinic Registration system. All patients presenting for treatment during a pandemic will be registered in this manner.

Separate Hospital Emergency Department Triage Sites

Separate triage sites will be ordered by the Incident Management Team due to increasing volume of flu patients

Hospital Admission Criteria

Admissions to the hospital will be coordinated with the Emergency Department Physician and Infection Prevention. Consideration should be taken for the need to segregate patients from others by combining same symptoms/exposure patients as roommates.

Infection Prevention Policies and Guidelines will be implemented at all times

Triage Process for Ventilator-Dependent Patients

Ventilator-Dependent patients will be triaged with the normal influx of influenza patients. However ventilator-dependent patients will have first priority to be triaged if the Casualty Care Unit Leader deems necessary. These patients will have ventilators provided immediate.

Transfer Protocols

Transfer protocols will be implemented under the normal Guidelines with the Cleveland Clinic Case Management Department follows.

Coordination with EMS

Coordination with EMS will be conducted by the EMS Coordinator to communicate vital information to local responders.

Protocols for Cancellation of Elective Surgery and Guidelines

The cancellation of Elective Surgeries and Guidelines will be determined by the Incident Commander in consultation with the Chairman of Department of Infectious Disease and/ or Director of Infection Prevention.

Nurse on Call, Appointment and Referral System

Referrals and appointments will be directed to the Cleveland Clinic appointment line at: **866.594.8555**

Surveillance and Detection of Novel Respiratory Virus

Cleveland Clinic has signed an agreement with Ohio Department of Health to participate in real-time Outbreak Disease Surveillance (OhioEPI) in the Emergency Department on main campus. Spikes above baseline are reported to the local health department electronically. Results of seasonal influenza tests are sent daily to Infection Control. Aggregate numbers of influenza test results are sent weekly by infection prevention to hospital epidemiology and incident command center.

Notification of Presence of Disease in Region

Public Health Advisories are sent via the secure Ohio Public Health Communication System (OPHCS). (For more information see www.cdc.gov/flu/weekly/fluactivity.htm.)

Primary OPHCS contact:

<u>Infection Preventionist</u>	<u>pager</u>	<u>82504</u>
(Title)	(Contact info)	

Backup OPHCS contact:

<u>Infection Preventionist</u>	<u>pager</u>	<u>26596</u>
(Title)	(Contact info)	

A. If Novel Respiratory Virus is in the community, public health authorities will notify the following:

- Hospital Emergency Departments
- Laboratory
- Infection Preventionist, who will then notify the following:
 - Adult and Pediatric Hospital Epidemiologists
 - Senior Director, Infection Prevention
 - Infection Preventionists – main campus
 - Hospital Emergency Preparedness Director via Command Center 4-2250
 - ID fellow on-call (pager # 23665)
 - Cuyahoga County Health Department via phone 216-201-2080 during normal business hours, or Emergency Pager 216- 857-1433 after normal business hours for residents of Cuyahoga County
 - Cleveland Clinic health system ICP

B. If Novel Respiratory Virus is identified at Cleveland Clinic initially, laboratory will notify Infection Preventionist immediately via pager #21740 if a suspected or confirmed case of Novel Respiratory Virus is identified. Infection Preventionist will notify:

- Adult and Pediatric Hospital Epidemiologists
- Infection Preventionists
- Hospital Emergency Preparedness Director via Command Center 4-2250
- ID fellow on-call (pager # 23665)
- Cuyahoga County Health Department via phone 216-201-2080 during normal business hours, or Emergency Pager 216- 857-1433 after normal business hours for residents of Cuyahoga County
- Cleveland Clinic health system Infection Control Preventionists

Monitoring and reporting Seasonal Influenza-like illness among hospitalized patients, volunteers, and staff

Notification

1. Laboratory will notify Infection Prevention of all positive influenza tests from both hospital and ambulatory settings via the daily significant finding report.
2. An e-mail “alert” that the season has started will be sent by Infection Prevention to the chair of medicine and ID and ED physicians.
3. Reports are faxed to the local health department communicable disease reporting number as directed by public health.

Health care workers (HCW) should be vigilant for the development of fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 1 week after last exposure to influenza-infected patients. HCW’s should seek medical care for symptoms of fever or respiratory illness.

Exposed persons should notify their healthcare providers in advance that they have been exposed to a patient with Novel Respiratory Virus. Call health care provider before coming into the hospital or clinic.

With the exception of visiting a health-care provider, health-care workers who become ill should be advised to stay home as directed by Occupational Health, unless an alternative diagnosis is established or diagnostic tests are negative for influenza A virus.

While at home, ill persons should practice respiratory hygiene and hand hygiene to lower the risk of transmission of virus to others.

Depending on the situation and in consultation with the Health Department “work quarantine” may be utilized for exposed HCWs.

Information on the clinical signs and diagnosis of influenza is available at www.cdc.gov/flu/professionals/diagnosis/.

Evaluation and diagnosis of hospitalized patients and/or staff with symptoms of Novel Respiratory Virus

Screening of Persons Entering the Facility (including HCW’s, patients, visitors)

During the peak of a pandemic, the Emergency Department would quickly become overwhelmed with screening persons entering the facility. Alternative portals of entry on main campus would be established for employees and the general public. The alternative portals will be determined in consultation with senior medical staff, Protective Services Administration, and the Cleveland Clinic Police Department administration. A “triage officer” may be useful for managing patient flow, including deferral of patients who do not require emergency care. See Occupational Health Respiratory Protection Program for screening of healthcare workers and return to work plan.

Information on the clinical signs and diagnosis of influenza is available at www.cdc.gov/flu/professionals/diagnosis/.

Management of persons with possible Novel Respiratory Virus

There are two levels of response at the Cleveland Clinic:

1. Novel Respiratory Virus detected within the United States – **without** local transmission (See Algorithm #1)
2. Novel Respiratory Virus detected within the United States – **with** local transmission (See Algorithm #2)

See Figure 1 for Pandemic Severity Index

Care of the Patient with Suspected or Confirmed Novel Respiratory Virus

Admission of influenza patients should be limited to those with severe complications of influenza who cannot be cared for outside the hospital setting. Most patients with Novel Respiratory Virus will be able to remain at home during the course of their illness and can be cared for by family members.

Patients admitted with suspected or confirmed Novel Respiratory Virus will initially be placed in Airborne Precautions until mode of disease transmission is determined.

See Infection Control policy and Guidelines # 105 *Novel Respiratory Virus* on the Infection Control web site.

Infection Prevention response to Influx of Persons with Communicable Disease

Recognition	Actions
<ul style="list-style-type: none"> • Recognize key indicators • Minimize transmission 	<ul style="list-style-type: none"> • ED triage or charge nurse evaluates patient for symptoms of communicable disease, isolates as needed, and utilizes PPE as appropriate
Response	
<ul style="list-style-type: none"> • Isolation • Quarantine • Initiate response 	<ul style="list-style-type: none"> • ED directs symptomatic persons to current isolation rooms; overflow directed to identified areas in ED • ED capacity is up to 80 individuals • Non symptomatic family members advised to go home • ED activates the disaster preparedness plan based on number of symptomatic individuals presenting to ED • Casualty Plan activated at threshold of 15 or more symptomatic individuals presenting • ED Charge Nurse evaluates with physician patients to be discharged • Facilitates discharge to Discharge Lounge in J Building. • Triage ambulatory patient to E11 or E17. • ED personnel man the labor pool, in E1-160. • Registration maintains log of patient disposition.
Containment	
<ul style="list-style-type: none"> • Preventing transmission • Prevent employee exposure 	<ul style="list-style-type: none"> • Non-symptomatic emergency patients diverted to segregated area in ED • ED staff advised to apply appropriate PPE
Communication	
<ul style="list-style-type: none"> • ED initiates Code Yellow 	<ul style="list-style-type: none"> • ED notifies hospital operator at 111 that Code Yellow Disaster plan is in effect

<ul style="list-style-type: none"> • ICP notification 	<ul style="list-style-type: none"> • ED broadcasts Code Yellow to first floor E building • ED notifies Cleveland Clinic Police 42222 • ED notifies Cuyahoga Emergency Communication System (CECOMS) of status • ED notifies ICP on call via pager #21740 • ICP notifies remaining ICPs Main Campus and System • ICP notifies Hospital Epidemiologist • ICP notifies local public health (216-201-2080) or pager 216- 857-1433
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PREVENTION OF NOSOCOMIAL INFLUENZA

To ensure prompt recognition of suspected cases, suspicion for influenza should be high in any patient with upper respiratory symptoms and fever.

1. Isolate all patients with suspected or confirmed influenza in consultation with Infection Preventionists.
2. Cohort patients whenever possible. Generally patients may remain on their original unit if possible.
3. Hand hygiene after touching any respiratory secretions.
4. Transport of patients in isolation should be avoided whenever possible. In the event that a patient must be transported:
 - Counsel patient to contain secretions using tissues whenever possible
 - Clear the hallway and elevator prior to transport
 - The patient should wear a surgical mask if possible
 - If the patient is unable to wear a mask, those immediately around the patient should wear an approved respirator or PAPR.

Precautions and Personal Protective Equipment (PPE) for Aerosolizing Guidelines

- Definition: endotracheal intubation, nebulizer treatment, bronchoscopy, suctioning
- Healthcare personnel should wear gloves, gown, face/eye protection, and a N95 respirator or powered purified air respirator (PAPR)
- If possible and when practical, use of an airborne infection isolation room may be considered when conducting aerosol-generating Guidelines
- Respirators should be used within the context of the Occupational Health Respiratory Protection Program
 - ◊ PAPR
 - Available from Central Service
 - Does not need to be fit tested to use
 - Additional disposable hoods available in storeroom
 - Reuse disposable hood when quantities limited.
 - Discard only if torn, wet or contaminated with body fluids*
 - ◊ N95 disposable respirator
 - Must be fit tested to wear a disposable N95 respirator.
 - Must perform fit check each time a disposable N95 respirator is used
 - Available in storeroom
 - Single use per Respiratory Protection Policy

Exposed patients

1. Confirm vaccination status. Vaccinate if appropriate.
2. Consider antiviral prophylaxis for high-risk immunosuppressed patients exposed to influenza A (e.g., transplant, immunosuppressed, neoplasm, connective tissue disease etc.).
3. Isolate exposed roommates who are symptomatic for influenza (asymptomatic exposed roommates do not need to be isolated)
4. Perform PCR influenza detection test on symptomatic exposed roommate (no need to test exposed roommates who do not have signs or symptoms of influenza)

Exposed employees

1. Confirm vaccination status. Vaccinate if appropriate.
2. Consider antiviral prophylaxis for high-risk employees exposed to influenza A (e.g., immunosuppressed employees).
3. Employee with suspected influenza should be tested.
4. Furlough employees with **CONFIRMED** disease per Corporate Health,
5. In the event of extreme employee shortage, employees may return to work when able and will wear a mask for direct patient care. Counsel employees to wash hands after touching respiratory secretions and follow cough etiquette and respiratory hygiene.

Exposed Persons

1. *Units to maintain log of all persons potentially exposed to a person with Novel Respiratory Virus. (See IC Policy 105A)*
2. *Employees*
 - a. *Occupational Health to monitor health of employee for 10 days*
 - b. *Employees with no signs or symptoms of illness may return to work*
 - c. *Occupational Health will determine eligibility to return to Work*
3. Hospitalized patients
 - a. Monitor temperature daily
 - b. Patients with a temperature greater or equal to 38° C (100.4° F), or cough or other sign of respiratory illness should be placed in Airborne Precautions
4. Instruct person to stay home if they develop a fever, cough or other respiratory distress and to immediately contact their physician
5. Notify Infection Preventionist via pager #21740 of exposed person who has developed signs or symptoms of Novel Respiratory Virus

Infection Prevention Plan

See Infection Control policy and Guidelines # 105 *Novel Respiratory Virus* on the Infection Control web site.

(For the most recent information on Novel Respiratory Virus infection control recommendations for staff in a healthcare setting, see www.pandemicflu.gov/plan/healthcare/maskguidancehc.html.)

Communication with Regional Infection Preventionists

Potential exists for the disruption of communication across the system. This may be addressed by HICS.

The Innerpulse can be utilized to provide updated information to employees as well as e-mail alerts.

Additional guidance available at: www.pandemicflu.gov/plan/healthcare/maskguidancehc.html

Cough etiquette and Respiratory Hygiene signs will be posted.

(For information, see www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm.)

Guidelines for Patient Placement during Periods of Extreme Bed Shortages

Patient Access Services/Admitting will follow standard Guidelines for patient placement. All possible placement options will be reviewed. They may include, but are not limited to nor need to occur in this order:

- Semi-private rooms which have been converted to private will be converted back to semi-privates.
- PACU may retain patients or may admit patients if beds are not required for surgical cases
- The Founders' Suite will convert its single suites to 2 bed patient rooms, where possible
- Seizure Monitoring Unit beds will be filled. This will include Adult and Pediatric Seizure Units
- Pediatric Units can be used to accommodate over flow adult patients. Older adolescent patients may be triaged to an appropriate adult in-patient unit.
- Pediatric Cardiac Step-down may be used if that service does not have predetermined patients for those beds. Screening of inappropriate patients (i.e. infected cases) MUST occur.
- Short Stay beds may be utilized for overflow. Extended hours of operation (from Saturday 3 pm through Monday 7 am) should be considered.
- ICUs may hold patients or admit non-ICU patients as needed.
- Bone Marrow Transplant beds may be used if that service does not have predetermined patients for those beds. Screening of inappropriate patients (infected cases, etc.) needs to occur.
- CDU in the ED may be used.
- Neuro step down beds may be used for any patient.
- Any area currently under construction/renovation should be reviewed for patient placement opportunities

Patient assignment priority for bed placement is determined by Nursing Director On Call or NOM. All patients will be accommodated as beds permit. No referral or admission will be diverted without prior consultation with the Chief Nursing Officer.

Responsibility has been assigned for regularly monitoring www.pandemicflu.gov for updates/revisions of infection prevention recommendations and implementing recommended changes. Once a Novel Respiratory Virus is detected and its transmission characteristics are known, Health and Human Services/Center for Disease Control and Prevention will provide updated guidance on any need to modify infection control recommendations. Any changes to current recommendations will be published on www.pandemicflu.gov.

Safety and Security

Access Control and Lockdown

If Novel Respiratory Virus spreads throughout the community, visitors will have limited access into the hospital. Essential visitors are those defined as accompanying a child under the age of 18 or those requesting access to see immediate family member in grave condition. All other visitors will be considered non-essential.

The hospital's lockdown Guidelines will be utilized when active screening of visitors becomes necessary.

Interior Security and Control of Movement

The Cleveland Clinic Police Department will control movement and monitor all suspicious individuals through security camera and conducting routine round throughout the hospital.

Visitor Control

The only access to the hospital will be through the initial screening at the entrance to the emergency department.

A screening station will be set up for staff by occupational health or designee as assigned by hospital command center for staff. If the visitor is found to be an essential visitor and free from CDC recommended symptoms, the visitor will be allowed access to the facility.

Non essential visitors displaying signs of CDC recommended symptoms will be directed to the Emergency Room.

To help prevent the spread of the seasonal flu and H1N1, Cleveland Clinic will limiting visitation to adults only and is asking visitors to refrain from bringing children under the age of 19 to visit patients at any of its hospitals. Visitors 19 and older should only come to the hospital if they are healthy. Although we understand these visiting limitations may be inconvenient, they will help prevent the spread of flu to our patients, visitors and employees in this unique flu season.

1. Visitation limited and by approval only. Telephone visits will be encouraged.
2. Screen visitors for signs and symptoms of influenza before entry into the facility and exclude persons who are symptomatic.
3. All visitors who accompany patients with influenza-like illness to the hospital are assumed to have been exposed to influenza and should wear masks.
4. Instruct visitors on hand-hygiene practices.

Isolation Guidelines

These Guidelines are to be followed by the standard isolation Guidelines protocols following CDC Guidelines.

Vaccine and Antiviral Medications

Priorities for Use of Vaccines and Anti-virals for Cleveland Clinic Employees

Tier Groups Only During Limited Supplies

During a Novel Respiratory Virus employees of the Cleveland Clinic maybe divided in three tier groups to help prevent the spread of infection otherwise if enough vaccine is available all will be able to receive vaccine. Vaccination stations will be established, exact locations will be determined by Corporate Health and operate from 7 a.m. to 5:30 p.m. Mondays thru Friday or time addressed otherwise.

The eligible employee group for the LAIV includes all healthy healthcare workers with the exception of:

- Pregnant women
- Healthcare workers under age 50 with certain chronic medical conditions as determined by current CDC Guidelines
 - People 50 years of age and older
- Healthcare workers who work with bone marrow transplant patients

Tier 1 Employees

- Adult and pediatric Emergency Department staff (nurses, physicians, respiratory therapists, patient transport and EMS workers, technicians)
- Critical Care Unit staff (nurses, staff physicians, residents, house officers and fellows, respiratory therapists, intensivists and pulmonologists)
- All pediatric, medical and surgical nursing staff
- All pediatricians and obstetricians
- Emergency Department and ICU X-ray technicians and phlebotomists
- Critical Care Transport staff

Tier 2 Employees

- *All nurses*
- All physicians
- X-ray technicians, EKG technicians and phlebotomists
- Transport staff
- Surgical Services personnel
- Medical students
- EVS, Pharmacy, Dietary Engineering, Security, CPD, Rehab Services, Echo and EEG staff
- Social workers, child life and case managers
- Laboratory services, outpatient clinic (CHF, Coumadin, Pain Management, etc.) staff
- DPC, digestive health, cath lab staff
- All other ancillary (clinical) departments

Tier 3 Employees and Specified High Risk Patients

- All employees will be able to received vaccine and high risk patients:
- Peds
- Peds Gastro
- Rheum
- Peds Cardiology/Cath Lab
- Inf Disease
- Peds Onc
- BMT

- Lung Transplant
- Liver Transplant
- Heart Transplant
- Kidney Transplant
- Pancreas Transplant
- CC Hillcrest Ob/GYN
- Peds Neuro

Priorities for Use of Vaccines and Anti-virals for Public- Mass Vaccination Clinic

Tier Groups Only During Limited Supplies

The Cleveland Clinic (main campus) conducts public vaccinations from 10:00am to 3:00pm daily for days that will be specified in order to reach the Clinic's daily patient, visitor and guest (employee families included) population.

Internal Medicine coordinates public vaccinations (with support from Pediatrics) targeting those patients and visitors coming to campus and desiring vaccinations. Vaccinations will be conducted in two locations: the Crile Lobby (A building) and Miller Lobby (J building). Marketing conducts an internal marketing campaign consisting of the intranet, employee email blasts, signs and flyers on campus, the regional hospitals and the family health centers.

- Internal Medicine coordinates and executes the vaccination campaign using the same template/methodology used for seasonal vaccinations.
- Pediatric Medicine supports Internal Medicine with personnel to ensure that children can be vaccinated at both vaccination locations during all operating hours.
- Internal Medicine reports vaccination numbers daily to the H1N1 incident management team.
- Operations provides volunteers, cleaning and logistics support as requested.
- Protective Services provides on site security at both locations to assist in crowd flow and control as needed.
- Protective Services provides parking validations (charged to specified cost center) to the vaccination sites.
- Marketing conducts internal marketing plan focusing on email blasts to employees, the intranet, and signage/flyers on main campus, the regional hospitals and the family health centers.
- Pharmacy ensures adequate vaccine on hand (approximately 3000 doses). If demand exceeds the supply the clinics will cease operations.

Vaccine administration and Anti-viral dispensing Guidelines

Monitor CDC recommendations on development, distribution, and use of vaccine. Coordinate with Ohio State and local health departments for plans for distribution and priority use of vaccine. The Incident Management will develop protocols for dispensing medications with the recommendations of the CDC.

Surge Capacity

Increased Patient Capacity On-Site

During a Novel Respiratory Virus:

1. Unit Admission Criteria will be reviewed by Medical Chief of Staff and Chief Nursing Officer, and adopted as indicated.
 2. All inpatients will be reviewed by Chief Nursing Officer with Inpatient Nursing Directors to identify patients who do not require ongoing inpatient care.
 3. Discharge orders will be written by same or in conjunction with listed primary physician, Vice President of Medical Affairs, or chairs of appropriate medical department.
- Transportation to other facilities may be provided by the Cleveland Clinic
 - A patient discharge holding area will be established in the Miller lobby.

Case Management Department will call home care agencies within our region to:

- Arrange at-home follow-up care for patients who have been discharged early.
- Arrange at-home visits for patients whose admissions was deferred because of limited bed space.

Chief of Surgery and the Director of Surgical Services will review the surgery schedule current and future. They will:

- Identify elective surgical Guidelines to be cancelled and those to be temporarily postponed
- Determine what and where emergency Guidelines are to be performed.
- Determine whether patients who require emergency Guidelines will be transferred to another hospital.

The Command Center will track bed capacity and provide information to local/state health departments as needed.

In consultation with ODH, expand bed capacity to handle crisis. Staff, medical equipment and supplies will be arranged to care for the occupant of each additional hospital bed. Areas to consider are:

- Psyche
- Skilled
- Rehab.

In consultation with CDC and ODH, the “Altered Standards of Care in Mass Casualty Events” strategies will be applied.

Current Policies and Guidelines for shifting patients between nursing units to free up bed space in critical-care areas and/or to cohort Novel Respiratory Virus patients will be followed as stated in this plan.

- Critical care overflow areas may include – OR /Hold/Recovery, Cardiac Cath Prep/Hold/Recovery.

Current memoranda of understanding/agreements with other local facilities who can accept non-influenza patients who do not need critical care will be initiated i.e. surrounding acute care hospitals.

50 Emergency surge cots and supplies are located at North Campus in the emergency management cage.

Staffing Requirements, Recruitment, and Retention

Departmental management will work in collaboration with HICS command center to establish and maintain coordination of staffing during a Pandemic

Strategies to Provide Adequate Staffing

- Expect 75% Cleveland Clinic employees to report to the hospital for assigned shift during a disaster outbreak.
- Collaborate in an effort to utilize staff from other Cleveland Clinic Health System Hospitals, if available.
- Assign patient care responsibilities to any available qualified staff
- Contact Red Cross for volunteers
- Collaborate with local Agencies
- Utilize Student Nurses/Allied Health Providers
 - Contact local colleges for available students that would be willing to assist
 - Contact local schools for available students to assist with ancillary patient care

Cross Training

- Utilize staff that is available in other areas of the hospital

Credentialing Guidelines

Follow Disaster Privileging Policies

Increased Volume of Laboratory Tests

Any Novel Respiratory Virus (when available) testing results will be sent to Infection Prevention Coordinator.

The laboratory will keep current with new testing as available and determine if testing can be done at the Cleveland Clinic or other affiliates of The Cleveland Clinic Health System. Laboratory will follow; “ODH Guidelines for Reporting Domestic Suspected Human Cases” Testing Guidelines will be determined by the laboratory and the Incident Management Team to prevent unnecessary testing.

Legal and Ethical Guidelines

Cleveland Clinic will provide care to their patients following all rules and regulations during a disaster situation. Legal and Ethical issues will be addressed through the legal Department and the ethics committee.

Morgue Capacity and Mass Fatalities

Refer to the Mass Fatality Incident Plan

References:

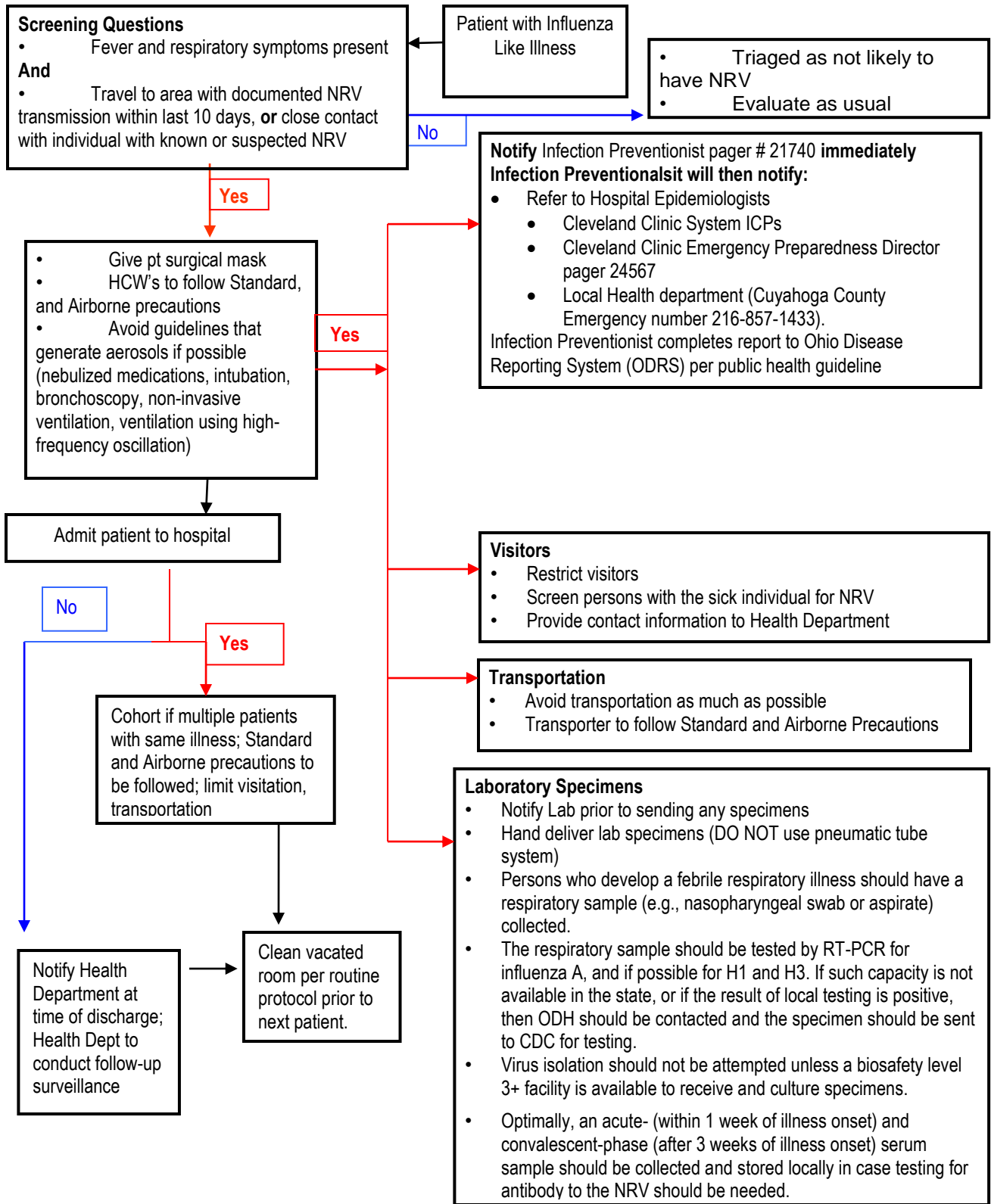
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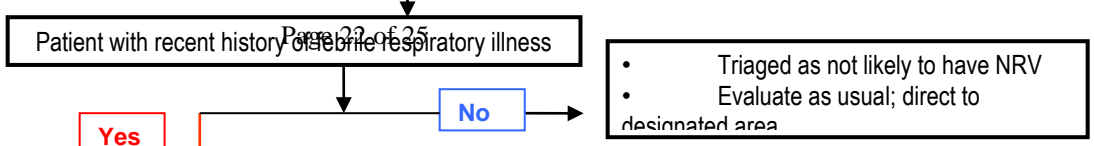
US Department of Health and Human Services. National Vaccine Program Office. Influenza Pandemics: How they Start, How They Spread, and Their Potential Impact. <http://www.hhs.gov/nvpo/pandemics/flu2.htm>

Algorithm 1. Novel Respiratory Virus detected within the United States – NO local transmission



Algorithm. 2: Novel Respiratory Virus detected WITH local transmission

Screen individuals entering ED for influenza-like illness (ILI)
 Teach cough etiquette
 Make surgical masks and hand hygiene products available in waiting area;
 Consider masks for all individuals entering healthcare facility.
 Have patient wear surgical mask during transportation (if appropriate)
 Cover patient with a clean sheet



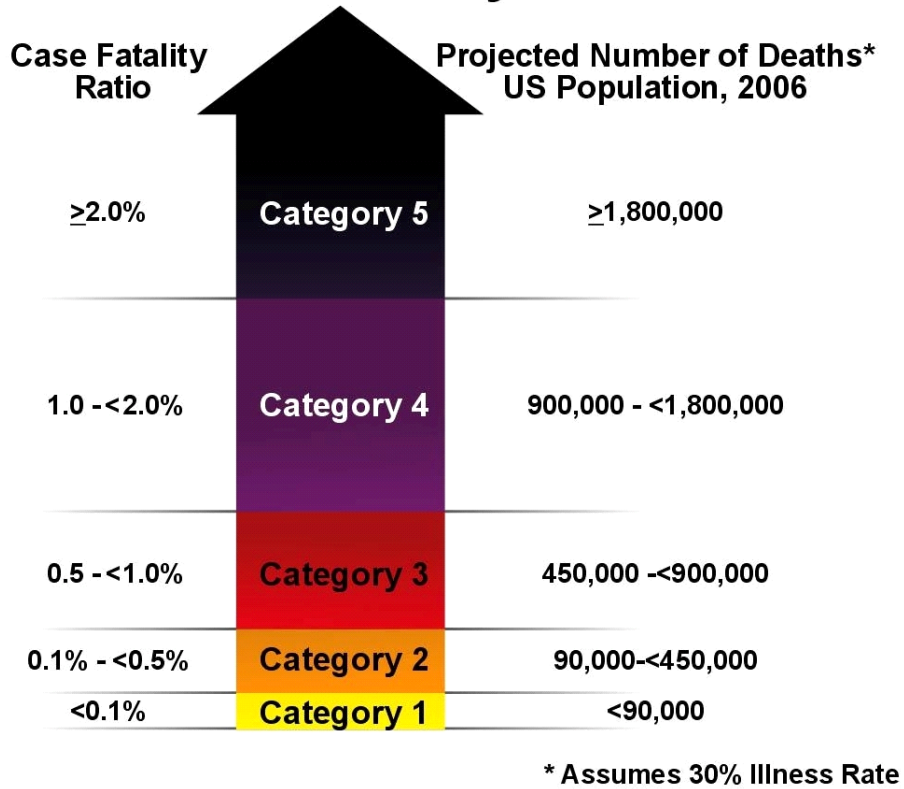
Notify receiving department
 Clear elevator prior to transport

See Operations Dashboard for current information on Airborne Infection Isolation Room status

Primary Rooms to use	Secondary Rooms to use
<p><u>Emergency Department</u> E12-5, E12-6, E15-10, E-15-11, E18-8</p> <p><u>Intensive Care:</u> G53 – 3, 4 G60- 07, 08 G61- 15, 16, 17, 18 G62-01, 02, 03, 09, 10, 16, 17, 18 J31-17 J56-08 J66-08</p> <p><u>Adult:</u> G81-25, 27, G91-23, 25 J51- 06, 15 J52-01 22 J53-10, 17 J61-05, 15 J62-01-22 J63-10, 17 J71-06-, 17 J72-01, 22 J73-10, 17 J81- 06, 17 J82-01, 22 J83 - 09, 15</p> <p><u>Pediatrics:</u> M30-15, M31-01, M43-03, M43-04 (Depending on circumstances pediatric patients may be sent to an adult unit. Pediatric nursing staff to provide coverage if necessary).</p>	<p>Portable HEPA Unit fitted Rooms: Medical determination</p> <hr/> <p>Outpatient & Non-patient care rooms:</p> <p>E20-146, 147 (PACU) A90-144, 152, 156, 302, 304 (Pulmonary Medicine) G6-154 (Bronch Suite) G51 (PACU) 01, 02 J55 – 511 (Guidelines room) L2-170 (Autopsy) L4-180, L4-180c (AFB lab), M51-55 (General Clinical Research Center) NN1-03, 04 (Cancer Lab) Q6-10-1, 2 (Dialysais)</p>

Reference: Nursing Policy 210 Disaster Preparedness: Casualty Plan
 Figure 1. Pandemic Severity Index

Pandemic Severity Index



<http://www.cdc.gov/media/pdf/MitigationSlides.pps>

Figure 2

Interventions by Setting	Pandemic Severity Index		
	1	2 and 3	4 and 5
Home <ul style="list-style-type: none"> • Voluntary isolation of ill at home (adults and children); combine with use of antiviral treatment as available as indicated • Voluntary quarantine of household members in homes with ill persons (adults and children); consider combining with antiviral prophylaxis if effective, feasible and quantities sufficient 	Recommended	Recommended	Recommended
	Generally not recommended	Consider	recommended
School Child Social Distancing <ul style="list-style-type: none"> ▪ Dismissal of children from school and school based activities and closure of child care programs ▪ Reduce out of school contacts and community mixing 	Generally not recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
	Generally not recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
Workplace/ Community Adult Social distancing: <ul style="list-style-type: none"> ▪ Decrease number of social contacts (e.g. encourage teleconferences, alternatives to face to face meetings) ▪ Increase distance between persons (e.g. reduce density in public transit, workplace) ▪ Modify. Postpone, or cancel selected public gatherings to promote social distance (e.g. postpone indoor stadium events, theater performances) ▪ Modify work place schedules and practices (e.g. telework, staggered shifts) 	Generally not recommended	Consider	Recommended
	Generally not recommended	Consider	Recommended
	Generally not recommended	Consider	Recommended
	Generally not recommended	Consider	Recommended