I. Description

This policy describes the management of patients and personnel during a pandemic influenza outbreak or other highly communicable respiratory disease.

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II. Rationale

Several pathogenic microbes that are transmitted principally by the droplet or airborne routes may lead to severe respiratory disease including avian influenza (H5N1), SARS-CoV, MERS-CoV and pulmonary plague (etiologic agent, Yersinia pestis). Planning and preparedness are critical to the successful management of an epidemic involving a highly communicable respiratory disease. Rapid implementation and strict adherence to this policy can reduce disease transmission within UNC Health Care.
III. Policy

A. Definition of a Highly Communicable Respiratory Disease

For the purpose of this plan, highly communicable respiratory diseases will include pandemic influenza strains including avian influenza (H5N1), SARS-CoV, MERS-CoV, *Y. pestis*, agents of hemorrhagic fevers (Ebola, Marburg, Lassa, Congo-Crimean fevers), certain hanta viruses, and certain pox viruses (e.g., smallpox, monkey pox).

The Director or Medical Director of Hospital Epidemiology, the Centers for Disease Control and Prevention, or the North Carolina State Epidemiologist may designate other agents requiring similar management. In cases of specific pathogens, after reviewing recommendations from the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO), Hospital Epidemiology may amend this plan accordingly and post updates on the hospital’s infection control website.

B. Notification and Activation

1. The Hospital Emergency Incident Command System (HEICS) and Emergency Operations Plan Incident Management Annex will be activated when there are one or more cases of highly communicable respiratory diseases in UNC Hospitals or UNC Outpatient Care Services.

2. In all cases of suspected or known highly communicable respiratory diseases visits or admissions, the Infection Preventionist and receiving UNC Health Care location should be notified prior to the patient being triaged to a UNC Health Care facility. It is the responsibility of the attending physician or his/her designee to notify the Infection Preventionist.

3. All Health Care personnel may be reached via hospital operator, 966-4131
   a. Infection Preventionist: 919-123-7427
   b. Infectious Disease Adult Consult: 919-216-0626
   c. Infectious Disease Pediatric Consult: May be reached via hospital operator, 966-4131
   d. Nursing House Supervisor: 919-347-1922
   e. ED Attending: 919-966-4721
   f. Microbiology Director On-Call: pager number can be obtained by calling 919-966-4056
   g. Hospital Police: 919-966-3686
   h. Orange County Health Department: 919-968-2022
   i. State Communicable Diseases: 919-733-3419
   j. Medical Examiner: 919-966-2253, 800-672-7024

C. General Surveillance and Triage

1. In the presence of *global* highly communicable respiratory disease activity (*but no cases in North Carolina)*:
   a. Ideally, a mask should be placed on the patient at the ED or clinic intake/registration desk. Posted visual alerts will recommend “respiratory hygiene precautions.” (Appendix 2)
   b. Clinicians, intake and triage staff will be regularly updated via email, updates posted on the Hospital Intranet, memoranda, and meetings on the status of the highly communicable respiratory disease locally, nationally, and internationally.
c. Intake and triage staff will be trained on how to assess risks for highly communicable respiratory disease and use any applicable tools (thermometers, respiratory signs/symptoms checklists) to screen patients. Training will be provided by Hospital Epidemiology.

2. In the presence of highly communicable respiratory disease activity in North Carolina (but no cases within UNC Health Care facilities):
   a. Signs (in appropriate languages including English and Spanish) will be placed outside the Emergency Department (ED) and other hospital entrances requesting that persons with respiratory symptoms and epidemiologic exposure identify themselves to the triage nurse or greeter/clinic intake staff.
   b. Patients with suspect or probable highly communicable respiratory disease requiring medical evaluation should ideally be seen in the Infectious Disease Clinic (the Infectious Disease Clinic must be notified prior to the patient’s arrival) rather than another outpatient clinic or the Emergency Department (ED).
   c. The ED should only be used for patients who require acute medical evaluations or interventions, or are likely to require hospital admission.
   d. The patient will be required to wear a surgical mask upon arrival and will be given the mask by intake staff.

3. In the presence of highly communicable respiratory disease activity in North Carolina and cases at UNC Health Care facilities:
   a. Screening of persons (patients and visitors) entering the facility will escalate from passive (e.g., signs at the entrances) to active (e.g., direct questioning, respiratory symptoms, temperature monitoring). Screening will need to be coordinated with access controls, a triage station outside the facility to screen patients before they enter the facility, and/or telephone screening of patients with appointments. Separate screening entrances will be established for patients, staff, and visitors (if warranted, visitors may be excluded from entering the healthcare facility).
   b. A “Highly Communicable Respiratory Disease Evaluation Center” will be used to separate patients with suspected highly communicable respiratory disease from other patients seeking care at UNC Health Care. The Infectious Disease Clinic will be used as the “Highly Communicable Respiratory Disease Evaluation Center.” To prevent exposure of staff, patients and visitors, the outside entrance/emergency exit will be used as it allows direct access without entering from a hospital corridor.
   c. Patients scheduled for evaluations not involving a potentially highly communicable respiratory disease will be triaged to an alternate Infectious Disease clinic site (to be determined by the Incident Commander in consultation with the Director of the Infectious Disease Clinic).

4. When the number of potential highly communicable respiratory disease cases exceeds the capacity of the Infectious Disease Clinic (estimated to be >100 persons per day):
   a. The Family Practice Center will be used as the “Highly Communicable Respiratory Disease Evaluation Center.”

D. Triage and Management of Cases of Highly Communicable Respiratory Diseases

1. To the extent possible (and with help of the local health departments), care for highly communicable respiratory disease cases should remain with their primary physician or local hospital with consultation from the local and/or state health department.

2. If a patient contacts a UNC physician via phone, the physician should ascertain the level of illness and then discuss triage with the ED physician (severe disease) or the Infectious Disease Adult/Pediatric (as appropriate) Consult Attending (mild/moderate disease). The patient will be triaged to the appropriate site for care.
3. If a patient has already presented at a local UNC Health Care facility, the local UNC Health Care physician should ascertain the level of illness and then discuss triage with the ED physician (severe disease) or the Infectious Disease Adult/Pediatric (as appropriate) Consult Attending (mild/moderate disease). Patients with mild/moderate disease will be triaged to their home and provided with an appointment for after-hours evaluation in Infectious Disease Clinic.

4. If patient at a non-UNC Health Care facility is under consideration for transfer to a UNC Health Care facility, either the ED Attending or the Infectious Disease Consult Attending (adult or pediatric as appropriate) should be involved in the triage decision. If possible the patient should be managed at the outside facility or with consultation from the local health department. If not possible, the patient should be triaged to the Infectious Disease Clinic for an after-hours evaluation (mild to moderate illness) or ED (severe disease). The ED and Infectious Disease Consult attendings should always be notified prior to transfer.

<table>
<thead>
<tr>
<th>Patient Source</th>
<th>Responsible Physician For Consultation</th>
<th>Location For Patient Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital healthcare personnel *</td>
<td>Medical Director, Health Care OHS</td>
<td>ID clinic (after hours)**</td>
</tr>
<tr>
<td>University employee (including employees from Y.pestis, SARS research lab)*</td>
<td>Medical Director, University EOHS</td>
<td>ID clinic (after hours)**</td>
</tr>
<tr>
<td>UNC Health Care (local facility): Minor to moderate disease (Symptoms plus epidemiologic exposure)</td>
<td>ID consult MD (adult or pediatrics)</td>
<td>ID clinic (after hours)**</td>
</tr>
</tbody>
</table>

**Work related illnesses and injuries only**

**When the number of potential highly communicable respiratory disease cases exceeds the capacity of the Infectious Disease Clinic (estimated to be >100 persons per day): The Family Practice Center will be used as the "Highly Communicable Respiratory Disease Evaluation Center"**

E. Hospital Services for Management of Patient

1. Nursing House Supervisor will assist in evaluating nursing coverage options for Infectious Disease Clinic and may assist in coordinating couriers for lab specimens.

2. Portable x-rays will be obtained in Infectious Disease Clinic by Radiology.
3. Patient specimen management will be handled by the McLendon Laboratories per laboratory policies.

4. Infection Preventionists will be available to assure compliance with Isolation Precautions including proper use of personal protective equipment (PPE).

5. Hospital Epidemiology will be responsible for completing all CDC case reports and surveillance forms.

F. Clinical Evaluation of Patients

1. In the absence of known highly communicable respiratory disease activity worldwide:
   Perform a routine evaluation of respiratory illnesses and maintain a low index of suspicion for highly communicable respiratory diseases. In the absence of highly communicable respiratory disease transmission anywhere in the world, the overall likelihood that a given patient with fever and respiratory illness has a highly communicable respiratory disease will be exceedingly low unless there are both typical clinical findings and some accompanying epidemiologic evidence that raises the suspicion of exposure to highly communicable respiratory diseases.

2. Once highly communicable respiratory disease activity has been documented anywhere in the world: The positive predictive value of even early clinical symptoms (e.g., fever or respiratory symptoms in the absence of pneumonia), while still low, may be more acceptable if used in combination with an epidemiologic link to a setting in which highly communicable respiratory disease has been documented.

3. Symptoms of patients will vary based on the highly communicable respiratory disease under consideration. WHO and CDC will develop case definitions which will be adopted by UNC HC and posted on our website as they are developed and updated.

4. Deaths/Human Remains. Instruct staff to wear appropriate personal protective equipment (PPE). (Appendices 3-4).

G. Infection Control for Highly Communicable Respiratory Diseases

Transmission risk of highly communicable respiratory diseases in healthcare facilities depends on the extent of highly communicable respiratory disease activity in the community but also highly communicable respiratory disease activity in the facility. The decision for escalating infection control measures will be based on highly communicable respiratory diseases activity and transmission. For infection control guidance on potential agents of bioterrorism, please refer to the Infection Control Response to the Intentional Use of a Biothreat Agent Policy.

1. Isolation Precautions
   a. All patients with suspected highly communicable respiratory diseases seen in the ED or the ID Clinic should immediately be placed in a private room meeting airborne isolation requirements (i.e., ≥ 6 air changes per hour, air exhausted directly to the outside, negative pressure). A surgical mask should be placed on the patient until placement in an AIIR (Airborne Infection Isolation Room).
   
   b. Staff should perform and document a tissue test to ensure negative pressure before placing patient in the room. The tissue test must be performed and documented daily by nursing thereafter.
   
   c. All patients with suspected highly communicable respiratory disease should be placed on Special Airborne/Contact Precautions in an AIIR room (Appendix 4).
   
   d. Protocol for entering Special Airborne/Contact Precaution room
i. N95 respirator or other NIOSH-approved respirator that the wearer has been fit tested and approved to wear; secure elastic bands at middle of head and neck; fit flexible band to nose bridge; fit snug to face and below chin

ii. Gloves (extend to cover wrist of isolation gown)

iii. Gown (fully cover torso from neck to knees, arms to end of wrists, and wrap around the back; fasten in back of neck and waist)

iv. Protective eyewear

v. Goggles for aerosol generating procedures (e.g.: bronchoscopy, intubation)

e. Protocol for leaving room (except for respirator, remove PPE at doorway or in anteroom)

i. At the door just prior to exit:
   1. Remove gloves by peeling off inside-out. Dispose of gloves in trash.
   2. Remove goggles or face shield by handling the head band or ear pieces.
   3. Remove gown by unfastening the back and then remove with inside outward (touching inside of gown only). Dispose of gown in trash.
   4. Exit room.

ii. At the door just outside of room:
   1. Remove N-95 respirator and discard in trash.
   2. Perform hand hygiene with antiseptic soap and water immediately after removing all PPE.
   3. Put on clean exam gloves and decontaminate goggles (if reusable) by wiping exterior surface with alcohol or EPA-approved disinfectant.
   4. Remove gloves and perform hand hygiene with antiseptic soap or alcohol based hand rub.

iii. Signs describing the protocol for entering and leaving the room will be placed on the inside and outside of the door (Appendix 3 and Appendix 4).

f. A log will be maintained of all persons entering the room of patients with a suspect or probable highly communicable respiratory disease (Appendix 5). This log will be the responsibility of the nurses on the unit where the patient is admitted.

g. Aerosol-generating procedures (e.g., sputum induction, airway suctioning, aerosol medication therapy, bronchoscopy, and intubation): Special Airborne/Contact Precautions (including eye protection) must be used for performing all procedures that generate aerosols.

i. Limit the use of aerosol-generating procedures on highly communicable respiratory disease patients to those that are deemed medically necessary.

ii. Use clinically appropriate sedation during intubation and bronchoscopy to minimize resistance and coughing during the procedure.

iii. Use bacterial/viral filters on exhalation valves of mechanical ventilators.

iv. Eye protection should consist of goggles that fit snugly around the eyes.

v. A face shield may be worn over goggles to protect exposed areas of the face but should not be used as a primary form of eye protection for these procedures.

2. Transport
a. Whenever possible, the patients should have procedures/tests done in their own rooms, rather than transporting to other areas.

b. Minimize intra-hospital transport of patients with suspected highly communicable respiratory disease. When a patient is being transported for essential diagnostic tests or from clinic/ED to hospital room, the patient should wear a surgical mask. Always notify receiving area prior to patient transport. When transporting patients, identify a path segregated from the main traffic routes as much as possible. Ventilators used for patient transport must use bacterial/viral filters on the exhalation valves.

c. Transport personnel should wear a respirator, gloves, gown, and eye protection.

3. Laboratory

a. Laboratory specimens for patients with highly communicable disease patients will be hand carried to the laboratory (i.e., use of the tube system is prohibited).

b. Patient specimen management will be handled by the McLendon Laboratories per laboratory policies.

4. Visitors

a. All visitors (except those identified in ii. below) will be excluded from visiting persons with suspect or probable highly communicable respiratory disease.

i. If necessary, an isolation/quarantine order will be sought from the State or Local Health Department to enforce this policy.

ii. Visitors will be restricted to the guardians of minor children and no more than 2 adult significant others (e.g., spouse, adult brother/sister) may visit provided that they do not have fever or respiratory symptoms, and are able to wear appropriate PPE. An exception to the visitation rule can be made by the State Epidemiologist or the Medical Director of Hospital Epidemiology.

iii. Visitors must undergo daily health screening by a trained professional prior to visitation. Health screening forms will be placed in the patient’s medical record.

iv. Visitors must receive infection control training and comply with infection control measures.

v. To allow for PPE-free time for the visitor, the maximum time per visit is two hours.

vi. Symptomatic visitors exposed to highly communicable respiratory disease patients will be excluded from visitation and reported to the local health department for follow-up.

H. Patient Placement, Isolation and Cohorting

1. Patients with suspect or probable highly communicable respiratory diseases should be admitted only if medically indicated (i.e., require hospital care for respiratory distress).

2. Patients requiring hospitalization should be admitted to a room meeting airborne infection isolation criteria. A complete, up-to-date listing of AIIRS can be obtained from the infection control page on Intranet@Work.

a. Preference will be given to housing floor status adult patients on 6 Bed Tower. Ideally, rooms 6300-6301 will be used and a plastic barrier constructed across the corridor to create an “anteroom.” The exit door at the end of the corridor will be rendered unable to be opened from the stairwell (if possible). If 6 Bed Tower is full, then the AIIRS in 3 Anderson will be used. Floor status pediatric patients will be housed in AIIRS in the Children’s Hospital.
b. Adult patients requiring ICU care will be housed in the MICU. Pediatric patients requiring ICU care will be housed in the PICU.

c. The number of staff allowed to enter the room should be minimized to only essential personnel. Students and volunteers should be prohibited from participating in the care of patients with suspect or probable highly communicable respiratory diseases.

d. Ideally, a monitor will be placed outside the patient’s door to assist with proper use of PPE and maintain the entry log (Appendix 5).

3. A lack of AIIRs and/or a need to concentrate infection control efforts and resources may lead to a strategy that includes the following:

a. Cohorting patients in individual rooms on the same floor, rather than placing them in AIIRs throughout the hospital; or

b. Converting private AIIRs to double rooms to accommodate more patients requiring airborne isolation. This strategy would only be implemented following approval from the Incident Commander, Federal and State authorities, and to the extent that staff could manage the number of patients on the unit.

c. A lack of hospital beds may lead to a strategy of utilizing non-licensed inpatient beds for patient management (e.g., PACU, observation beds) following approval from the Incident Commander, Federal and State authorities, and to the extent that staff can manage the number of hospitalized patients.

d. In the context of significant highly communicable respiratory disease transmission, high patient volume or frequent unprotected exposures, patients might be divided into the following cohorts for room placement: patients who are exposed and asymptomatic; patients who are exposed and symptomatic but do not meet the highly communicable respiratory disease case definition; patients who meet the highly communicable respiratory disease case definition; non-exposed patients.

I. Engineering and Environmental Controls

1. Plant Engineering will be responsible for ensuring that the AIIRs are functioning properly. Nursing staff must perform a tissue test and document results prior to placing a patient in an AIIR and at least on a daily basis thereafter.

2. If all AIIRs are utilized, investigate whether non-AIIR rooms can be modified to achieve appropriate airflow direction and/or air exchanges for care of highly communicable respiratory disease patients.

3. If the patient must temporarily leave the Airborne Precautions room, the door must be kept closed for a minimum of 30 minutes prior to anyone entering without wearing a respirator. Likewise, the door should remain closed for a minimum of 30 minutes with the isolation sign displayed when a patient is discharged from an Airborne Precautions room. The 30 minute time period will allow the room ventilation system to remove any droplets/droplet nuclei.

4. Environmental disinfection policies should be followed:

a. Following discharge, hospital rooms housing highly communicable respiratory disease patients should receive terminal cleaning and disinfection using UNC Health Care System’s Environmental Service policy. Environmental service personnel must wear gloves, gowns, respirator and eye protection (i.e., goggles or face shield) until cleaning is complete.

b. In clinics and procedure areas (e.g., Radiology), all equipment (e.g., stretchers) having direct or close contact with patients with suspected highly communicable respiratory
diseases must be disinfected immediately after use with an EPA-approved disinfectant-detergent (e.g., SaniCloth, MetriGuard or 1:10 dilution of bleach and water).

c. These environmental guidelines may require alteration depending on the pathogen of concern and will be revised at the discretion of the Hospital Epidemiology.

J. Exposure Reporting and Evaluation

1. Occupational exposure consists of:
   a. providing care or being in the room with a highly communicable respiratory disease patient without wearing proper PPE or
   b. entering a vacated highly communicable respiratory disease patient's room without wearing a respirator when the patient has not been out of the room for a minimum of 30 minutes
   c. disease-dependent exposure definitions will be maintained by Hospital Epidemiology to reflect the most up to date information on disease transmission. The definitions will be based on CDC definitions.

2. All occupational exposures must be reported to the appropriate occupational health service provider. The occupational health service providers will notify the local health department of all employee exposures.

3. In the setting of human to human transmission in the local geographic area, any employee with respiratory symptoms should notify his/her occupational health provider via phone to assess his/her need for evaluation.

4. Management of asymptomatic healthcare personnel exposed to highly communicable respiratory disease.
   a. Persons who have been exposed to a highly communicable respiratory disease should notify their occupational health service provider. They should also be vigilant for fever or respiratory symptoms following exposure for a period of time that varies depending on the possible respiratory pathogen (e.g., influenza = 1-5 days; SARS = 1-10 days). Those who develop fever or respiratory symptoms should not go to work. Decisions about limiting interactions of persons who develop fever or respiratory symptoms outside the home and restrictions on attending school, out-of-home child-care, church or other public areas will be determined by state or local public health departments.
   b. Exposed, unprotected healthcare personnel, who are asymptomatic, depending upon the disease, may be furloughed at the discretion of the Medical Director of the applicable occupational health service during the incubation period of the disease.
   c. Exposed, unprotected healthcare personnel who are asymptomatic and who are allowed to work must be evaluated prior to work each day by the appropriate occupational health service.
      i. Occupational Health Service: UNC Health Care employees
      ii. University Employee Occupational Health Clinic: UNC employees
   d. Such examinations will be performed for a period of time that varies depending on the possible respiratory pathogen (e.g., influenza = 5 days; SARS = 10 days) following the last unprotected exposure. In addition, exposed asymptomatic healthcare personnel should take their own temperature 2x per day and report any elevated temperatures (i.e., >38.0°C) to their occupational health provider.
   e. Afebrile healthcare personnel in some or all units with respiratory symptoms may be required to undergo laboratory testing for respiratory viruses (e.g.: influenza A, influenza
B, RSV, rhinovirus) depending on the nature of the highly communicable disease pathogen and time of year. Depending on the highly communicable disease pathogen, healthcare personnel who test negative may be allowed to continue to work, while wearing a mask and practicing good hand hygiene.

5. Management of symptomatic healthcare personnel exposed to a highly communicable respiratory disease.
   a. Exposed healthcare personnel who develop fever and/or respiratory tract symptoms should not report to work. Rather they should immediately report by phone the development of fever and/or respiratory tract symptoms to the appropriate healthcare provider (e.g., Medical Director of Occupational Health, Nurse Practitioner of Occupational Health). The healthcare provider will evaluate symptomatic persons as medically necessary in the Infectious Disease Clinic. Alternatively, symptomatic healthcare personnel could be medically evaluated in alternative locations as directed by the Incident Commander.
   b. If symptoms do not progress to meet the suspect highly communicable respiratory disease definition within the time period to be determined by the specific infectious agent, the person may be allowed to return to work (depending on the pathogen) at the discretion of the Medical Director of Occupational Health. Decisions about when the person can return to school, out-of-home child-care, church or other public areas will be determined by state or local public health departments.

6. Management of asymptomatic healthcare personnel with a high-risk exposure to a highly communicable respiratory disease
   To manage an unprotected high-risk exposure of a worker (i.e., worker in the same room as probable highly communicable respiratory disease patient during a high-risk aerosol-generating procedure and infection control precautions are either absent or breached) with no symptoms of highly communicable respiratory disease, the worker:
   a. Should be excluded from duty for a time period that depends on the specific respiratory pathogen (e.g., influenza = 5 days; SARS = 10 days) following the date of the last high-risk exposure
   b. Need not limit activities outside the health care setting but should be vigilant for development of fever and/or respiratory symptoms.
   c. Will document active surveillance for the development of fever or respiratory symptoms, and the frequency of recording health status measures will be determined by occupational health service providers.

7. University employees who are exposed to a highly communicable respiratory disease (e.g., SARS, avian influenza) in a University research lab should contact the University Biological Safety Officer (office phone: 919-962-5722; cell phone: 919-883-7021) for information on Standard Operating Protocols for post exposure follow-up to select agents.

K. Pre- and Post-Exposure Prophylaxis
   1. Pre-exposure antiviral prophylaxis may be made available to selected healthcare personnel by the appropriate occupational health service. Generally, pre-exposure prophylaxis for pandemic influenza would be taken for the duration of influenza activity. Guidelines published by CDC, the NC State Health Department and professional organizations will be used by Hospital Epidemiology and the appropriate occupational health service in determining which groups are to be offered prophylaxis.
2. Post-exposure antiviral prophylaxis may be made available to selected healthcare personnel by the appropriate occupational health services. Generally, post-exposure prophylaxis for pandemic influenza would be taken for 7-10 days. Guidelines published by CDC, the NC State Health Department and professional organizations will be used by Hospital Epidemiology and the appropriate occupational health service in determining which groups are to be offered prophylaxis.

3. Vaccine may be made available for healthcare personnel as recommended by the Advisory Committee on Immunization Practices, state and federal guidelines. Prioritization may occur based on state and local regulations. All vaccine will be provided to employees with informed consent and at the healthcare system’s expense.

4. In the event we are unable to obtain antivirals from usual vendors, a request will be made to local authorities for antivirals from state or federal reserves. Prioritization may occur based on local needs, state and federal regulations.

L. Staffing Needs and Personnel Policies

1. Following appropriate infection control and personal protection equipment training and fit-testing, all healthcare personnel are expected to conduct their normal level of job activities in order to provide care for patients with known or suspected highly communicable respiratory diseases.

2. During a highly communicable respiratory disease outbreak of any size, staffing shortages may occur. Staffing shortages are likely to escalate as an outbreak progresses. As the number of patients increase and/or staff become ill or are quarantined, a determination will need to be made as to how staffing needs will be met. Use of alternative staffing resources (e.g., retired healthcare personnel, volunteers, contract personnel, students) may be needed but will require training and support (including malpractice insurance, occupational health services) during the outbreak response.

3. Quarantine authority belongs to the health department. If quarantine is used as an exposure management tool, some healthcare personnel may be placed on ‘home/work restrictions’ to ensure sufficient staffing levels. Healthcare personnel on home/work restrictions should travel only between home and the healthcare facility for the duration of the restriction. Should quarantine be necessary, the employee will be instructed by the health department regarding details on the restriction.

4. Health care personnel have access to mental health professionals to help them cope with the emotional strain of managing a highly communicable respiratory disease outbreak (e.g., Employee Assistance Program, Critical Incident Stress Management, Psychiatry).

M. Hospital Access Controls

1. Hospital Police will manage all restrictions on movement of visitors, patients, and employees. The decision to implement access controls will be made by the Incident Commander in conjunction with the Lockdown Annex of the Emergency Operations Plan.

2. The Incident Commander or Operations Section Chief will consider limiting hospital admissions, transfers, and discharges (in accordance with local/state recommendations and regulations) in the event that nosocomial highly communicable respiratory disease transmission occurs.

N. Supplies and Equipment

1. Assess anticipated needs for consumable (e.g., hand hygiene supplies, N-95 respirators, goggles and face shields, gowns, gloves, surgical masks) and durable resources (e.g.,
ventilators, portable X-ray units, portable HEPA filtration units) that will be necessary to provide care for various numbers of highly communicable respiratory disease patients.

2. N-95 respirators may be reused following guidelines by Environmental Health and Safety and Infection Control. The appropriateness and method for reuse following a decontamination procedure would be determined by the nature of the highly communicable respiratory disease and per strict recommendations from Infection Control.

3. If N-95 respirators are not available, alternatively use N-95 respirators from another vendor, followed by N-100 respirators, N-99 respirators, and surgical masks. Any change in the type of respirator used would require additional fit testing of employees. A PAPR should be used for high-risk procedures. The industrial hygienists in Environmental Health and Safety will be responsible for overseeing appropriate PAPR use.

4. Central Distribution will maintain at least a one to three-month surplus of consumable supplies for personal protective equipment.

5. In the event of a shortage of resources during a highly communicable respiratory disease outbreak, an ad hoc committee will be established to determine the allocation of scarce resources (e.g., ICU beds, ventilators) in accordance with the Utility and Resource Management Annex of the Emergency Operations Plan. Members will be drawn from the UNCHC ethics committee as well as from medical staff with expertise on the specific situation.

O. Communication and Reporting

1. In accordance with the Crisis Communication Annex of the Emergency Operations Plan, and on an as needed basis the health care staff will have a conference call with the state and local health department and University personnel to report and receive information on highly communicable respiratory disease activity in the healthcare facility and the community. This call may also discuss discharge planning of highly communicable respiratory disease patients with health department officials to ensure appropriate follow-up and case management in the community.

2. Public Affairs will manage all press releases and communications with the general public, news media, and employees. Health Link or other alert messaging may be used to disseminate these messages to patients and employees.

IV. References


V. Reviewed/Approved by

Hospital Infection Control Committee

VI. Original Policy Date and Revisions

Appendix 1: Definitions and Acronyms

Definitions:

Avian flu is caused by an avian specific influenza virus (e.g., H5N1), which occurs naturally among birds.

Cohort is a defined population that has a common exposure or disease.

Communicable disease is an illness that is due to a specific infectious agent that arises through transmission of that agent from an infected person either directly or indirectly.

Epidemiologic Exposure is the proximity or contact with a source of a disease agent (e.g., exposure to sick birds for avian flu).

Incubation Period is the time period between exposure to an infectious agent and the appearance of the first sign or symptom of disease.

Isolation is the separation of infected persons or animals from others for the duration of the period of communicability in order to prevent or limit transmission of the infectious agent.

Isolation Precautions are infection control measures used for decreasing the risk of transmission of microorganisms in healthcare facilities.

Nosocomial infection is an infection that is associated with the healthcare setting.

Pandemic flu is flu that causes a global outbreak, or pandemic, of serious illness that spreads easily from person to person.

Quarantine is the restriction of activities for well persons or animals that have been exposed to a communicable disease for the duration of the incubation period in order to prevent transmission of the infectious agent.

Seasonal flu is a contagious respiratory illness caused by influenza viruses A and B.

Surveillance is the systematic, ongoing collection, collation, and analysis of data and the timely dissemination of information to those that need to know so that action can be taken.

Acronyms:

AIIR—Airborne Infection Isolation Room

CICU—Cardiac Intensive Care Unit

CDC—Centers for Disease Control and Prevention

ED—Emergency Department

HEICS—Hospital Emergency Incident Command System

ID—Infectious Disease

MD—Doctor of Medicine

MERS-CoV—Middle Eastern Respiratory Syndrome-Coronavirus

MICU—Medicine Intensive Care Unit

N95, N99, N100—Respirators that are N-series filters with 95%, 99%, or 100% filtration efficiency, respectively

PACU—Post Anesthesia Care Unit

PAPR—Powered Air Purifying Respirator

PICU—Pediatric Intensive Care Unit

PPE—Personal Protective Equipment

SARS-CoV—Severe Acute Respiratory Syndrome-Coronavirus

WHO—World Health Organization
Appendix 2: Respiratory Hygiene Poster

If this is you...
¡Si este es usted...

this is what to do!
esto es lo que debe hacer!
Appendix 3: PPE Removal Poster

**SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.

1. **GLOVES**
   - Outside of gloves is contaminated!
   - Grasp outside of glove with opposite gloved hand; peel off.
   - Hold removed glove in gloved hand.
   - Slide fingers of ungloved hand under remaining glove at wrist.
   - Peel glove off over first glove.
   - Discard gloves in waste container.

2. **GOGGLES OR FACE SHIELD**
   - Outside of goggles or face shield is contaminated!
   - To remove, handle by head band or ear pieces.
   - Place in designated receptacle for reprocessing or in waste container.

3. **GOWN**
   - Gown front and sleeves are contaminated!
   - Unfasten ties.
   - Pull away from neck and shoulders, touching inside of gown only.
   - Turn gown inside out.
   - Fold or roll into a bundle and discard.

4. **MASK OR RESPIRATOR**
   - Front of mask/respirator is contaminated — DO NOT TOUCH!
   - Grasp bottom, then top ties or elastics and remove.
   - Discard in waste container.

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**SEQUENCIA PARA QUITARSE EL EQUIPO DE PROTECCIÓN PERSONAL (PPE)**

Con la excepción del respirador, quite el PPE en la entrada de la puerta o en el antecámara. Quite el respirador después de salir de la habitación del paciente y cerrar la puerta.

1. **GUANTES**
   - ¡El exterior de los guantes está contaminado!
   - Agarre la parte exterior del guante con la mano opuesta de la que habría te puesto el guante y quitaselo.
   - Sostenga el guante que se quitó con la mano engrasada.
   - Deslice los dedos de la mano sin guante por debajo del otro guante que no se ha quitado todavía a la altura de la muñeca.
   - Quite el guante de manera que acabe cubriendo el primer guante.
   - Arroje los guantes en el recipiente de desechos.

2. **GAFAS PROTECTORAS O CARETA**
   - ¡El exterior de las gafas protectoras o de la careta está contaminado!
   - Para quitarlas, tomelas por la parte de la banda de la cabeza o de las piezas de los ojos.
   - Colóquelas en el recipiente designado para reprocessor materiales o de materiales de desecho.

3. **BATA**
   - ¡La parte delantera de la bata y las mangas están contaminadas!
   - Desate los cordones.
   - Tocando solamente el interior de la bata, pásela por arriba del cuello y de los hombros.
   - Vuelve la bata al revés.
   - Dúchala o enrollerla y deséchala.

4. **MÁSCARA O RESPIRADOR**
   - La parte delantera de la máscara o respirador está contaminada — ¡NO LA TOQUE!
   - Primero agarre la parte de abajo, luego los cordones o banda elástica de arriba y por último quite la máscara o respirador.
   - Arrojalo en el receptor de desechos.

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**PERFORM HAND HYGIENE IMMEDIATELY AFTER REMOVING ALL PPE**

**EFECTÚE LA HIGIENE DE LAS MANOS INMEDIATAMENTE DESPUÉS DE QUITARSE CUALQUIER EQUIPO DE PROTECCIÓN PERSONAL**
Appendix 4: Special Airborne Isolation Sign

STOP
SPECIAL AIRBORNE/CONTACT PRECAUTIONS

Visitors, including family, must not enter—report to Nursing Station.

HEALTHCARE PERSONNEL MUST WEAR:

TO ENTER:
- N-95 Respirator (prior fit testing required)
- Gloves
- Gown
- Protective eyewear (e.g. face shield or goggles)

During Aerosol Generating Procedures (e.g. intubation, bronchoscopy, collecting sputum sample):
- N-95 Respirator (prior fit testing required)
- Gloves
- Gown
- Goggles

Perform Hand Hygiene before entering the room and following removal of personal protective equipment and leaving the Patient’s room.

For Questions Call Hospital Epidemiology at 919-966-1638 or Page 123-7427.

PRECAUCIONES ESPECIALES PARA LA TRANSMISIÓN POR VÍA AÉREA
O POR CONTACTO
Los visitantes, incluyendo la familia, no deben entrar—presentense a la estación de enfermeras.

EL PERSONAL DE CUIDADO DE LA SALUD DEBE USAR:

PARA ENTRAR:
- mascarilla respiratoria N-95 (para poder usarla es obligatorio que pase antes la prueba para saber la medida correcta)
- guantes
- bata
- protección para los ojos (por ej. careta o gafas protectoras)

Durante procedimientos que generan aerosoles (por ej. intubación, broncoscopia, recogiendo muestras de esputo):
- mascarilla respiratoria N-95 (para poder usarla es obligatorio que pase antes la prueba para saber la medida correcta)
- guantes
- bata
- gafas protectoras

Lleve a cabo la higiene de las manos antes de entrar a la habitación y después de quitarse el equipo de protección personal y salir de la habitación del paciente.

Si tiene preguntas llame a Hospital Epidemiology al 919-966-1638 o al buscapersonas 123-7427.

Translated by UNC Health Care Interpreter Services, 09/08/24
### Appendix 5: Entry Log for Individuals Entering the Room of a Patient with Suspected Highly Communicable Disease

**HOSPITAL EPIDEMIOLOGY**

<table>
<thead>
<tr>
<th>Healthcare Personnel</th>
<th>Date</th>
<th>Time In/Out</th>
<th>Last Name, First Name (Print Name)</th>
<th>EID/PID</th>
<th>Pager (or phone)</th>
<th>OHS Provider</th>
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<th>Non-healthcare personnel</th>
<th>Date</th>
<th>Time In/Time Out</th>
<th>Last Name, First Name (Print Name)</th>
<th>Date of Birth</th>
<th>Home Address</th>
<th>Phone Number</th>
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This entry log should be placed outside the hospital room of a patient with suspect or probable highly communicable respiratory disease. All individuals should complete the log at the time of first entry on each day of service or visit.