AIRBORNE PRECAUTIONS

(Airborne Precautions are in addition to Standard Precautions. See Standard Precautions for questions)

ATTENTION!

ATTENTION! VISITORS must report to the nurse station before entering.

Patient Placement

Private room, if possible. Ensure that patients are physically separated (i.e., >3 feet apart) from each other. Draw the privacy curtain between beds to minimize opportunities for direct contact.

Personal Protective Equipment (PPE)

Don gown upon entry into the room or cubicle. Remove gown and observe hand hygiene before leaving the patient-care environment.

Hand Hygiene (according to Standard Precautions)

Avoid unnecessary touching of surfaces in close proximity to the patient.

When hands are visibly dirty, contaminated with proteinaceous material, or visibly soiled with blood or body fluids, wash hands with soap and water.

If hands are not visibly soiled, or after removing visible material with soap and water, decontaminate hands with alcohol-based hand rub. Alternatively, hands may be washed with an antimicrobial soap and water.

Perform Hand Hygiene:

-Before having direct contact with patients
-After contact with blood, body fluids, or excretions, mucous membranes, non-intact skin, or wound dressings.
-After contact with a patientôs intact skin (e.g. when taking a pulse or blood pressure or lifting a patient)
-If hands will be moving from a contaminated body site to a clean body site during patient care
-After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient
-After removing gloves

Patient Transport

Limit transport and movement of patients outside of the room to medically-necessary purposes.

When transport or movement in any healthcare setting is necessary, ensure that infected or colonized areas of the patientôs body are contained and covered.

Remove and dispose of contaminated PPE and perform hand hygiene before and after transporting patients on Contact Precautions.

Exposure Management

Immunize or provide the appropriate immune globulin to susceptible persons as soon as possible following unprotected contact (i.e., exposed) to a patient with specific conditions (see full description).

AIRBORNE PRECAUTIONS

From: 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

V.D. Airborne Precautions

V.D.1. Use Airborne Precautions as recommended in Appendix A for patients known or suspected to be infected with infectious agents transmitted person-to-person by the airborne route (e.g., M tuberculosis, measles, chickenpox, disseminated herpes zoster.

V.D.2. Patient placement

V.D.2.a. In *acute care hospitals and long-term care settings*, place patients who require Airborne Precautions in an AIIR that has been constructed in accordance with current guidelines.

V.D.2.a.i. Provide at least six (existing facility) or 12 (new construction/renovation) air changes per hour.

V.D.2.a.ii. Direct exhaust of air to the outside. If it is not possible to exhaust air from an AIIR directly to the outside, the air may be returned to the air-handling system or adjacent spaces if all air is directed through HEPA filters.

V.D.2.a.iii .Whenever an AIIR is in use for a patient on Airborne Precautions, monitor air pressure daily with visual indicators (e.g., smoke tubes, flutter strips), regardless of the presence of differential pressure sensing devices (e.g., manometers).

V.D.2.a.iv. Keep the AIIR door closed when not required for entry and exit.

V.D.2.b. When an AIIR is not available, transfer the patient to a facility that has an available AIIR.

V.D.2.c. In the event of an outbreak or exposure involving large numbers of patients who require Airborne Precautions:

-Consult infection control professionals before patient placement to determine the safety of alternative room that do not meet engineering requirements for an AIIR.

-Place together (cohort) patients who are presumed to have the same infection(based on clinical presentation and diagnosis when known) in areas of the facility that are away from other patients, especially patients who are at increased risk for infection (e.g., immunocompromised patients).

-Use temporary portable solutions (e.g., exhaust fan) to create a negative pressure environment in the converted area of the facility. Discharge air directly to the outside, away from people and air intakes, or direct all the air through HEPA filters before it is introduced to other air spaces.

V.D.2.d. In *ambulatory settings*:

V.D.2.d.i. Develop systems (e.g., triage, signage) to identify patients with known or suspected infections that require Airborne Precautions upon entry into ambulatory settings.

V.D.2.d.ii. Place the patient in an AIIR as soon as possible. If an AIIR is not available, place a surgical mask on the patient and place him/her in an examination room. Once the patient leaves, the room should remain vacant for the appropriate time, generally one hour, to allow for a full exchange of air.

V.D.2.d.iii. Instruct patients with a known or suspected airborne infection to wear a surgical mask and observe Respiratory Hygiene/Cough Etiquette. Once in an AIIR, the mask may be removed; the mask should remain on if the patient is not in an AIIR.

V.D.3. Personnel restrictions

Restrict susceptible healthcare personnel from entering the rooms of patients known or suspected to have measles (rubeola), varicella (chickenpox), disseminated zoster, or smallpox if other immune healthcare personnel are available.

V.D.4. Use of PPE (Personal Protective Equipment)

V.D.4.a. Wear a fit-tested NIOSH-approved N95 or higher level respirator for respiratory protection when entering the room or home of a patient when the following diseases are suspected or confirmed:

-Infectious pulmonary or laryngeal tuberculosis or when infectious tuberculosis skin lesions are present and procedures that would aerosolize viable organisms (e.g., irrigation, incision and drainage, whirlpool treatments) are performed.

-Smallpox (vaccinated and unvaccinated). Respiratory protection is recommended for all healthcare personnel, including those with a documented ñtakeò after smallpox vaccination due to the risk of a genetically engineered virus against which the vaccine may not provide protection, or of exposure to a very large viral load (e.g., from high-risk aerosol-generating procedures, immunocompromised patients, hemorrhagic or flat smallpox.

V.D.4.b. No recommendation is made regarding the use of PPE by healthcare personnel who are presumed to be immune to measles (rubeola) or varicella-zoster based on history of disease, vaccine, or serologic testing when caring for an individual with known or suspected measles, chickenpox or disseminated zoster, due to difficulties in establishing definite
immunity. Unresolved issue

V.D.4.c. No recommendation is made regarding the type of personal protective equipment (i.e., surgical mask or respiratory protection with a N95 or higher respirator) to be worn by susceptible healthcare personnel who must have contact with patients with known or suspected measles, chickenpox or disseminated herpes zoster. *Unresolved issue*

V.D.5. Patient transport

V.D.5.a. In *acute care hospitals and long-term care and other residential settings*, limit transport and movement of patients outside of the room to medically-necessary purposes.

V.D.5.b. If transport or movement outside an AIIR is necessary, instruct patients to wear a surgical mask, if possible, and observe Respiratory Hygiene/Cough Etiquette.

V.D.5.c. For patients with skin lesions associated with varicella or smallpox or draining skin lesions caused by *M. tuberculosis*, cover the affected areas to prevent aerosolization or contact with the infectious agent in skin lesions.

V.D.5.d. Healthcare personnel transporting patients who are on Airborne Precautions do not need to wear a mask or respirator during transport if the patient is wearing a mask and infectious skin lesions are covered.

V.D.6. Exposure management

Immunize or provide the appropriate immune globulin to susceptible persons as soon as possible following unprotected contact (i.e., exposed) to a patient with measles, varicella or smallpox:

-Administer measles vaccine to exposed susceptible persons within 72 hours after the exposure or administer immune globulin within six days of the exposure event for high-risk persons in whom vaccine is contraindicated.

-Administer varicella vaccine to exposed susceptible persons within 120 hours after the exposure or administer varicella immune globulin (VZIG or alternative product), when available, within 96 hours for high-risk persons in whom vaccine is contraindicated (e.g., immunocompromised patients, pregnant women, newborns whose mother's varicella onset was <5 days before or within 48 hours after delivery).

-Administer smallpox vaccine to exposed susceptible persons within 4 days after exposure.

V.D.7. Discontinue Airborne Precautions according to pathogen-specific recommendations in Appendix A.

V.D.8. Consult CDCs ñGuidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005ò and the ñGuideline for Environmental Infection Control in Health-Care Facilitiesò for additional guidance on environment strategies for preventing transmission of tuberculosis in healthcare settings. The environmental recommendations in these guidelines may be applied to patients with other infections that require Airborne Precautions.