

AEROSOL TRANSMISSIBLE DISEASE (ATD) and TUBERCULOSIS (TB) ANNUAL SAFETY TRAINING

Infection Prevention and Control (747) 210-3624

Training Objectives

- Introduction to Aerosol Transmissible Diseases (ATD)
- Examples of ATD / Signs / Symptoms
- Modes of Transmission
- Tuberculosis
- Risk Identification
- Engineering and Work Practice Controls
- Personal Protective Equipment (PPE)
- Donning and Doffing
- Decontamination and Disposal of PPE
- Respirator Protection
- High Hazard Procedures
- Exposure Procedure and Medical Follow-up
- Vaccines Available to Staff



Training Requirement



This is an annual mandatory training that is applicable to everyone working at OVMC. At the completion of this module, you must complete the post test.

The law requires that you have an opportunity for interactive questions and answers during this training. If you reach a point in this training when you do have a question, **STOP** and contact your department Safety Coordinator.

Introduction to the Aerosol Transmissible Disease (ATD) Plan

- The ATD Exposure Control Plan replaced the Tuberculosis
 Exposure Control Plan broadening the hazard analysis from just
 TB to all aerosolized pathogens.
- Aerosol Transmissible Diseases (ATDs) are diseases that are transmitted through dissemination of airborne droplet nuclei, such as small particle aerosols or dust particles containing the disease agent.
- Airborne Precautions or Droplet Precautions are required for Aerosol Transmissible Diseases. There are a wide variety of diseases that are considered ATDs including, Influenza, Tuberculosis (TB), Pertussis (Whooping Cough), Meningitis, and Pneumonia.
- California Code of Regulations, Title 8, Section 5199, Aerosol Transmissible Diseases can be found at the following website: http://www.dir.ca.gov/title8/5199.html
- OVMC ATD Plan can be obtained by going to the Intranet under Infection Prevention and Control Policies.



If you have any suggestions or input as to the effectiveness of the OVMC ATD Plan, please email:

ovminfectionprevention@dhs.lacounty.gov

Examples of ATD's that are transmitted by aerosols which require either Droplet or Airborne Isolation

DROPLET

- Diphtheria
- Influenza
- Meningitis
- Meningococcal disease
- Mumps
- Mycoplasma pneumonia
- Pertussis
- Plague
- Pneumonia caused by certain
- organisms
- Rubella
- SARS
- Scarlet Fever
- Streptococcal disease
- Viral hemorrhagic fevers

AIRBORNE

- Anthrax
- Avian influenza
- Chickenpox (Varicella)
- Measles
- Monkey Pox
- Smallpox
- TB
- Novel or unknown pathogens
 - SARS-COVID 19

Signs and Symptoms of ATDs



Potential TB can have the following symptoms:

- Cough lasting more than 3 weeks
- Unexplained weight loss
- Night sweats
- Fever
- Chronic fatigue / malaise
- Coughing up blood

Other ATD's such as COVID-19 can have the following symptoms:

- Fever
- Chills
- Cough
- Shortness of breath/difficulty breathing
- Fatigue
- Runny or stuffy nose
- Muscle or body aches
- Headache

Modes of Transmission

Aerosol Transmissible Diseases can be transmitted in a variety of ways. Since the disease is transmitted through dissemination of airborne droplet nuclei, small particle aerosols, or on dust particles containing the disease, it makes the presence of the disease more likely.

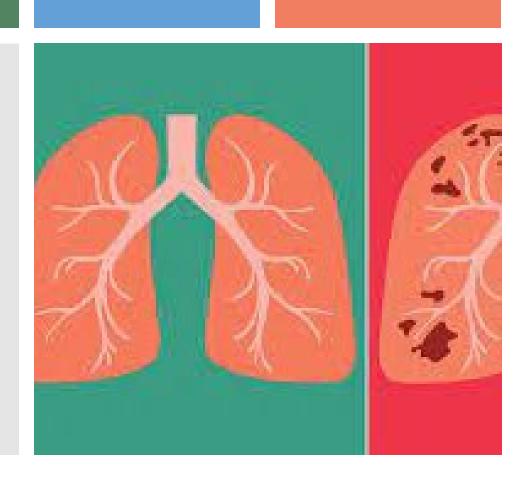
The following are common modes of transmission:

- An uncovered cough or sneeze that produces droplets (highest risk 3 6 feet).
- Close contact with an ill person (Example: drinking from the same beverage)
- Aerosols that are present in the air and inhaled by someone else
- Touching surfaces /objects that contain the disease



Tuberculosis

- Is a contagious disease caused by the organism known as Mycobacterium tuberculosis
- Serious chronic illness; can be fatal if untreated
- While it's most often a pulmonary or lung disease, it can also affect other parts of the body including the kidneys, brain and bone
- Symptoms: fever, chills, night sweats, fatigue, cough > 2weeks, cloudy/bloody sputum, decrease appetite, weight loss, SOB, Chest pain
- When someone with active TB coughs or sneezes, microscopic particles, called droplet nuclei, are expelled into the air
- Exposure occurs when another person inhales that air
- Health care workers who provide services to high-risk groups are themselves considered to be at high risk for contracting TB
- Transmission generally requires repeated, prolonged exposure to someone with active TB.
 Active is the operative word here, because a person with a latent TB infection or LTBI is not infectious
- Respirator such as CAPR PAPR or N95 should be worn when providing care to patients
- Approval by Los Angeles Department of TB Control is required prior to discharging a TB patient



Risk of TB Infection and Disease

Highest Risk for TB Infection

- Medically under-served population
- Low income
- Foreign born person from high TB prevalence areas
- IV drug users
- Persons in correctional facilities
- Close contacts to suspect/known cases
- Healthcare workers serving high risk patients

Highest Risk for Progression to TB Disease

- HIV infected, or otherwise immunocompromised
- Recently infected with TB
- Certain chronic medical conditions
- IV drug abusers
- History of inadequately treated TB

Tuberculosis Latent vs. Active

Latent TB

- Infected with *M. tuberculosis*, but do not have TB disease *TB bacteria found in the body but inactive*
- People with latent infections LTBI often don't realize it because they have no symptoms and feel well
- Skin test or blood test result indicating TB infection
- Normal chest x-ray and a negative sputum
- Need treatment for latent TB infection to prevent TB disease
- Completing the entire regimen is essential to prevent future development of the disease
- Stopping treatment regimen prematurely can make the infection resistant to curative drugs
- Persons with latent TB infection are not infectious and cannot spread TB infection to others

Active TB

- A person's risk of developing active tuberculosis is greatest in the two years immediately following infection, although it persists throughout his or her lifetime
- Symptoms of the disease include a cough of more than three weeks duration, bloody sputum, fever, fatigue, night sweats, loss of appetite and weight loss
- Skin test or blood test result indicating TB, abnormal chest x-ray, along with positive sputum cultures
- Need treatment to treat TB disease
- It's essential to complete the regimen to prevent the complication of drug resistance
- People with drug-resistant TB can remain infectious for an extended period
- Persons with TB disease are considered infectious and may spread TB bacteria to others

TB Surveillance Program

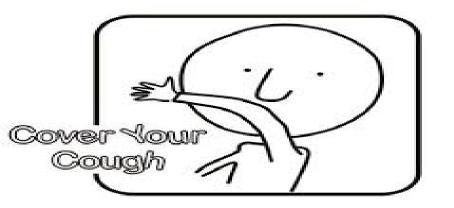
OVMC Employee Health Services (EHS) screens all employees upon hire and annually thereafter

If an occupational TB Exposure occurs EHS will send out a notification to the exposed employee for follow-up

Employees must report all known exposure incidents to their supervisor or manager

Managers or supervisors made aware of TB exposures must notify EHS and Infection Prevention and Control

Engineering and Work Practice Controls



Source Control Measures:

- TB Screening/early identification
- Masking and prompt isolation of suspected ATD patients
- Hand Hygiene Stations (tissues, alcohol sanitizer, masks)
- Respiratory Hygiene / Cough Etiquette Practices
- Signs/posters
- Isolation signs
- · Dedicated waiting rooms
- Communication between staff prior to transfer of patient
- Hand Hygiene
- Personal Protective Equipment (PPE)
- Decontamination
- Respirators

Engineering / Work Practice Controls:

Engineering controls for airborne infectious diseases (AirIDs) include:

- airborne infection isolation rooms or areas (AIIRs),
- local exhaust ventilation
- highefficiency particulate air (HEPA) filtration

How to recognize exposure activities

Exposure to an ATD may occur when:

- 1. In the same room as (or within 6 feet of) a suspected or confirmed ATD patient.
- 2. Performing direct patient care tasks on a suspected or confirmed ATD patient.
- 3. Performing (or present during) a task that may send ATD pathogens into the air (aerosolize).
- 4. Entering the room of a patient placed in Airborne Isolation precautions within an hour after the patient has left the room.

In all these situations, you must use appropriate exposure prevention measures such as personal protective equipment (PPE) to prevent exposure.



Personal Protective Equipment (PPE)

Gloves

- Wear when contact with blood, bodily fluids or infectious agents
- Hand hygiene before donning and after removing
- Never wear same pair of gloves between patients or rooms
- Do not touch your face when wearing gloves
- Do not wear in the common areas i.e. hallway, transporting, elevator, etc

Gown

- Wear when entering a contact/enhanced precaution isolation room
- Wear if anticipating contact with blood or bodily fluids
- Fully cover torso from neck to knees
- Secure the gown by the ties at the neck and waist
- Remove inside the room prior to exiting or anteroom
- Do not use gowns in common areas, i.e. hallways, elevators, cafeteria, etc.

Mask

- For ATD requiring droplet isolation
- Wear a mask that fits snuggly from nose to chin
- Mask must fully cover mouth, nose and chin
- Perform hand hygiene prior to removing mask, touching only the straps or ties
- Don't wear mask below the nose, around neck or on forehead
- Don't touch or adjust mask without performing Hand Hygiene

Face Shield/Goggles

- Place over the face and eyes and adjust to fit
- Remove from the back by lifting the head band without touching the front
- Perform hand hygiene after removal
- Dedicated to one person
- If reusable, clean immediately after completion of task
- Check the integrity prior to doffing

Respiratory/N95

- Tight-fitting mask that when properly fitted to the face protects the wearer from very small particles that float in the air (e.g. Tuberculosis, measles or chicken pox).
- Wear for airborne ATD's patients
- Must be fit tested
- Ensure proper fit and cover nose and mouth
- Don't wear if wet or spoiled (get new N95 respirator)
- Don't touch the front of respirator
- Perform Hand Hygiene after removal

Personal Protective Equipment (PPE)

- PPE should be disposed of when damaged or soiled.
- Employees must inspect all PPE prior to use for evidence of damage, missing or defective parts, correctness of size/fit, and any other condition which could affect its use. Any PPE with worn or defective parts must be repaired or replaced prior to use.
- PPE which isn't discarded after single use should be cleaned and/or disinfected, depending on the condition, use and type of the PPE.
- Clean PPE must be stored in a location and in a way which will keep it clean between uses.
- Goggles, non-disposable gloves, hard-hats, and other PPE shouldn't be exchanged among employees for use unless they've been cleaned and sanitized.



Donning and Doffing PPE

 <u>Education Compliance Program</u> (<u>sharepoint.com</u>)

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet of airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the type of PPE.

1. 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



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- · Fit flexible band to nose bridge
- · Fit snug to face and below chin
- Fit-check respirator



· Place over face and eyes and adjust to fit



4. GLOVES

Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- · Limit surfaces touched
- . Change gloves when torn or heavily contaminated
- · Perform hand hygiene

DW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (P KAMPLE 2

e is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with pote ctious materials. Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirate into the patient room and closing the door. Remove PPE in the following sequence:

GOWN AND GLOVES

Sown front and sleeves and the outside of gloves are contaminated!

f your hands get contaminated during gown or glove removal, mmediately wash your hands or use an alcohol-based hand sanitizer

Grasp the gown in the front and pull away from your body so hat the ties break, touching outside of gown only with gloved hands

While removing the gown, fold or roll the gown inside-out into a bundle

As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container





GOGGLES OR FACE SHIELD

Jutside of goggles or face shield are contaminated!
f your hands get contaminated during goggle or face shield removal,
mmediately wash your hands or use an alcohol-based hand sanitizer
Remove goggles or face shield from the back by lifting head band and
without touching the front of the goggles or face shield

f the item is reusable, place in designated receptacle for eprocessing. Otherwise, discard in a waste container



MASK OR RESPIRATOR

Front of mask/respirator is contaminated — DO NOT TOUCH!

f your hands get contaminated during mask/respirator removal, mmediately wash your hands or use an alcohol-based hand sanitizer Srasp bottom ties or elastics of the mask/respirator, then the ones at he top, and remove without touching the front

Discard in a waste container





WASH HANDS OR USE AN
ALCOHOL-BASED HAND SANITIZER
IMMEDIATELY AFTER REMOVING
ALL PPE









Understanding the Difference Between Surgical Mask and N95 Respirator

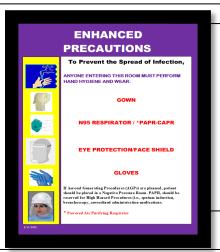
Surgical Mask

- Cleared by the U.S. Food and Drug Administration (FDA)
- Fluid resistant and provides protection against large droplets, splashes, or sprays of bodily or other hazardous fluids. Protects the patient from the wearer's respiratory emissions.
- Loose-fitting
- Disposable. Discard after each patient encounter. It should also be discarded when it becomes damaged or deformed; no longer forms an effective seal to the face; becomes wet or visibly dirty; breathing becomes difficult; or if it becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients

N95 Respirator

- Evaluated, tested, and approved by NIOSH as per the requirements in 42 CFR Part 84
- Reduces wearer's exposure to particles including small particle aerosols and large droplets (only non-oil aerosols).
- Requires fit testing
- Must be tight fitting to form a seal
- Should be discarded after each patient encounter and after aerosol generating procedures. It should also be discarded when it becomes damaged or deformed; no longer forms an effective seal to the face; becomes wet or visibly dirty; breathing becomes difficult; or if it becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients

For patients with confirmed or suspected Covid-19



Private room in almost all cases Negative pressure room if AGP* Staff and visitors also wear gloves, gowns and eye protection

Eye protection = face shields or goggles
No open-sided disposable

glasses

Strict hand hygiene Universal staff and patient masking during pandemic

*Aerosol-generating procedure (AGP) <u>Examples</u>: Intubation, CPR, high-flow oxygen, nebulizer treatment, etc. CAPR is <u>required</u>

For diseases spread by respiratory droplets over short distances (<3 feet)

Droplet

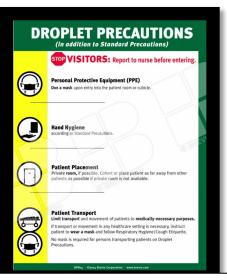
Bacterial Meningitis

Meningococcal Disease

Mumps

Pertussis

Influenza



Private room preferred, but may place with non-infected or like disease Staff and visitors wear surgical mask if \leq 3 feet from patient Patients wear surgical mask when outside the room

For diseases spread by <u>direct contact</u> with an infected or colonized person



Contact
Multidrug Resistant
organisms (MDRO's)
Candida Auris*
VRE
MRSA
C.diff*
ESBL
RSV **
Head lice
Scabies

Private rooms <u>at all times</u> for CRE and C-diff Private rooms <u>preferred</u> for other MDROs Staff and visitors use gloves and gowns

For diseases spread through air over <u>long</u> distances (>3 feet)

Airborne

Tuberculosis Measles Chickenpox

Private room with negative pressure ventilation Keep door closed Staff wears N95 respirator when inside room Visitors wear surgical mask when inside room Patients wear surgical mask when outside room Strict hand hygiene

Put N95 on before entering an Airborne Precaution room! Remove outside the room!



Decontamination and Disposal of PPE

Employees must remove any PPE before leaving the work area or when the PPE becomes contaminated or torn and place it in appropriate containers for storage, washing, decontamination or disposal.

The exception is your respirator, which must be removed after leaving the patient room. Consider the front of the respirator and facemask contaminated after use. Dispose of your N95 in regular trash after use.

Decontaminate and store PAPRs/CAPR's according to hospital policy and/or departmental procedures.

Always practice good hand hygiene after the removal of PPE!

High Hazard Procedures

High Hazard Procedures are aerosol-generating procedures performed on an individual who has a suspected or confirmed ATD.

Employees who participate in "high hazard" procedures on patients suspected or confirmed to have

an Airborne Infectious Disease (AirID) must wear a PAPR or equivalent protection, procedure should be performed in a negative pressure Isolation room.

These procedures include:

- Sputum induction
- Bronchoscopy
- Endotracheal Intubation/extubation
- **❖** Open suctioning of airways
- Cardiopulmonary resuscitation
- **❖** Aerosolized administration of Pentamidine or other medications
- Pulmonary function test
- Clinical, surgical and laboratory procedures that may generate aerosols
- Additionally, PAPRs/CAPR's are required when performing autopsies on cadavers potentially infected with ATDs.

Exposure Procedure & Medical Follow-Up

An employee who is exposed is to an ATD is to notify their supervisor as soon as possible. The supervisor who becomes aware of an exposure is to notify Employee Health and Infection Control and provide a list of employees suspected to have had an exposure.

Exposed employees will be notified as soon as possible of potential exposures. A post exposure evaluation will be conducted for those employees with a significant exposure by Employee Health

Notification to Supervisor



ADT_AttachmentG_23.pdf

Hello Directors/Managers/Supervisors,

Your department has been recognized as a location where care/services were provided for **source patient Doe John** who has tested postive f COVID-19. Please see ATD report (attachment G).

Please review work assignments and interview staff to identify any staff that were NOT using a N95, PAPR/CAPR and appropriate eye protectic entering the source patients room under the Infection Prevention Control tab in Persinda

Please log into Persinda, go to My Staff, click on Infection Control List, and identify any of your staff that were potentially exposed. If no staff r exposure criteria, mark the box called "No Known Exposure".

You will receive this message daily untill staff are identified.

Sincerely,

Infection Prevention and Control and Employee Health Services

- Supervisors identified receive an auto email notification
- Employee Health email is copied
- Exposure analysis ATD is attached
- Instructions:
 - Within 48 hours must reply
 - Log into Persinda and identify staff potentially exposed
 - My Staff
 - Infection Control List
 - After 48 hours, will receive email every 24 hours till there is a response

Notification to Workforce Member

Subject: WFM Exposure Notification

Importance: High

You have been identified as having a possible exposure to COVID-19.

Please log into Persinda and and complete the COVID exposure questionnaire. You have the option to present

You will receive this message daily untill the required form is completed.

Sincerely,

Infection Prevention and Control and Employee Health Services

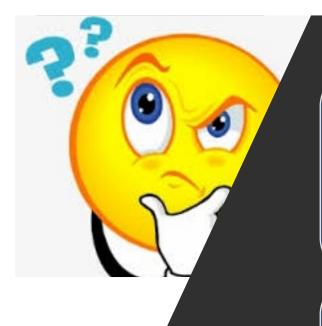
- Workforce Members identified receive an auto email notification
- Exposure Notification is attached
- Instructions:
 - Log into Persinda and complete Tuberculosis exposure evaluation
 - Option:
 - Contact EHS via phone for eval
 - Email will be sent every 24 hours till there is a response

Vaccinations

- Healthcare workers (HCWs) are at risk for exposure to serious, and sometimes deadly, diseases.
- Getting appropriate vaccines will reduce the chance to get or spread vaccine-preventable diseases.
- Vaccination is a safe, effective, and reliable method of controlling the spread of infectious diseases
- Vaccinations are available to all county employee free of charge
- Employees who decline the seasonal influenza vaccination must sign a declination form

Vaccinations offered/required

- Hepatitis
- MMR (Measles, Mumps, and Rubella)
- Tetanus, Diphtheria, and Pertussis (Tdap)
- Varicella
- Influenza (during flu season)
- Covid-19
- Meningococcal (Laboratory)



Questions?

Please complete the Annual Safety Post Test and submit to your Safety Coordinator

Aerosol Transmissible Disease (ATD)

An Aerosol Transmissible Disease (ATD) or Aerosol Transmissible Pathogen (ATP) is a disease or pathogen that is transmitted by aerosols, which require either Droplet or Airborne Isolation.



Aerosol Transmissible Disease/Pathogen which require Airborne Isolation:

In addition to **Standard Precautions**, use *Airborne Precautions*, for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei. Wear a N95 respirator upon entry into the patient room. Some diseases may also require Contact Precautions, refer to Appendix A in the Infection Control Manual for additional precautions.

Avian influenza Chickenpox (Varicella Zoster) Herpes Zoster (immunocompromised and patients with disseminated zoster) H1N1 Influenza Measles Monkeypox Novel or unknown pathogens SARS Smallpox Tuberculosis

Aerosol Transmissible Disease/Pathogen which require Droplet Isolation:

In addition to **Standard Precautions**, use *Droplet Precautions*, for patients known or suspected to be infected with microorganisms transmitted by droplets. Some diseases may also require Contact Precautions, refer to Appendix A in the Infection Control Manual for additional precautions. Wear a surgical mask upon entry into the patient room.

Diphtheria Pharyngeal

Epiglottitis (*Haemophilus influenza* type B)

Group A streptococcus (Invasive disease, skin,

wound or burn major)

Meningococcal disease

Meningitis (*Haemophilus influenza* type B)

Influenza

Mumps

Mycoplasma pneumonia

Fifth disease/erythema infectiosum (parvovirus

B19)

Pertussis /Whooping cough

Pharyngitis in infants and young children.

(Adenovirus, Group A streptococcus, H

influenza type B, orthomyxoviruses, herpes simplex virus, Epstein-Barr virus)

Pneumonia

Adenovirus

Chlamydia pneumoniae

Mycoplasma pneumoniae

Streptococcus Group A

Pneumonic plague

Rubella

Scarlet fever

Viral hemorrhagic fevers (Ebola, Lassa,

Marburg, Crimean-Congo, Hanta viruses)

Early identification

Efforts to identify suspected or confirmed ATD infectious patients will begin as soon as the patient enters the hospital. Patients should be assessed for ATD symptoms when they enter the facility. If a cough and other symptoms are present, a surgical mask will be placed on the patient. If patient is admitted, an order for either **Airborne or Droplet Isolation** must be part of the admitting orders.

Employee Precautions

Employees are to wear a NIOSH approved "N-95" respirator mask for airborne isolation or a surgical mask for droplet isolation if the patient is coughing or unable to wear the mask.

High Hazard Procedures

Effective September 2010, Powered Air Purifying Respirators (PAPRs) will be required for employees involved in High Hazard Procedures for suspected or confirmed ATD patients. High Hazard Procedures, may include the following; sputum induction, bronchoscopy, Pentamedine & Riboviran administration and Pulmonary Function Testing.

Transporting Patients

Patients leaving the room for urgent procedures must wear a surgical mask, be escorted by a Health Care Worker, and the department or area must be notified prior to transporting the patient for any procedure or evaluation.

Source Control Measures

Respiratory and Cough Etiquette Stations Isolation Signs Signs at entrance



Training

Employees required to wear a NIOSH approved "N-95" respirator are to be fit tested, instructed in the correct application of mask and the appropriate indications for wearing the mask. TB/ATD training is done upon hire and yearly thereafter.

Exposures

An "ATD Exposure Incident" is defined as an event in which a patient or employee sustains a substantial exposure to a ATD case without having had the benefit of all applicable and required control measures (i.e. respiratory protection, isolation, treatment). An employee who is exposed is to notify their supervisor as soon as possible. The supervisor who becomes aware of an exposure is to notify Employee Health and Infection Control and provide a list of employees suspected to have had an exposure. Exposed employees will be notified as soon as possible of potential exposures. A post exposure evaluation will be conducted for those employees with a significant exposure by Employee Health.

Vaccines

The following vaccines are available to all employees who have occupational exposure.

Influenza

Hepatitis B

Measles

Mumps

Rubella

Tetanus/Tdap

Varicella

2022

ATD / Tuberculosis Exposure Control Plan

LEARNING MODULE

TUBERCULOSIS EXPOSURE CONTROL PLAN

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(After reviewing the learning module and /or watching the ATD / TB video, please sign in and complete the post test. Safety coordinators will review test and are available for interactive questions/answers)

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

POLICY:

All employees will adhere to Olive View-UCLA Medical Center ATD Exposure Control Plan as mandated by the California Occupational Safety and Health Administration (Cal/OSHA). This program is developed in accordance with the requirements contained in Title 8, California Code of Regulations, Section 5199 (8CCR§5199).

This Exposure Control Plan is found in the Infection Control Manual and will be made accessible to all employees

PURPOSE: The goal of the ATD standard is to prevent healthcare worker illness and provide a safe environment for employees by reducing the risk of Aerosol Transmissible Diseases, including measles, TB, mumps, rubella, pertussis, Chicken pox (varicella), small pox, monkey pox, severe acute respiratory syndrome (SARS), SARS-CoV-2 and novel or unknown ATDs.

DEPARTMENT: ALL

DEFINITIONS:

Aerosol Transmissible Disease (ATD) or Aerosol Transmissible Pathogen (ATP) A disease that is transmitted by Aerosols, which requires either Droplet or Airborne Isolation.

Airborne Infection Isolation (AII) Infection Control procedures as described in Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Settings. These procedures are designed to reduce the risk of transmission of airborne infectious pathogens and apply to patients known or suspected to be infected with epidemiologically important pathogens that can be transmitted by the airborne route.

Airborne Infection Isolation Room (AIIR) A room, area, booth or other enclosure that is maintained at a negative pressure to adjacent areas in order to control the spread of aerosolized M. tuberculosis and other airborne infectious diseases.

Airborne Infectious Disease (AirID) An aerosol transmissible disease transmitted through dissemination of airborne droplet nuclei containing the disease agent for which Airborne Infection Isolation (ALL) is recommended by CDC.

High Hazard Procedure Procedure performed on a person who is a case or suspected case of an Airborne Infectious Disease. Procedures include sputum induction, bronchoscopy, aerosol administration of Pentamidine or other medications, pulmonary function testing and autopsies.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

<u>Powered Air Purifying Respirator</u> (PAPR). A respirator with a high efficiency particulate air (HEPA) filter which is used by employees who perform or are in the room when performing high hazard procedures on AirID cases or suspects.

<u>Controlled Air Purifying Respirator</u> (CAPR). Is a proprietary version of a PAPR, which fulfills all of the same functions using a slightly different arrangement.

Reportable Aerosol Transmissible Disease (RATD) A disease or condition which a health care provider is required to report to the Local health officer, in accordance with Title 17 CCR, division 1, chapter 4 and which meets the definition of a Aerosol transmissible disease (ATD)

PROCEDURE:

I. ASSIGNMENT OF RESPONSIBILITY:

- 1. The Infection Control Committee and its designees in conjunction with the Environmental Health and Safety, Employee Health Service, Facilities, Hospital Administration and Management Departments are responsible for operating and complying with this policy.
- 2. The Infection Prevention Medical Director and Assistant Nursing Director are knowledgeable in infection prevention practices and therefore designated as consultants and administrators of the ATD Plan.
- 3. This policy is to be reviewed annually and revised as needed.
- 4. It is the shared responsibility of Infection Prevention and Control, Employee Health Services, Human Resources, Environmental Health and Safety and individual education departments (nursing, medicine, etc.) to provide training on this policy to all employees via their safety coordinators.
- 5. It is the responsibility of the Department Managers and Service Chiefs to assure that initial and annual training is provided to all employees as outlined in the **Education** and **Training** section of this policy. It important to recognize and acknowledge the important role of leaders, supervisors, and managers have in supporting and ensuring compliance with education related to this policy.
- 6. Employees are to comply with this policy. Failure of employees to comply with this policy will result in disciplinary action per *OVMC* policy.
- 7. Each Department manager/supervisor and Service Chief is responsible to monitor the compliance of employees with this policy.
- 8. Infection Prevention and Control and Employee Health Service are responsible for ATD surveillance and follow up after an exposure incident.
- 9. RATD exposure incidents are reviewed by Infection Control and Employee Health.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

- 10. Reportable ATD exposure occurrences will be made to the Local Health Officer in accordance with Title 17.
- 11. Employees with Negative Tuberculin Skin Test (TST) require annual skin testing as mandated by OSHA.

II. EXPOSURE DETERMINATION CLASSIFICATIONS: (by department)

A. CATEGORY I DEPARTMENTS

(All employees have occupational exposure to patients presenting with ATD Diseases)

Facilities **Pastoral Services** Admissions Ambulatory Medicine **Environmental Services** Pathology Anesthesiology Laboratory **Pediatrics** Medicine Physical Cardiology Therapy **Central Processing** Nursing **Psychiatry** Community Health Plan (CHP) OB/GYN Radiology Occupational Therapy Respiratory Therapy **Dental Clinic** Operating Room Safety Police Dietary Patient Financial Service Emergency Medicine Social Work Employee Health Outpatient Financial Surgery

Utilization Management

B. CATEGORY II DEPARTMENTS

(Occupational exposure to Patients ATD Diseases)

Business Office Materials Management Volunteers
Communications Medical Administration
Data Processing Medical Records
Expenditure Management Medical Transcribing
Hospital Administration Office Services
Human Resources Personnel
Library Sciences

III. COMPLIANCE METHODS

Linen Services

A. Standard Precautions

Standard Precautions are used for all patients. Standard Precautions include good Hand Hygiene: use of Personal Protective Equipment (PPE), such as gloves, gowns, masks, respirators and face shields/eye protection when there is the risk of blood and body fluid exposures.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

B. Airborne Isolation

In addition to **Standard Precautions**, use *Airborne Precautions*, for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei. Wear a N95 respirator or PAPR/CAPR upon entry into the patient room.

Enhanced Precautions is used to describe additional PPE for novel pathogens such as (2019-nCoV) which required additional PPE such as contact isolation and the use of face shield or goggles to protect eyes.

Pathogens and illnesses requiring Airborne Isolation:

Chickenpox (Varicela Zoster)

Ebola

Herpes Zoster in immunocompromised patients and in patients with disseminated zoster

Novel or unknown pathogens

Novel Influenza

Measles

Monkeypox

Smallpox

SARS

Tuberculosis

(2019-nCoV)

C. Droplet Isolation

In addition to **Standard Precautions**, use *Droplet Precautions*, for patients known or suspected to be infected with microorganisms transmitted by droplets. Wear a surgical mask upon entry into the patient room.

Pathogens and illnesses requiring Droplet Precautions:

Diphtheria Pharyngeal

Epiglottitis (Haemophilus influenza type B)

Group A streptococcus (Streptococcus pyogenes)

Meningococcal disease

Meningitis (*Haemophilus influenza* type B)

Influenza

Mumps

Mycoplasma pneumonia

Fifth disease/erythema infectiosum (parvovirus B19)

Pertussis / Whooping cough

Pharyngitis in infants and young children (Adenovirus, Group A streptococcus, *H. influenza* type B, orthomyxoviruses, herpes simplex virus, Epstein-Barr virus)

Pneumonia

Adenovirus

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

Chlamydia pneumoniae Mycoplasma pneumoniae Streptococcus Group A Pneumonic plague Rubella Scarlet fever

Viral hemorrhagic fevers (Ebola, Lassa, Marburg, Crimean-Congo, Hanta viruses) Any other diseases that the Centers for Disease Control and Prevention (CDC) or California Department of Public Health recommends droplet precautions.

IV. PERSONAL PROTECTIVE EQUIPTMENT (PPE)

Employees shall wear PPE appropriate to the type of occupational exposure reasonably anticipated during the normal performance of their jobs. All employees receive training in the proper selection, indications, mandated use and proper procedures for disposal or reprocessing of PPE set forth by administrative leadership. Failure to wear appropriate PPE will be investigated and documented to determine whether the failure was justified and whether changes are needed to prevent future occurrences.

- 1. Employees at risk of occupational exposure shall be provided appropriate personal protective equipment (PPE) at no cost.
- 2. Appropriate PPE shall be readily available to employees in the appropriate sizes.

V. HIGH HAZARD PROCEDURES

- A. High hazard procedures are procedures performed on a person who is a suspect or confirmed case of an Airborne Infectious Disease (AirID).
- 1. High Hazard Procedures which are not immediately required for diagnosis or treatment will be delayed until the suspect or confirmed patient is no longer infectious.
- 2. For suspect or known AirID patients, high hazard procedures are to be performed in a room meeting AIIR criteria, bronchoscopy suite or sputum induction chamber.
- 3. Employees who perform high hazard procedures will use a powered air purifying respirator (PAPR), unless the employer determines that this use would interfere with the successful performance of the required task.
- 4. Respiratory Therapy, Employee Health, Environmental Safety, Education Department or a designee are to provide training to employees on proper PAPR use.
- 5. In general, all healthcare providers have the potential to be exposed to high hazard procedures, therefore EHS will ensure that all personnel are evaluated using the initial "on-boarding" of new employees' procedure.
- B. High hazard procedures requiring a powered air purifying respirator (PAPR)

Intubation

Sputum induction

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

Bronchoscopy
Pentamedine administration or other medications
Pulmonary Function Testing
Autopsy procedures that may aerosol pathogens
Laboratory procedures that may aerosol pathogens

VI. IDENTIFICATION AND MANAGEMENT OF CONFIRMED OR SUSPECTED ATD PATIENTS

A. TRIAGE ASSESSMENT

Early Identification: Efforts to identify suspected or confirmed ATD infectious patients will begin as soon as the patient enters the hospital. Patients will be assessed for ATD symptoms when they enter the facility. Rapid identification of these patients will enable staff to mask and isolate as necessary.

B. PATIENT PRECAUTIONS / ISOLATION

- 1. If a cough and other symptoms are present, a surgical mask will be placed on the patient. The patient will be instructed to wear the mask until he/she is evaluated by the health clinician.
- 2 In the Emergency Department rooms 24, 25, 29, 30, 39 or 46 will be used. Urgent care and all other out-patient clinics will use their designated isolation rooms with the door closed.
- 3 The patient shall be given a mask to wear and instructed on using respiratory hygiene precautions when coughing or sneezing.
- 4 Respiratory Hygiene Stations are located in visible areas throughout the facility for patients and visitors with signage indicating preventative measures, i.e. mask, tissues, hand gel (depending on availability). See Respiratory Hygiene and Cough Etiquette Policy.
- 5 Disposable and dedicated equipment is preferred from an Infection Prevention standpoint whenever possible. The support of Hospital Administration will dictate the availability and feasibility based on resources allocated for this.

C. EMPLOYEE PRECAUTIONS

- 1. Appropriate PPE shall be readily available to employees in the appropriate sizes.
- 2. Employees are to wear a NIOSH approved "N-95" respirator mask or PAPR/CAPR for airborne isolation or surgical mask for droplet precautions if the patient is coughing or unable to wear a mask.
- 3. The decision of whether or not to immediately bring the patient into the ED or clinic for care will be dictated by the severity of the illness.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

D. ADMISSION

- 1. Once the decision is made to admit a suspected with an ATD to the hospital, Bed Control and the Administrative Nursing Office are to be notified immediately of the need for an inpatient isolation bed.
- 2. An order for either **Airborne or Droplet Isolation** must be part of the admitting orders.
- 3. Any patient with suspect or known AirID who cannot be placed in a Negative Pressure Room on an inpatient floor will be transferred to another facility with a appropriate negative pressure room within 5 hours.
- 4. The patient is to be instructed to wear the mask at all times while in the building until he/she is placed in an isolation room (see Engineering Controls for list of designated isolation rooms). These patients are to be escorted by a Health Care Worker directly to the unit when a bed is available.

IDENTIFICATION AND MANAGEMENT OF ATD PATIENTS – (INPATIENT PLAN) I. MANAGEMENT OF INPATIENTS

When a patient with a suspected ATD is admitted to the hospital, the Medical Team will:

A. INSTITUTE AIRBORNE OR DROPLET ISOLATION

- 1. Patients are to be transported to the nursing unit from clinics, Emergency Department or admitting wearing a properly applied surgical mask.
- 2. Patients are to be placed in an appropriate respiratory isolation room (see Engineering Controls for list of rooms).
 - The airborne isolation room is to be a negative pressure private room.
 - The area of isolation will be the patient's room.
 - Patients are not to be cohorted unless approval to cohort is given by IC medical Director, Infection Control or Infectious Disease Department.
 - Patients leaving the room for urgent diagnostic procedures must wear a surgical mask, be escorted by a Health Care Worker, and the department/area must be notified prior to transporting the patient for any procedure /evaluation.
- 3. A negative pressure room (airborne) should provide the following:
 - A minimum of twelve air exchanges per hour.
 - Negative pressure relative to adjacent rooms and hallways
 - Air exhausted to the outside.

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- 4. The door to the isolation room will be kept closed to maintain control over the airflow direction. The door will be kept closed even when the patient has temporarily left the room for diagnostic procedures.
- 5. An "Airborne, Droplet Isolation or Enhanced Sign" sign will be posted on the door and will list the precautions to be taken before entering the room.
- 6. All employees entering a room with a "airborne isolation" or "enhanced precautions" sign must apply a properly fitted NIOSH approved "N-95" respirator mask or PAPR/CAPR. Visitors must be instructed in the proper application and fitting of the mask. Disposable masks and other personal protective equipment (e.g., gowns, gloves, etc.) will be readily accessible on the isolation cart. If at any time, there is limited availability PPE as a result of global or nation-wide shortages this procedure may need to be substituted and account for operational considerations that need to take place as a result of limited supplies.
 - N-95 respirator, masks and PAPR/CAPR are to be worn until leaving the room and are to be removed **outside** the isolation room.
- 7. A powered air purifying respirator (PAPR) or CAPR will be worn by employees during high hazard procedures for confirmed or suspect AirID patients.
 - 1. These procedures are to be performed in the patient's isolation room, with the door closed, Bronchoscopy Suite (GI Lab) or sputum induction chamber, etc. Limit to only those who are required to be in the room for the immediate care. No other patients, visitors or family are to be in the room during these procedures.
 - Bronchoscopy procedures are to be performed in the Bronchoscopy Suite (GI Lab) or a negative pressure isolation room.

B. MANAGEMENT OF ALREADY ADMITTED, NEWLY DIAGNOSED ATD PATIENTS

- 1. Proceed with the same protocol as for the "newly admitted ATD and R/O ATD patients" outlined above.
- 2. Initiate post exposure follow up of other patients and employees if indicated.

C. VISITOR INSTRUCTIONS

- 1. All persons entering the room must adhere to isolation precautions and wear respiratory protection.
- 2. Nursing staff is responsible for educating visitors entering the isolation room regarding the application and use of PPE while in the patient's room and of the need to keep the door closed.

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D. TRANSPORTING PATIENTS

- 1. If at all possible, all procedures for the treatment of ATD patients should be performed in the patient's isolation room.
- 2. If the patient is to be transported to another department for a diagnostic procedure, the department / area must be notified prior to transporting the patient. The patient is to wear a properly applied surgical mask covering his/her nose and mouth and be escorted by a health care worker to and from the isolation room. HCW should not wear PPE that could contaminate the environment while transporting patient, unless there is an extenuating circumstance reason to do so.
- 3. If the patient is to be transferred or transported to an outside facility, notification of the patient's isolation status condition shall be made prior to transport to both the receiving facility and the transporting agency. The patient is to wear a properly applied surgical mask covering his/her nose and mouth at all times. It is the responsibility of the accompanying HCW to provide education on proper mask placement and adherence to the patient.

E. DISCONTINUING ISOLATION

Isolation may be discontinued when the conditions are met as outlined in **Appendix A**, *Type and Duration of Precautions Recommended for Selected Infections and Conditions*. Located in the Infection Control Manual. For novel pathogens such as COVID-19, refer DHS Expected Practices (EPs) which will be updated as new information is available. The Infectious Disease physicians should be consulted for guidance on duration and discontinuation of isolation on novel pathogens. Prior to discharging a TB patient, approval from Los Angeles Department of Public Health TB Program is required.

VII. RESPIRATORY PROTECTION

A. Respiratory protective devices used are to, at the minimum, meet the NIOSH approved standards for an "N-95" respirator mask or PAPR/CAPR.

B. Respiratory protection is to be used:

- 1. When in an Airborne Infection Isolation Room (AIIR)
- 2. When in the presence of an unmasked AirID source case.
- 3. When repairing, maintaining, or replacing filters in ventilation ducts that may contain or generate aerosolized pathogens.
- 4. When entering, working or decontaminating a room within 1 (one) hour after the room has been occupied by an unmasked AirID suspect or confirmed case.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

C. FIT TESTING/PAPR TRAINING

- 1. Employees required to wear a NIOSH approved "N-95" respirator mask are to be fit tested, instructed on the correct application of the respirator and the appropriate
 - indications for wearing by a qualified person using one of the appropriate fit testing methods, as per EH Policy #3473 Respiratory Protection Fit Testing.
- 2. Employees who have been fit tested will be evaluated annually by Employee Health to determine if fit testing needs to be repeated.
- 3. Employees requiring a PAPR/CAPR will be trained by Employee Health, Respiratory Therapy, Environmental Health and Safety, Education Department or any other department designated by Hospital Administration to help comply with OSHA requirement prior to using the device.

VIII. ENGINEERING CONTROLS AND WORK PRACTICE CONTROLS

I. VENTILATION SYSTEM

The ventilation engineer works closely with Infection Control Staff to assist in the control of airborne infections.

- 1. Olive View-UCLA Medical Center HVAC system meets federal, state and local requirements.
- 2. The direction of airflow from clean areas to less clean areas is monitored by the Facilities Department.
- 3. Negative pressure rooms with air exhausted directly to the outside are used for Airborne Isolation (with minimum of twelve air exchanges per hour).
- 4. Airborne Isolation rooms in use are monitored daily by nursing staff by visually checking monitor located outside of each negative pressure room. Readings are documented on logs as per *Policy 2223 and 3035 Monitoring of Negative Pressure Rooms*.
- 5. All re-circulated air is filtered through HEPA style filters.
- 6. HEPA style filters are handled using appropriate respiratory protection by Facilities staff.
- 7. If a negative pressure room is in use for a AirID case and not maintain negative pressure, the unit manager/supervisor must notify facilities immediately and the patient shall be moved to another working negative pressure room.
- 8. AIIRs are ventilated for the minimum amount of time required for 99.9% of potential airborne contaminants to be exhausted or filtered from the air prior to allowing anyone to enter without respiratory protection when an AirID case or suspected case vacates a room.

II. WORK PRACTICE CONTROLS

The following measures shall be implemented in order to reduce the risk of transmission.

SUBJECT: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

A. AIRBORNE ISOLATION

- 1. All patients suspected or confirmed of having an AirID must be placed immediately in a AIIR.
- 2. Room door is to **remain closed** at all times except for when persons are entering or exiting the room.
- 3. A sign is to be posted designating "Airborne Precautions".
- 4. Wear respiratory protection (N95 respirator/PAPR/CAPR) when entering the room.
- 5. Patient escorted at all times and receiving area notified of isolation precautions.
- 6. Perform Hand Hygiene before and after patient contact.

A1. ENHANCED PRECATIONS

- 1. All patients suspected or confirmed as COVID-19 should be placed in an AIIR immediately when available.
- 2. Room door is to **remain closed** at all times except for when persons are entering or exiting the room.
- 3. A sign is to be posted designating "Enhanced Precautions".
- 4. Contact precautions and face shield or goggles in addition to airborne precautions.
- 5. Respiratory protection (N95 respirator/PAPR/CAPR) when entering the room.
- 6. Patient escorted at all times and receiving department or area notified of isolation precautions, this includes outside transfers.
- 7. Patient should wear mask at all times.
- 8. Perform Hand Hygiene before and after patient contact.

B. DROPLET ISOLATION

- 1. All patients suspected or confirmed of having an ATD with microorganisms transmitted by droplets must be placed in private room.
- 2. Room door is to remain closed except for when persons are entering or exiting the room.
- 3. A sign is to be posted designating "Droplet Precautions"
- 4. Wear a surgical mask (employee may opt to use higher protection, i.e. respirator) upon entry into the patient room or cubicle.

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- 5. Patient escorted and receiving area notified of isolation precautions
- 6. Perform Hand Hygiene before and after patient contact.

C. PATIENT INSTRUCTIONS

The patient is to be instructed:

- 1. Respiratory and Cough Etiquette. Use tissue precautions covering nose and mouth when coughing or sneezing and to dispose of tissue appropriately.
- 2. To remain in the room and leave the room only with the permission of the nurse to go to another area only as necessary for diagnostic procedures. Patient is to be escorted by a health care worker.
- 3. To wear a surgical mask (properly) when leaving the room. Patient is to be instructed on where and why to wear mask.
- 4. There may be circumstances where patients may be asked to wear masks at all times during hospitalization as source control and a way to prevent transmission to others.

D. EMPLOYEE AND VISITOR INSTRUCTIONS

All persons entering an airborne isolation room are to wear a NIOSH approved "N-95" respirator mask or PAPR/CAPR. Nursing staff is responsible to instruct visitors entering the room on the correct application and fit of the respirator mask.

E. TRANSPORTING PATIENT

- 1. If at all possible, all procedures for the treatment of AirID patients should be performed in the patient's AIIR.
- 2. If the patient is to be transported to another department for a diagnostic procedure, the department / area must be notified prior to transporting the patient. The patient is to wear a properly applied surgical mask covering his/her nose and mouth and be escorted by a health care worker to and from the AIIR.

F. TRANSFERRING PATIENT TO ANOTHER WARD/UNIT/DEPARTMENT

1. If the patient is transferred to another room (inpatient ward, clinic area, etc.), the room that the patient was initially in needs to remain unoccupied for at least 1 (one) hour.

G. OTHER INFECTION PREVENTION MEASURES

- 1. Employees should not come to work when ill and should be encouraged to stay home if sick.
- 2. If an employee becomes sick at work, the employee should be sent home.

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3. If an employee is out with a communicable disease, the employee should not return to work until cleared by their primary physician and Employee Health. In some cases, Los Angeles Department of Public Health will provide guidance and approve return.

H. ENVIRONMENT

- 1. Cleaning and disinfection of the rooms occupied by someone with a suspected or confirmed ATD/ communicable disease will be done using EPA-registered and hospital approved products appropriate to the pathogens intended to eliminate.
- 2. EVS (Sodexo) will ensure that staff receive training on appropriate cleaning methods and appropriate PPE use.
- 3. Sodexo will disinfect high touch surface or objects using appropriate contact time.
- 4. Sodexo will adhere to the same protocol for PPE usage as the hospital staff when cleaning rooms occupied by patients with suspected or confirmed ATD's.
- 5. Sodexo will provide, update and present all polices related to environmental cleaning to the Environment of Care Committee and Infection Prevention Committee.

I. The following rooms are appropriate for Airborne Isolation

INPATIENT ROOMS

<u>3A</u>	<u>3D</u>	<u>4A</u>	<u>4BN</u>	<u>4BS</u>	<u>4C</u>	<u>4D</u>
SDSU-105	-111	-114	-109 (12)	-128 (1)	-112	<u>-113</u>
Rec Rm-	-112	-117	-110 (11)	-129 (2)	-115	<u>-116</u>
NW3227	-115	-118	-113 (1)	-130 (3)	-116	<u>-117</u>
IN W 3227	-116		-114 (2)	-131 (4)		
				-132 (5)		
				-133 (6)		

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INPATIENT ROOMS

<u>5A</u>	<u>5BN</u>	<u>5BS</u>	<u>5C</u>	<u>5D</u>	<u>2F</u>	<u>2F</u>
-114	-109 (12)	-128 (1)	-111	-113	-331	-337
-117	-110 (11)	-129 (2)	-112	-116	-328	-341
-118	-113 (1)	-130 (3)	-115	-117	-325	-347
	-114 (2)	-131 (4)	-116		-321	-353
		-132 (5)			-319	-357
		-133 (6)			-314	-361
					-312	-364
					-334	

OUTPATIENT ROOMS

<u>UC</u>	<u>ED</u>	GI SUITE	MORGUE
2B109	2E173	2C126	1A146
	2E176		
	2E231		
	2E228		
	2E243		
	2E245		

EDUCATION AND TRAINING OF EMPLOYEES

Olive View-UCLA Medical Center is dedicated to training the employees about the risks involved with caring for ATD patients. All employees who are at risk for occupational exposure to ATD's will receive training during working hours at no expense to them. The trainer shall be knowledgeable in the subject matter of the training program. A video may be used along with the opportunity for interactive questions and answers with the person conducting the training session. ATD Training is held annually and it the responsibility of the Department Head/Service Chief to make sure that their staff receive the proper training material and are compliant. Human Resources (HR) shares a responsibility in assuring that all staff have documented training in their annual evaluations.

A. Training program required components.

1. General explanation of ATDs, including signs and symptoms. Common symptoms of TB include cough, night sweats and weight loss. Common symptoms of COVID-19, fever or chills, cough, shortness of breath/difficulty breathing, fatigue, runny or

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stuffy nose, muscle or body aches and headache. Symptoms may appear 2-14 after exposure

- 2. Mode of transmission, measures to prevent exposure and applicable Source Control Measures (e.g., engineering controls, work practice controls, personal protective equipment, respiratory protection). Mode of transmission located on page 4.4.
- 3. Information on the types, proper use, location, removal, handling, decontamination and disposal of PPE and explanation of the basis for selection of PPE.
- 4. Employee and employer responsibilities for reporting exposure incidents and post exposure evaluation.
- 5. Information on the appropriate actions to take and persons to contact for exposures
- 6. An explanation of the ATD Exposure Control Plan and the means by which the employee can obtain a copy of the written plan and how they can provide input as to its effectiveness
- 7. Information on vaccines which are available to all employees free of charge, (i.e. Influenza, Measles, Mumps, Rubella, Tdap and Varicella). The benefits of being vaccinated.
- 8. An accessible copy of the regulatory text of the standard and an explanation of its contents
- 9. An opportunity for interactive questions and answers with the person conducting the training session
- B. Education is to be provided to new employees at the time of initial assignment and at least annually thereafter. This is the responsibility of the Education Department/HR to coordinate and provide to all new employees upon hire or entry to the facility.
- C. The education records will include the date of the training, the contents or summary of the training, the name of the person conducting the training and the name and job titles of all persons attending the training.
- D. Training shall be appropriate for the educational level, literacy and language of the employees.

POST EXPOSURE MANAGEMENT

I. **DEFINITION**

- 1. An Exposure Incident" is defined as an event in which a patient or employee sustains a substantial exposure to a ATD case without having had the benefit of all applicable and required control measures (i.e. respiratory protection, isolation, treatment).
- 2. In determining whether the event involved a substantial exposure, the following factors are to be taken into account: the infectiousness of the exposure source, proximity of the

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exposed person to the exposure source, the extent to which the exposed person was protected from exposure, and the length of the exposure event.

- 3. The Infection Control and/or Employee Health Service Departments are to be consulted for determination of an exposure incident.
- 4. Exposed employees will be notified as soon as possible of potential exposures by Employee Health. EH will begin implementation of an exposure work-up, including notification to employees.
- 5. A post exposure medical evaluation will be conducted for those employees with a signifant exposure by Employee Health as soon as possible.
- 6. RATD exposure will be reported to Los Angeles Public Health in accordance with Title 17.

II. EMPLOYEE POST ATD EXPOSURE MANAGEMENT

- A. When an ATD exposure occurrence is suspected or confirmed, the following reporting mechanism should take place.
 - 1. An employee who is exposed is to notify their supervisor as soon as possible (follow the chain of command if supervisor is not on duty at that time). If the potential exposure is discovered by Infection Control, they will begin an immediate investigation.
 - 2. Employees are required to report if they test positive for any communicable disease including SARS-CoV-2, outside of DHS. Employee Health Services must be notified within 24hrs or prior to coming to the next scheduled shift, whichever comes first.
 - 3. The supervisor who becomes aware of an exposure is to notify Employee Health Service <u>and</u> Infection Control Departments <u>and</u> must begin collecting relevant information such as list of employees suspected to have had an exposure.
 - 4. The Infection Control Department Staff, when they become aware of an exposure, will investigate the possible exposure and confirm. Infection Prevention will notify EHS if not already aware and provide a summary of exposure including the department/s affected. EHS will send out an official notification to supervisor of involved departments with specific instructions required for follow-up and management of the incident.
 - 5. ATD exposure records of patients and employees are maintained per the confidentiality standards of the hospital and the legal requirements of the Information Management Department and the Office of Human Resources.
 - 6. Recommended vaccines shall be made available by Employee Health to all employees with occupational exposure unless the employee has already received the vaccine or it is determined the employee has immunity or the vaccine is contraindicated for medical reasons.

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7. A copy of the ATD standard will be made available to the employee.

III. RECORDKEEPING

A. Medical Records

- a. Medical records will be maintained for each employee with an occupational exposure in accordance with 8 CCR §3204
- b. All medical records will be maintained confidentially and not disclosed or reported without the employees written consent to any person within or outside the workplace unless required by local or state regulations.
- c. Record will include:
 - i. Employee name and any other identifier used in the workplace
 - ii. Vaccination status for all vaccines required, any vaccine record provided by employee, and any signed declination forms
 - iii. Copy of all written opinions provided by Employee Health Services
 - iv. Results of all TB assessments
 - v. Copy of the information regarding the exposure incident (This does not apply to records that do not contain individually identifiable medical information or from which individually identifiable medical information has been removed).
- d. The facility shall ensure all records, other than the employee's medical records, shall be made available upon request to the Chief of OSHA, NIOSH and the local health officer for examination and copying.
- e. Employee Health shall record all TB conversions. In addition, unless it is determined that the TB Test Conversion is not occupational, EHS shall investigate the circumstances and correct any deficiencies found during the investigation. The investigation shall be documented and reported in the ICCM.

B. Records of Exposure Incidence

Records of exposure incidents shall be retained and made available as employee exposure records in accordance with section 3204. These records shall include:

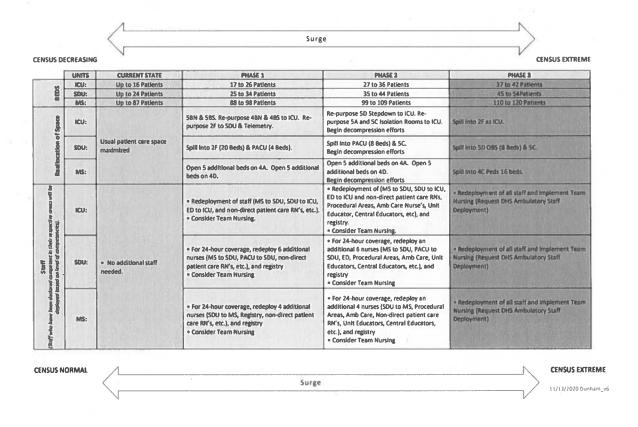
- a. The date of the exposure incidence
- b. The names and any other employee identifiers used in the workplace, of the employees who were included in the exposure evaluation
- c. The disease or pathogen to which the employee may have been exposed
- d. The name and title of the person performing the evaluation
- e. The identity of any local health officer and or/PLHCP consulted
- f. The date of the evaluation
- g. The date of contact and contact information for any other employer who either notified the employee or was notified.

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IV. SURG PLAN AND STAFF DEVELOPMENT

A patient surge event involves a large influx of victims from an internal or external event requiring treatment, such as the result of a fire, explosion, train wreck, pandemic, or infectious disease outbreak. A response to an emergency can include the following: maintaining or expanding services, conserving resources, curtailing services, supplementing resources from outside the local community, closing the hospital to new patients, staged evacuation, and total evacuation.

A. HOSPITAL INPATIENT SURGE CAPACITY



Staffing Practices to Increase Surge Capacity

Responsibility for the assessment and coordination of staffing will be assigned to the Incident Commander. Staffing needs will be assessed daily as the number of patients increases and/or health care and support personnel become ill or remain at home to care for ill family members. The Incident Commander will coordinate with Human Resources, which will oversee the pool of volunteers, staff, retirees, etc. to ensure staffing needs are met.

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Containment

- Triage utilizing tents located outside of DEM
- Limiting the movement of suspected and confirmed cases within the facility
- Bundling and combining care activities to minimize exposure and room entries
- Cohorting
- Postponing or cancelling elective and nonserious visits/procedures
- Implementing patient telephone and video visits
- Expediating hospital discharges to free additional rooms
- Discharging to home isolation
- Transferring inpatients to less impacted facilities
- Cancellation of non-essential meetings
- Replace in-person activities with virtual

Universal Source Control

All employees, visitors and patients will be required to wear approved medical-grade masks while in the healthcare facility, including in non-clinical spaces. Face masks will be made available at each entrance and must be worn properly covering both the mouth and nose.

B. WORK PRACTICES

Identification and Evaluation

Early identification of patients with aerosol transmissible diseases and pathogens such as COVID-19 infection will be done at the first point of contact.

- Rapid identification of individuals and institution of appropriate isolation measures will be critical to reducing the risk of aerosol transmissible diseases and pathogens.
- Signage to direct patients at entrances
- Dedicated entrances for staff and visitors

Patient Placement

- Patients will be triaged and prioritized for bed placement
- Patients will be placed in an appropriate isolation room based on transmissible disease/ pathogen
- Negative pressure rooms will be prioritized for patients requiring airborne and droplet isolation

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- Isolation signs will be placed and be visible to all entering room
- Patients not requiring private rooms or negative pressure rooms will be moved to nonisolation rooms

Personal Protective Equipment

The following Personal Protective Equipment (PPE) will be available and required for all health care personnel to use based upon the type of hazard, and in accordance with the PPE training received:

- o Respirators (N95 or PAPR/CAPR)
- o Face shield/eye protection
- o Gloves
- o Gowns

Cohorting

Designated units or areas will be used for cohorting patients having symptoms consistent with circulating pathogen. During a pandemic, other respiratory viruses (e.g., non-pandemic influenza, respiratory syncytial virus, parainfluenza virus) may be circulating concurrently. To prevent cross-transmission of respiratory viruses, whenever possible assign only patients with confirmed pathogens/organisms to the same room.

Patient Transport

- Patient transport and movement outside the isolation area will be limited to medically necessary purposes
- Use of portable x-ray equipment
- Patient should wear a surgical mask or N95 if tolerated. If a mask cannot be tolerated (e.g., due to the patient's age or deteriorating respiratory status), apply the most practical measures to contain respiratory secretions.
- Notification to the receiving area to which the patient is being transported the type of isolation precautions necessary prior to transport

C. DECONTAMINATION

Products

Only EPA-approved hospital products will be used for cleaning and disinfecting the environment. New products will be evaluated to ensure that they can be used for the specific pathogen in question. In addition to cleaning and disinfection practices already in place, housekeeping will increase frequency of cleaning to high traffic areas and high touch points.

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Cleaning and Disinfection of Equipment

- Equipment and/or devices that are not disposable must be cleaned adequately to remove any blood or body fluids and disinfected with hospital-approved detergent-disinfectant
- Perform hand hygiene and don appropriate PPE
- Cleaning and disinfection must be completed before the equipment is stored and before reusing
- Equipment surface(s) must be thoroughly wet with a hospital approved detergentdisinfectant and allowed to remain undisturbed for the contact time specified by the manufacture

Decontamination Facilities

- Fixed Emergency Showers located outside of the Emergency Room
- Mobile Decontamination Trailer
- Decontamination Suits with PAPR's

Hand Hygiene

Hand hygiene stations be available throughout the facility. Staff will be required to wash hands with soap and water for at least 20 seconds. When soap and running water are not immediately available, alcohol-based hand sanitizers with at least 60% ethanol or 70% isopropanol will be made available. Portable hand sanitizing stations will be relocated to meet the needs and demands during a surge.

Hazardous Materials and Waste

Hazardous materials and wastes derived from biological, chemical, or nuclear agents associated with decontamination, isolation, hospital hazardous waste and/or trash, will be properly managed, handled, and disposed in accordance with Federal, State, and local laws and regulations under the direction and authority of the Infection Control Practitioner, Safety Officer, or Radiation Safety Officer.

Laboratory

All clinical specimens will be handled using Standard Precautions to prevent contamination. Specimens will be properly labeled and transported in a way to prevent leakage and/or contamination.

Education

Staff education and trainings will be provided during surge. May be in the form of educational meetings, medical Grand Rounds, and tabletop exercises and other educational venues. Hospital management will encourage promotion and use of online/teams education modules during staff meetings. Hospital-specific topics for staff education will include:

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Education Cont.

- Policies and procedures for the care of patients, including isolation, patient placement, proper use of PPE and environmental containment measures
- Cleaning and disinfection of the environment
- Transportation
- Staffing and contingency plans, including how the facility will deal with illness in personnel
- Policies for restricting visitors
- Specimen handling
- Measures to protect family and other close contacts from secondary occupational exposure
- Training to screen and detect patients and implement immediate containment measures to prevent transmission

D. SUPPLIES

Supply Chain Operations (SCO) Warehouse will maintain necessary quantities of Personal Protective Equipment (e.g. gloves, gowns, face shields, masks, respirators, etc.), specifically respirators and masks based on usage calculations. Units will utilize existing floor stock for immediate patient care needs. As these supplies near depletion units will report their needs.

During times of increase need, these parameters will be increased to meet operational needs. If levels of supply fall to an unacceptable level, materials management will notify Hospital Administration and Infection Control of shortage and establish a plan to assure for uninterrupted production.

During times of critical shortage materials management must manage demand and provide ongoing in-time data of supply so that the hospital can deal with the operational strains from the demand and supply and plan accordingly.

E. NOTIFICATION AND COMMUNICATION WITH LOCAL/REGIONAL AUTHORITIES

All appropriate external authorities will be notified to help facilitate an orderly and effective response to emergencies, continuing operations, and recovery from an emergency that disrupts the normal patient care and/or business operations of Olive View-UCLA Medical Center. When the Emergency Operations Plan (EOP) is activated, all appropriate external authorities and community resources will be notified. These authorities may include:

- FEMA
- State of California EOC
- LA County EOC

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LA County Disaster Resource Center

When the EOP is initiated, the above local and regional authorities will be notified as appropriate.

REFERENCES:

California Code of Regulations Title 8, Section 5144, 5199, Title 17 and Title 22

Management of Multidrug-Resistant Organisms In Healthcare Settings, 2006 "Surveillance, Prevention and Control of Infection" Comprehensive Accreditation Manual for Hospitals, Joint Commission on Accreditation of Health Organizations.

Respiratory Hygiene and Cough Etiquette in Healthcare Settings CDC, November 4, 2004

Title 8 – California Code of Regulation, <u>Prevention of Occupational Tuberculosis</u>, CAL-OSHA.

U. S. Department of Health and Human Services, Public Health Service, CDC, MMWR, Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 2005, Volume 454, RR-17

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

A DAD.	Date: 3118122
Jelm Alex	Date: 3/18/20
Fram Carlo	Date: 3/24/22
Augen & for about	Date: 3/24/22
Reviewed date: 11/2014, 1/11/2016, 2/16/2017, 2/14/2018 3/2/21	3, 2/19/2019, 2/4/2020, 6/24/20,

Revised date: 4/2011, 4/2012, 1/2015, 2/1/2021, 7/28/21, 2/22/22

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APPENDIX A: AEROSOL TRANSMISSIBLE DISEASE (ATD) EXPOSURE CONTROL PLAN

Job Classification with associated risk categories

Job Classification	Category I (May Have Patient Exposure)	Category II (None-minimal patient Exposure)
ACCOUNT CLERK	1	X
ACCOUNTANT		X
ADMINISTRATIVE ASSISTANT	111111111111111111111111111111111111111	X
ANESTHESIOLOGIST	X	
AUDIOLOGIST	X	
AUTOPSY TECHNICIAN	X	
BLOOD GAS LABORATORY TECHNICIAN	X	
CARDIAC ELECTRODIAGNOSTIC TECH	X	
CARDIOVASCULAR TECHNICIAN	X	
CARPENTER		X
CASE WORKER	X	
CASHIER		X
CENTRAL SERVICES TECHNICIAN	X	
CLINICAL LABORATORY SCIENTIST	X	
CLINICAL PSYCHOLOGIST	X	
COMPUTER SYSTEM OPERATOR		X
DARKROOM ATTENDANT	X	
DENTAL ASSISTANT	X	
DENTIST	X	
DIETICIAN	X	
ELECTRICIAN		X
HVAC TECHNICIAN	X	
MAINTENANCE WORKER		X
GENETIC COUNSELOR	X	
HOSPITAL ADMINISTRATOR		X
HOUSEKEEPER	X	
INFORMATION SYSTEMS ANALYST		X
INTERMEDIATE CLERK	X	
LABORATORY ASSISTANT	X	
LAUNDRY WORKER		X
LICENSED VOCATIONAL NURSE	X	
LOCKSMITH	E	X
FACILITIES MANAGER		X
MEDICAL ELECTRONICS		X

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Job Classification	Category I (May Have Patient Exposure)	Category II (None-minimal patient Exposure)
(RECORDS) TECHNICIAN		
MENTAL HEALTH COUNSELOR	X	
MEDICAL SECRETARY		X
MICROBIOLOGIST	X	
NUCLEAR MEDICINE TECHNOLOGIST	X	
NURSE ANESTHETIST	X	
NURSE PRACTITIONER	X	1 100 (MOS
NURSING ATTENDANT	X	
NURSING DIRECTOR		X
NURSING INSTRUCTOR	X	
OCCUPATIONAL THERAPIST	X	
PAINTER		X
PATIENT FINANCIAL SERVICES WORKER	X	
PATIENT RESOURCES WORKER	X	
PERSONNEL OFFICER		X
PHARMACIST		X
PHARMACY TECHNICIAN		X
PHLEBOTOMY TECHNICIAN	X	
PHYSICAL THERAPIST	X	
PHYSICAL THERAPIST ASSIST.	X	
PHYSICIAN, MD	X	
PLUMBER		X
POLICE	X	
RADIOLOGIC TECHNOLOGIST	X	
RECREATION THERAPIST	X	
REGISTERED NURSE	X	
REHABILITATION THERAPY TECHNICIAN	X	
RESPIRATORY CARE PRACTIONER	X	
SAFETY ASSISTANT		X
SOCIAL WORKER	X	
STUDENT WORKER	X	
SURGICAL TECHNICIAN	X	
TISSUE ANALYSIS TECHNICIAN	X	
VOLUNTEER PROGRAMS DIRECTOR		X
WAREHOUSE WORKER	12424	X