AGENDA ITEM NO.
C-7

COUNTY OF HUMBOLDT

For the meeting of: January 20, 2015

Date: December 18, 2014

To: Board of Supervisors

From: Dan Fulks, Director, Human Resources

Subject: Aerosol Transmissible Diseases Exposure Control Plan

RECOMMENDATION(S):

That the Board of Supervisors:

1. Approve the Aerosol Transmissible Diseases Exposure Control Plan, and;
2. Direct Human Resources and applicable County departments to implement the Aerosol Transmissible Diseases Exposure Control Plan.

SOURCE OF FUNDING:

All County Funds.

DISCUSSION:

Effective August 5, 2009, the California Division of Occupational Safety and Health (Cal/OSHA) adopted Title 8, Chapter 4, Subchapter 7, article 109, Section 5199 Aerosol Transmissible Diseases (ATD); it regulates employee exposure to ATDs. These diseases can be spread through the air in the form of small particles or droplets. Some examples of ATDs are tuberculosis, avian flu, or swine flu.

Prepared by Clarke Guzzi CAO Approval

REVIEW:
Auditor _____ County Counsel WRC Personnel _____ Risk Manager _____ Other _____

TYPE OF ITEM:
X Consent
_____ Departmental
_____ Public Hearing
_____ Other _____

PREVIOUS ACTION/REFERRAL:

Board Order No. _____

Meeting of: _____

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT
Upon motion of Supervisor Sundberg Seconded by Supervisor Bass
Ayes Sundberg, Lovelace, Fennell, Bohn, Bass
Nays
Abstain
Absent

and carried by those members present, the Board hereby approves the recommended action contained in this Board report.

Dated: Jan 20, 2015
By: _____
Kathy Hayes, Clerk of the Board

The purpose of this formal written plan is to comply with California Code of Regulations, Title 8, Chapter 4, Subchapter 7, Article 109, Section 5199 Aerosol Transmissible Diseases. As required by Section 5199, the Aerosol Transmissible Diseases (ATD) Exposure Control Plan will provide guidance to county departments and employees on the procedures for minimizing occupational exposure to ATDs. The ATD Exposure Control Plan (ECP) sets forth the minimum standards for all county departments with operations and high hazard procedures that may expose employees to aerosol transmissible diseases at an elevated risk; i.e. higher than what is considered ordinary for employees having direct contact with the general public.

Humboldt County departments and divisions/branches covered by this regulatory compliance plan include the Sheriff's Department, Corrections, Animal Control, Probation, Public Health, In-Home Supportive Services, Social Services, Coroner's Office and Mental Health. Each department has implemented the specific elements of this written plan. These procedures aim to reduce or eliminate the possibility of infections after addressing the hazards of their workplaces. A copy of the ATD ECP and specific departmental procedures will be accessible to all affected employees.

Human Resources has been working with departments to formalize a written ATD ECP and it is now ready for approval. Human Resources and the Plan Administrator Team will continue to collaborate on updating and revising the ATD ECP annually as needed or identified, and address any areas of concern or common interest. The Plan Administrator Team includes the Sheriff or designee, Coroner or designee, Public Works Director or designee, Chief Probation Officer or designee, Public Health Director or designee, Social Services Director or designee and the Mental Health Director or designee.

Therefore, Human Resources recommends that the board approves the ATD ECP and directs Human Resources and applicable county departments to implement the ATD ECP.

FINANCIAL IMPACT:

Since applicable departments have already implemented procedures to comply with the law, costs associated the ATD ECP for training, tracking, record keeping, personal protective equipment (PPE) and fit-testing have been budgeted for in each respective department approved budget for fiscal year 2014-15.
There is no anticipated impact to the County General Fund.

Approving this ATD ECP supports the Board's Strategic Framework by investing in county employees and creating opportunities for improved health and safety.

OTHER AGENCY INVOLVEMENT:

Sheriff's Office, Department of Health and Human Services, Probation, Public Works and Coroner's Office.

ALTERNATIVES TO STAFF RECOMMENDATIONS:

The Board could choose to not approve this Aerosol Transmissible Diseases Exposure Control Plan, however this alternative is not recommended as the County would be out of compliance with current regulations.

ATTACHMENTS:

Aerosol Transmissible Diseases Exposure Control Plan.

Aerosol Transmissible Diseases Exposure Control Plan

County of Humboldt

Aerosol Transmissible Diseases Exposure Control Plan

Table of Contents

PURPOSE:

The Aerosol Transmissible Diseases Exposure Control Plan has been developed to provide guidance to Humboldt County departments and employees to minimize the risk of occupationally acquired aerosol transmissible disease, including Tuberculosis (TB). This Plan meets the California Occupational Safety and Health Administration (Cal/OSHA) requirement (Title 8, CCR, section 5199) to develop a plan to prevent the spread of aerosol transmissible diseases (ATD) within County operations.

Aerosol transmissible disease means an epidemiologically significant disease that is transmitted via droplet or airborne route. A list of these diseases is included in Appendix A.

The purpose of this plan is to comply with California Code of Regulations, Title 8, Chapter 4, Subchapter 7, Article 109, Section 5199 Aerosol Transmissible Diseases. As required by Section 5199, the County of Humboldt's, herein referred to as County Aerosol Transmissible Diseases Exposure Control Plan will provide guidance to County departments and employees on the procedures for minimizing occupational exposure to aerosol transmissible diseases.

The Plan sets forth the minimum standards for all County departments with operations and high hazard procedures that may expose employees to aerosol transmissible diseases at an elevated risk level, ie higher than what is considered ordinary for employees having direct contact with the general public. The ATD Exposure Control Plan (ECP) identifies those job classifications where employees may have an elevated risk of contracting a disease caused by an aerosol transmissible pathogen including but not limited to tuberculosis, avian influenza, or swine influenza. (See Appendix A for a complete listing)

Humboldt County departments and divisions/branches covered by this regulatory compliance plan include the Sheriff's Department, Corrections, Animal Control, Probation, Public Works, Public Health, In-Home Supportive Services, Social Services, Coroner's Office and Mental Health. Each department will develop specific procedures to reduce or eliminate the possibility of infection after addressing the hazards of their workplaces. A copy of this ATD ECP and specific departmental procedures will be accessible to all affected employees.

BACKGROUND:

Effective August 5, 2009, the California Division of Occupational Safety and Health (Cal/OSHA) adopted Title 8, Chapter 4, Subchapter 7, Article 109, Section 5199 Aerosol Transmissible Diseases, regulates employee exposure to ATDs. These diseases can be spread through the air in the form of small particles or droplets.

Section 5199 requires compliance for:

- Facilities, services, or operations that are designated to receive persons arriving from the scene of an uncontrolled release of hazardous substances involving biological agents, as defined in Section 5192, Hazardous Waste Operations and Emergency Response, of these orders.

- Police services provided during transport or detention of persons reasonably anticipated to be cases or suspected cases of aerosol transmissible diseases; and police services provided in conjunction with health care or public health operations.

- Public health services, such as communicable disease contact tracing or screening programs that are reasonably anticipated to be provided to cases or suspected cases of aerosol transmissible diseases, and public health services rendered in health care facilities or in connection with the provision of health care.

- Facilities, services or operations that are identified as being at increased risk for transmission of aerosol transmissible disease (ATD) infection: Correctional facilities and other facilities that house inmates or detainees; Homeless shelters; and Drug treatment programs.

- Facilities, services or operations that perform aerosol-generating procedures on cadavers such as pathology laboratories, medical examiner's facilities, coroner's offices, and mortuaries.
- Laboratories that perform procedures with materials that contain or are reasonably anticipated to contain aerosol transmissible pathogens – laboratory (ATP-L) or zoonotic aerosol transmissible pathogens as defined in Section 5199.1.

- Maintenance, renovation, service, or repair operations involving air handling systems or equipment or building areas that may reasonably be anticipated to be contaminated with aerosol transmissible pathogens (ATPs) or ATPs-L, including: Areas in which Airborne Infectious Disease (AirID) cases and suspected cases are treated or housed; Air handling systems that serve airborne infection isolation rooms or areas (AIIRs); and Equipment such as laboratory hoods, biosafety cabinets, and ventilation systems that are used to contain infectious aerosols.

- In cases where an employee faces an increased risk of occupational exposure to ATDs, the regulations require that the employer provide special respirator protection at its own cost. A surgical mask is insufficient; the respirator must be at least as effective as the N95 filtering face-piece respirator. Employees covered by these enhanced protections include those who work in contaminated areas or in areas designated for the isolation or quarantine of ATD cases or those whose jobs include the handling of infected cadavers or transport of exposed materials or persons. Where applicable, these employees must be fitted annually for a respirator (the details of which are outlined in the regulations) and must use the respirator rather than a simple surgical mask.

PROCEDURE:

I. EXPOSURE CONTROL PLAN POLICY

A. The County of Humboldt is committed to providing a safe and healthful work environment for its employees. The following ECP is provided to eliminate or minimize occupational exposure to ATD. All county classifications that have a high exposure possibility (beginning on page 7) will adhere to the requirements outlined in the ECP that follows:

B. Compliance with the ATD Standard requires the following activities:

1. Establishing and implementing a written ATD ECP.

2. Providing engineering and work practice controls.

3. Providing personal protective equipment and respiratory protection.

4. Developing isolation plans for identified or suspected cases of ATD.

5. Providing initial and annual training.

6. Ensuring accurate recordkeeping.

7. Providing medical services to exposed workers.

C. Administrative Controls

1. Procedures have been developed to reduce employees' exposure to persons with infectious TB or other aerosol transmissible diseases and are located on page 12. Each department of Humboldt County is responsible for ensuring high exposure possibility (HEP) staff follow established protective measures. The responsibility of Human Resources for monitoring compliance, reporting non-compliance, and the action taken in response to non-compliance is clearly defined and communicated to the HEP staff and department head.

2. Each County department is responsible for documenting that appropriate training has been given and necessary personal protective equipment has been provided.

3. When monitoring reveals repeated failure to follow recommended practices after additional supplies, education and/or retraining, and counseling have been provided, disciplinary action may be taken according to usual progressive disciplinary procedure.

4. Humboldt County is responsible for the provisions of a work place free from recognized hazards. This includes healthcare workers on-site employed by another agency, volunteers, and students from all programs.

5. This plan has been developed to insure the rapid detection, isolation, evaluation, and treatment of individuals likely to have tuberculosis (TB), or other ATD.

6. Any room or area where an infectious TB, or other ATD case is placed, will be posted in such a way that employees will be apprised of the exposure hazard before entering the room or area.

II. GOALS OF THE ATD EXPOSURE CONTROL PLAN

A. The goal of the ATD Exposure Control Plan (ATD ECP) is early identification, isolation, and treatment of persons who have active TB, or other ATDs, to reduce the risk of exposure for HEP Staff.

B. The primary objectives of the plan are:

1. The use of administrative measures to reduce the risk of exposure to persons who have infectious TB, or other ATDs.

2. The use of engineering controls to prevent the spread and reduce the concentration of infectious droplet nuclei.

3. The use of personal respiratory protective equipment in areas where there is still a risk for exposure to TB, or other ATD.

C. This ATD ECP includes information on the following:

1. Determination of employee exposure

2. Implementation of various methods of exposure control, including:

   a. Engineering and work practice controls

   b. Personal Protective Equipment (PPE)

   c. Respiratory Protection Program

7. Post-exposure evaluation and follow-up

8. Communication of hazards to employees

9. Recordkeeping

10. Procedures for evaluating circumstances surrounding an exposure incident

11. Training requirements

12. Requirements for laboratories

III. DEFINITIONS

A. The complete transcript of Section 5199 Aerosol Transmissible Diseases contains a substantive list of definitions and key terms.

B. An abbreviated list of definitions is provided below.

1. Aerosol Transmissible Disease (ATD) or Aerosol Transmissible Pathogen (ATP)

   A disease or pathogen for which droplet or airborne precautions are required, as listed in Appendix A of the ATD standard.

2. Aerosol Transmissible Pathogen -- Laboratory (ATP-L)
   A pathogen that meets one of the following criteria: (1) the pathogen appears on the list in Appendix D, (2) the Biosafety in Microbiological and Biomedical Laboratories (BMBL) recommends biosafety level 3 or above for the pathogen, (3) the biological safety officer recommends biosafety level 3 or above for the pathogen, or (4) the pathogen is a novel or unknown pathogen.

3. Airborne Infection Isolation (AII)
   Infection control procedures as described in Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care 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.

4. Exposure Incident
   An event in which all of the following have occurred: (1) An employee has been exposed to an individual who is a case or suspected case of a reportable ATD, or to a work area or to equipment that is reasonably expected to contain ATPs associated with a reportable ATD; and (2) The exposure occurred without the benefit of applicable exposure controls required by this section, and (3) It reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation.

5. Exposure Incident (laboratory)
   A significant exposure to an aerosol containing an ATP-L, without the benefit of applicable exposure control measures required by this section.

6. High Hazard Procedures
   Procedures performed on a person who is a case or suspected case of an aerosol transmissible disease or on a specimen suspected of containing an ATP-L, in which the potential for being exposed to aerosol transmissible pathogens is increased due to the reasonably anticipated generation of aerosolized pathogens. Such procedures include, but are not limited to, sputum induction, bronchoscopy, aerosolized administration of pentamidine or other medications, and pulmonary function testing. High Hazard Procedures also include, but are not limited to, autopsy, clinical, surgical and laboratory procedures that may aerosolize pathogens.

7. Novel or Unknown ATP
   A pathogen capable of causing serious human disease meeting the following criteria:

a. There is credible evidence that the pathogen is transmissible to humans by aerosols; and
b. The disease agent is:

i. A newly recognized pathogen, or
ii. A newly recognized variant of a known pathogen and there is reason to believe that the variant differs significantly from the known pathogen in virulence or transmissibility, or
iii. A recognized pathogen that has been recently introduced into the human population, or
iv. A not yet identified pathogen.

Note: Variants of the human influenza virus that typically occur from season to season are not considered novel or unknown ATPs if they do not differ significantly in virulence or transmissibility from existing seasonal variants. Pandemic influenza strains that have not been fully characterized are novel pathogens.

8. Occupational Exposure
Exposure from work activity or working conditions that is reasonably anticipated to create an elevated risk of contracting any disease caused by ATPs or ATPs-L if protective measures are not in place. In this context, "elevated" means higher than what is considered ordinary for employees having direct contact with the general public outside of the facilities, service categories and operations listed in subsection (a)(1) of the ATD Standard.

9. Referring employer
Any employer that operates a facility, service, or operation in which there is occupational exposure and which refers AirID cases and suspected cases to other facilities. Referring facilities, services and operations do not provide diagnosis, treatment, transport, housing, isolation or management to persons requiring AII. General acute care hospitals are not referring employers. Law enforcement, corrections, public health, and other operations that provide only non-medical transport for referred cases are considered referring employers if they do not provide diagnosis, treatment, housing, isolation or management of referred cases.

10. Source control measures
The use of procedures, engineering controls, and other devices or materials to minimize the spread of airborne particles and droplets from an individual who has or exhibits signs or symptoms of having an ATD, such as persistent coughing.

11. Suspected case
Either of the following:
(1) A person whom a health care provider believes, after weighing signs, symptoms, and/or laboratory evidence, to probably have a particular disease or condition listed in Appendix A of the ATD standard.

(2) A person who is considered a probable case, or an epidemiologically-linked case, or who has supportive laboratory findings under the most recent communicable disease surveillance case definition established by CDC and published in the Morbidity and Mortality Weekly Report (MMWR) or its supplements as applied to a particular disease or condition listed in Appendix A of the ATD standard.

12. TB conversion
A change from negative to positive as indicated by TB test results, based upon current CDC or CDPH guidelines for interpretation of the TB test.

IV. CONTROL PLAN

A. Employer Requirement

Human Resources and the Plan Administrator Team shall establish, implement, and maintain an effective, written ATD ECP which is specific to the work place or operation(s), and which contains all of the elements in subsection (d)(2) of the ATD standard.

B. Administration of Plan

1. Plan Administrator Team will include the following team members:
   a. The Sheriff or a designee
   b. The Coroner or a designee
   c. The Public Works Director or a designee
   d. The Chief Probation Officer or a designee
   e. The Public Health Director or a designee
   f. The Social Services Director or a designee
   g. The Mental Health Director or a designee

Human Resources is responsible for the annual review and update of the plan with the assistance of the Plan Administrator Team.

2. Schedule and Method of Implementation of All Provisions of the Plan

   a. All new and existing HEP workers will be educated on the components of the ATD Standard Plan and how to access a copy, with additional training completed through the Aerosol Transmissible Disease module found within the Target Safety training program (www.targetsafety.com) offered through Risk Management.

All existing HEP workers will be re-educated annually on the components of the ATD Plan during their annual recertification as determined by their departments.

3. Annual Review
   a. The ECP will be reviewed and revised as appropriate on an annual basis.
   b. The approved ECP, as well as verification of the annual review, will be maintained by Human Resources and the Plan Administrator Team.

4. Accessibility
   a. The ATD ECP is located on the County's webpage and the DHHS Internal webpage. All HEP workers are notified when they begin employment and during their annual recertification, of the location of the ATD ECP and may review the ATD ECP whenever desired.

C. List of Job Classification in Which Employees Have Occupational Exposure

All County classifications have been reviewed for their occupational exposure based on degree of direct client contact, and/or exposure to air potentially contaminated with TB or other ATD. The following list outlines those as HEP.

The classification into exposure categories was determined without consideration of use of Personal Protective Equipment (PPE).

D. Appeals Process

An employee can submit a written appeal to their respective department to have their job classification included in the list of job classifications with higher occupational exposure.

If the employee does not agree with the response from the department, the employee can forward the appeal to Human Resources who will make a final determination of the employee appeal.

County Department	High Exposure Possibility
DHHS	0913 Psychiatric Nurse 0920 Supervising Psychiatric Nurse 0922 Assistant Director of Psychiatric Nursing 0932 Director of Psychiatric Nursing 0914 A/B Psychiatric Technician I/II 0911 A/B Mental Health Worker 0912 Psychiatric Mid-Level Practitioner 0937 Physician/Psychiatrist 0902 Medical Director 0434 Mental Health Cook 0435 Mental Health Cook Aide 0269 Mental Health Maintenance Custodian 0901 Director of Dietary Services 0566 Registered Nurse 0528 Public Health Nurse 0527 Senior Public Health Nurse 0514 Supervising Public Health Nurse 0586 Nurse Practitioner 0587 FNP & 0912 Mid Level) 0508 Director of Public Health Nursing 0570 A/B Medical Office Assistant (positions assigned to PHB Clinic only) 0574 A/B Medical Office Assistant (positions assigned to PHB Clinic only) 0916 Supervising Mental Health Clinician (positions assigned to SV only) 1571 A/B Lab Assistant I/II 0526 A/B PH Microbiologist 0516 PH Lab Manager 0511 A/B Community Health Outreach Worker I/II 0707 Social Worker IV 0725 Social Worker III, (underfill SWIV)) 0907 Mental Health Case Manager 0708 Social Services Aide 0909 Mental Health Clinician 0742 Vocation Assistant (Transport only)
	0626 Administrative Analyst 0166 Administrative Secretary 0415 Community Services Officer 0416 A/B Deputy Sheriff I/II 0100 Elected Official – Sheriff

	0128	Emergency Communications Dispatcher
	0401	Emergency Communications Supervisor
	0407	Evidence Technician
	0177 A/B	Fiscal Assistant I/II
	1148	Fiscal Services Supervisor
	0178 A/B	Legal Office Assistant I/II
	0134	Legal Office Business Manager
	1150	Legal Office Services Supervisor
	1410 A/B	Property Technician I/II
	0127	Senior Emergency Communications Dispatcher
	0168	Senior Legal Office Assistant
	0423	Sheriff's Investigator
	0406	Sheriff's Lieutenant
	0414	Sheriff's Sergeant
	0429	Training Coordinator
	0400	Undersheriff
Juvenile Hall/Regional Facility	0433	Correctional Cook
	0283	Food Services Supervisor
	0482	Juvenile Corrections Facility Manager
	0486 A/B	Juvenile Corrections Officer I/II
	0475	Probation Division Director
	0473 A/B	Probation Officer I/II
	0124	Senior Fiscal Assistant
	0487	Senior Juvenile Corrections Officer
	0469	Senior Probation Officer
	0485	Supervising Juvenile Corrections Officer
Probation	0776	Administrative Services Officer
	0826	Chief Probation Officer
	0134	Legal Office Business Manager
	0178 A/B	Legal Office Assistant I/II
	0143	Legal Office Services Manager
	1144 A/B	Legal Secretary I/II
	0475	Probation Division Director
	0473 A/B	Probation Officer I/II
	1197 A/B	Revenue Recovery Officer I/II
	0168	Senior Legal Office Assistant
	0469	Senior Probation Officer
	1199	Senior Revenue Recovery Officer
	0492	Senior Substance Abuse Counselor
	0470	Supervising Probation Officer

Humboldt County Correctional Facility	0437	Correctional Captain
	0433	Correctional Cook
	0419	Correctional Lieutenant
	0424 A/B	Correctional Officer I/II
	0430	Correctional Program Coordinator
	0420	Correctional Supervisor
	0432	Kitchen and Laundry Supervisor
	0178 A/B	Legal Office Assistant I/II
	0168	Senior Legal Office Assistant
	0422	Sheriff's Compliance Officer
	0421	Senior Correctional Officer
Coroner	0100	Elected Official – Coroner
	0445	Deputy Coroner Public Administrator
	0178 A/B	Legal Office Assistant I/II
Animal Control	1428	Animal Control Officer
	0440 A/B	Animal Shelter/Care Attendant I/II
	0179 A/B	Office Assistant I/II
Building Maintenance	0164	Administrative Secretary
	0278 A/B	Airport Service Worker I/II
	0268	Building Maintenance Custodian
	0427	Correction Work Crew Leader
	0264	Custodial Supervisor
	0200	Deputy Public Works Director – Facility Maintenance
	0251 A/B	Facility Maintenance Mechanic I/II
	0253	Facility Maintenance Manager
	0252	Facility Maintenance Supervisor
	0263	Senior Building Maintenance Custodian
	0268	Building Maintenance Custodian
	0272 A/B	Park Caretaker I/II
	0629	Senior Real Property Agent
	0233	Work Crew Leader
	0276	Custodian
	0266	Laborer

NOTE: If any department determines that any occupation within their department that is not on the published list has occupational exposure, then the department must still comply with the ATD ECP by providing employees in the unlisted occupation with the same training, personal protective equipment, vaccinations and exposure reporting.

If any department determines an employee with an occupation published on the list does not have occupational exposure because that employee's duties do not include occupational exposure, then the ATD ECP does not apply to that employee.

E. List of High Hazard Procedures

1. Sputum collection

   a. A procedure performed on a suspect or confirmed infectious TB case, which can aerosolize body fluids likely to be contaminated with TB bacteria.

2. Resuscitative procedures performed by emergency personnel.

3. Autopsy, laboratory, research, or production procedures performed on tissues known or suspected to be infected with TB, which can aerosolize TB-contaminated fluids.

4. Repairing, replacing or maintaining air systems or equipment that may be anticipated to contain aerosolized M. tuberculosis, or other ATD.

F. List of Assignments or Tasks Requiring Personal Protective Equipment

1. Making home visits to an infectious client.
2. Maintaining/repairing air systems that may be anticipated to contain aerolized M. tuberculosis or other ATDs.
3. Handling materials containing TB and other Aerosol Transmissble Pathogens in the Laboratory.

G. Specific Control Measures

1. Containment
   a. Identification of a symptomatic person - all staff must be proactive in noticing a person who is coughing severely and notify a member of the Plan Administrator Team or Designee, or contact Public Health Branch Communicable Disease Nurse.
   b. Triage

      i. Triage of persons with pulmonary symptoms must be done by a designated licensed staff member.
      ii. A coughing patient is to immediately be masked and placed in a private room with the door closed, or escorted outside to wait for a medical evaluation.
      iii. Prompt medical evaluation of persons with symptoms suggestive of TB, or other ATDs, must be done by qualified, licensed health care professionals.

2. Engineering Controls

   a. Effective Ventilation requires:

i. Air exchanges of minimum twelve/hour in exam room

3. Personal Protective Equipment
   a. Appropriate Protective Equipment will be provided to employees at no cost.
   b. Staff must be fit tested, and receive instructions on use and care.
   c. Re-assessment of the need for new fit test to be completed at the department's discretion.

H. Source Control Measures

1. Respiratory Precautions to be used by patient:

- Cover the nose/mouth when coughing or sneezing.
- Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use.
- Hand washing with soap and water or alcohol-based hand rub after having contact with respiratory secretions and contaminated objects or materials.
- The patient must wear a surgical/procedure mask at all times if transport to another facility is necessary.
- Designated staff are responsible for educating patients about appropriate respiratory precautions.

2. Patient Identification/Transfer:

- Designated Public Health Branch staff will be responsible for communicating with other healthcare providers when a patient with a confirmed or suspect ATD requires a referral for care. Staff include: Disease Control and Public Health Nursing.
- The receiving facility must be informed of all suspected or confirmed ATD infections prior to receiving facility acceptance and transfer.
- All transporting personnel (staff, ambulance and air transport personnel) must be informed of all suspected or confirmed aerosol transmissible infections prior to transfer.
- The patient must wear a surgical mask at all times.
- While awaiting transfer, patients with a confirmed or suspected ATD will be asked to wait outside.

3. Medical Services
   a. Medical services for TB and other ATD must be provided for employees with occupational exposure.

      Medical Services for employees for infection with aerosol transmissible pathogen (ATP) and aerosol transmissible pathogen – laboratory (ATP – L) will be provided based on the type of work setting.

      i. Following an exposure incident, employees are encouraged to

contact Company Nurse. Employees may elect not to be evaluated by the Workers' Compensation physician and can be seen by their personal health care provider if employees have a "Designated Physician" from completed and on file with Risk Management. If an employee elects to not seek medical help, Risk Management must be contacted and the employee must complete a declination form.

4. Employee TB Surveillance/Follow-up
   a. Initial Exam

      i. Baseline TB skin test (TST) unless documented previous positive TST, using a two step method, unless documented negative TST in past 12 months.
      ii. Chest x-ray, if TST positive; or documented history of past positive TST.
      iii. Exclusion of employees with suspect pulmonary TB until cleared; or
      iv. Referral for medical evaluation and treatment of latent TB infection for all employees with TST conversion and a normal chest x-ray.

   b. Repeat Exam

      i. Determine frequency of TST testing by assessment. Annual symptom review for all documented convertors.

CATEGORY	FREQUENCY OF TESTING
MINIMAL (III)	Every 24 months – TB testing and control evaluation
LOW (II)	Every 12 months - TB skin testing and control evaluation (includes category I HCWs with direct contact with non-TB patients in other clinic settings).
HIGH (I)	Every 6 months - TST skin testing and control evaluation (HCWs with direct contact with TB patients or laboratory specimens).
CLUSTER*	Two or more TST conversions in one area or a single occupational group working in multiple areas over a 3-month period. If there is a cluster of TST conversions, then HIGH RISK employees in the area will be tested every 3 months with TB skin testing, until conversion rate is reduced to baseline for 2 consecutive 3-month periods.

      ii. Chest x-ray if symptom screen indicates signs and symptoms suggestive of TB.

   c. All required TB skin tests, medical evaluations, and treatment of Latent TB Infection (LTBI) will be:

      i. Made available to the employee at a reasonable time and place;

ii. Performed by a licensed, trained healthcare professional; AND
iii. Made available at no cost to the employee

d. Employee skin test conversion

i. Employees who convert their TB skin test from negative to positive on routine screening will have a symptom screen and be referred for a chest x-ray immediately.
ii. Symptomatic employees, and those who are unable to obtain a chest x-ray reviewed by a radiologist or other medical professional, will be excluded from work until medically cleared.
iii. The Public Health Communicable Disease TB Nurse will interview the employee to determine the possible source of infection.
iv. The Public Health Officer (PHO), Human Resources, and County Personnel will be notified of employees whose chest x-ray is suggestive of active tuberculosis by the Public Health Communicable Disease TB Nurse.

e. Documentation, Data Collection and Evaluations

i. Tuberculin sensitivity skin test results, medical evaluations, and treatment are to be included in the employee medical records. They must be kept for at least the duration of employment plus 30 years.
ii. All TB skin tests for HEP staff must be documented and include: the name of the person tested, the date of the test, the results of the test in millimeters of in duration, and the interpretation of the result. If known, state if patient is immunocompromised. The HEP's HIV status is kept confidential.
iii. All TST converters and diagnosed cases of TB must be entered on the Cal-OSHA 300 Log, (only after consultation with Human Resources), unless it can be demonstrated that conversion or TB case is not work related.
iv. TST conversion rate by work area and/or occupational group will be evaluated annually by Human Resources with technical assistance from the PHB Communicable Disease TB Nurse.

5. Vaccination for Susceptible High Exposure Possibilities Positions (HEPs)

a. All HEPs with occupational exposures to ATD will be offered all vaccine doses listed in Appendix E of this ATD ECP.

b. Recommended vaccinations shall be made available to all employees who have occupational exposure after the employee has received the training required in subsection (c) or (i) and within 20 working days of initial assignment unless:

i. The employee has previously received the recommended vaccination(s) and is not due to receive another vaccination dose; or

ii. The Occupational Health Contractor has determined that the employee is immune in accordance with applicable public health guidelines; or

iii. The vaccine(s) is contraindicated for medical reasons.

c. Employees shall be offered additional vaccinations within 120 days of the issuance of new CDC or CDPH recommendations.

d. Employees cannot be required to participate in a pre-screening program as a prerequisite for receiving a vaccine unless CDC or CDPH guidelines recommend pre-screening prior to administration of the vaccine.

e. If employee initially declines a vaccination but at a later date, while still covered under the standard, decides to accept the vaccination, the employer shall make the vaccination available in accordance with subsection (h)(5)(A) within 20 working days of receiving a written request from the employee.

f. Employees who decline to accept a recommended and offered vaccination must sign the declination statement (see Appendix C1 and C2 at the end of this document – C2 is for seasonal flu vaccine only, and C1 is for all other vaccines).

I. Post Exposure Follow-Up

In the event a HEP is exposed to TB or other ATD in the workplace, Human Resources, Public Health Director and Company Nurse will be notified.

1. The County Health Officer or designee will coordinate the workplace contact investigation (CI) in accordance with standard communicable disease investigative protocols.

2. Specific follow-up will be determined based on the ATD to which the HEP is exposed, following California Department of Public Health's Communicable Disease Guidelines:

3. HEPs and supervisors will complete an Incident Report.

4. HEPs who decline a medical evaluation must sign the notation made on the Incident Form by their Supervisor that states, "employee declined medical evaluation". For Humboldt County DHHS staff, use the form in Appendix F.

5. HEPs may elect to be evaluated by their own health care provider rather than the Occupational Health Contractor per the Worker's Compensation Policy

J. Evaluation of Exposure Incidents

1. The purpose of the evaluation of each exposure is to identify and correct problems with the goal of prevention of recurrence.

2. The supervisor/manager is responsible for ensuring the required paperwork is completed and reviewed to identify the nature of the exposure, whether it was a significant exposure and that the employee was referred for appropriate medical evaluation.

3. Evaluation of the exposure/incident will include a review of utilization of appropriate control measures, including source control measures and personal protective equipment.

4. HEPs failing to adhere to provisions of the ATD ECP or Departmental policies and procedures after additional training will be subject to progressive disciplinary measures.

K. Notification of Employees of Potential Exposure to ATD

1. The Plan Administrators' Team, or their designees, will notify Human Resources of an occupational exposure of any county workers to ATD.

2. Employees will be notified in writing by Human Resources or designee of an occupational exposure to ATD.

L. Notification of Other Employers of Potential Exposure to ATD

1. Public Health Communicable Disease Control Staff will be responsible for notifying other employers of potential employee exposure to ATD, if the patient is diagnosed after being seen at a clinic, M.D. office or discharged from a health care facility.

M. Maintaining Adequate Supply PPE

1. Appropriate PPE (including gloves, eye protection, surgical masks and respirators) will be maintained by each Public Health Clinic, Emergency Preparedness Staff, Communicable Disease Control Staff, Public Health Nursing, and other departments, who provide staff for surge response for ATD outbreaks or other public health emergencies.

2. In the event there is a shortage of N-95 respirators, due to a pandemic, current CDC/CDPH guidance for re-use of single use respirators will be

provided.

N. Initial and Annual Training

1. Human Resources will help facilitate ATD training and will utilize the current "Target Safety" on-line educational system as a means of training and documenting skill and understanding by the employee.

2. All existing and new health workers will be educated on the components of the ATD Exposure Control Plan and on how to access a copy of the plan, at the time of initial assignment of tasks where occupational exposure may take place and at least annually thereafter.

3. All existing HEPs will be educated on the components of the ATD Plan, on their date of annual recertification and when new information is required on ATDs.

4. Training will include:

- A general explanation of ATDs including the signs and symptoms that require further medical evaluation;
- An explanation of what constitutes a workplace exposure and how to report it.
- Screening methods and criteria for persons who require referral;
- Information on vaccines Risk Management will make available, including the seasonal - influenza vaccine. For each vaccine, this information shall include the efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
- An opportunity for interactive questions and answers with a person who is knowledgeable in the subject matter as it relates to the workplace that the training addresses and who is also knowledgeable in the employer's infection control procedures. This would include the Plan Administrators' Team Member for that particular workplace, the occupational health contractor or Public Health Branch Communicable Disease Public Health Nurses.

O. Documentation of Training

1. Documentation of training shall be maintained for at least three years.

2. Documentation shall include:
   i. Employee's name
   ii. Employee identification
   iii. Training dates
   iv. Content of the training

3. The documentation of individual employee training will be kept in the employee's Target Safety training record.

P. Active Involvement of Employees – Plan Review

1. Each supervisor/manager is responsible for reviewing the ATD ECP to identify changes that are required for in job classifications and/or required tasks.

2. Each supervisor/manager will solicit input from staff under their supervision.

3. Exposure incidents will be reviewed by Human Resources, Plan Administrator Team and the Occupational Health Contractor. Recommendations will be made for corrective action.

Q. Surge Procedures

1. All County employees are designated as emergency disaster workers. In particular, PHB and Sheriff employees are expected to respond in the event of a Public Health emergency. The Rapid Response Team comprised of key PHB responders may be convened in the event of a disease outbreak or other Public Health emergency.

2. Employees receive training in Standard Emergency Management System/National Incident Management System (SEMS/NIMS) and core Public Health competencies at level I, II or III according to their job responsibilities. Training and exercises are coordinated by Public Health Emergency Preparedness and Response Program (PHERP).

3. HEPs who perform high hazard procedures are trained and fit-tested with N-95 respirators.

4. Surge fit-testing can be performed by trained Risk Management Staff, Communicable Disease Nurses and Public Health Nursing staff, in addition to Emergency Preparedness staff.

5. County entities responsible in surge capacity shall maintain an emergency notification system, with key staff notified via the California Health Alert Network (CAHAN).

6. Specific procedures for stockpiling and accessing respiratory and personal protective equipment are found in the PHB Emergency Response Plan and the Strategic National Stockpile (SNS) Plan which are maintained by PHB's Emergency Preparedness Staff. Respiratory Personal Protective Equipment is also maintained by Communicable Disease Surveillance and Public Health Nursing

7. The Public Health laboratory maintains PPE as delineated in their Biosafety Plan.

R. Specific Requirements for Laboratories

1. The ATD Standard requires lab employers to use available and reasonable engineering controls and work practice controls to limit exposure and to provide PPE and respirators when that equipment is necessary to control exposures.

2. The Public Health Laboratory is required to develop, implement and annually review a written Biosafety Plan (BSP) that includes the following:

   - Safe handling procedures and list of prohibited practices.
   - Engineering controls, including containment facilities such as biosafety cabinets.
   - Procedures requiring the use of PPE and/or respirators.
   - Effective decontamination/disinfection procedures.
   - A requirement that all incoming materials containing ATPs-L be treated as containing the virulent or wild-type pathogen, until proven otherwise.
   - Inspection procedures to be performed annually.
   - Emergency procedures for uncontrolled releases within the lab & untreated releases outside the lab, including reporting incidents to the local health officer.

3. Appendix D contains a list of agents that, when reasonably anticipated to be present, requires a laboratory to comply with Section 5199 of the Aerosol Transmissible Disease law.

V. RESPIRATORY PROTECTION PROGRAM

A. Work Assignments

HEPs shall not be assigned to work areas or tasks that require respirator use unless they have been medically determined to be physically able to perform the task wearing the equipment.

B. Respiratory Protection Requirements:

1. Making home visits or interacting with a new TB-5 or TB-3 Pulmonary or Laryngeal TB patient who is potentially infectious, in an enclosed area with inadequate ventilation.

2. Repairing, replacing or maintaining air systems or equipment that may be anticipated to contain aerosolized *M. tuberculosis,* or other aerosol transmissible diseases.

3. When providing care to patients suspected or confirmed to have TB, SARS, avian influenza or other aerosol transmissible disease.

C. Employee Training

The training must be comprehensive, understandable, and recur annually and more often if necessary. This subsection also requires the employer to provide the basic information on respirators in Appendix D of the ATD standard to employees who wear respirators when not required by this section or by the employers to do so.

1. Employees must demonstrate knowledge of:
   - Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
   - What the limitations and capabilities of the respirator are.
   - How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
   - How to inspect, put on and remove, use, and check the seals of the respirator.
   - What the procedures are for maintenance and storage of the respirator.
   - How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
   - The general requirements of this section.

2. The training shall be conducted in a manner that is understandable to the employee.

3. Training will be provided prior to requiring the employee to use a respirator in the workplace.

4. Retraining shall be administered annually, and when the following situations occur:

   a. Changes in the workplace or the type of respirator renders previous training obsolete.
   b. Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.
   c. Any other situation arises in which retraining appears necessary to ensure safe respirator use.

D. Respiratory Protection Program Evaluation

1. Evaluations of the workplace will be conducted as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

2. Employees required to use respirators will be consulted to assess their views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

a. Respirator fit (including the ability to use the respirator without interfering with effective workplace performance).
b. Appropriate respirator selection for the hazards to which the employee is exposed.
c. Proper respirator use under the workplace conditions the employee encounters.
d. Proper respirator maintenance.

E. Recordkeeping

1. Fit testing

a. A record will be maintained of the qualitative and quantitative fit tests administered to an employee including:

- The name or identification of the employee tested
- Type of fit test performed
- Specific make, model, style, and size of respirator tested
- Date of test
- The pass/fail results for Qualitative Fit Test (QLFTs) or the fit factor and strip chart recording or other recording of the test results for Quantitative Fit Test (QNFTs).

b. Records and respirator evaluation forms will be maintained in the Supervisor's working personnel file.

2. Written materials required to be under this subsection shall be made available upon request to affected employees for examination and copying.

VI. RESPIRATOR MASK PROCEDURES

A. Education and Training

All HEPs performing duties described in section IV. D. will be trained in the proper use of National Institute for Occupational Health and Safety (NIOHS) N95 respirators and their limitations at the time of hire, during their annual performance evaluation, and when the HEPs physical condition warrants it (i.e., weight loss or gain of 10% of body mass, dentures, facial disfigurement).

B. Factors that will Affect Respirator Leakage are:

- Incorrect respirator size
- Beard growth on wearer
- Failure to use both head straps
- Incorrect positioning on the wearer's face
- Incorrect head strap tension
- Improper respirator maintenance

- Respirator damage
- Significant weight loss or gain, over 10% body weight
- Facial deformities or scar

C. Fit Testing

The HEP staff member must do a fit check each time the respirator is worn. This may be done by cupping hands over the respirator and gently exhaling. Air escaping from the seal indicates an improper fit. The HEP staff member will reposition the respirator until the fit is secure.

D. HEPs who Cannot be Fit-Tested with a N-95 Respirator

HEPs who cannot be fit tested with the N95 respirator and are exposed to suspected active tuberculosis or other aerosol transmissible diseases while performing their job will be instructed on the use of the Powered Air-Purifying respirators (PAPR) and receive education and training pertaining to that respirator, with annual review. These HEPs may be individuals who:

- Have facial hair that interferes with a correct fit,
- Have facial scars or deformities,
- Are not saccharin sensitive,
- Are allergic to N95 respirator material,
- Have temple pieces on glasses that interfere with the seal.

A hood will be given to each of these HEPs. These hoods are reusable until integrity is compromised. They must be cleaned at the end of each shift, and stored in a clean area. PAPRs and battery chargers will be assigned to each work area depending on how many HEPs are required to wear them.

E. Powered Air Purifying Respirator Requirement

Effective October 1, 2011, employees unable to use N-95 kits will be provided with a powered air purifying respirator (PAPR) with a High Efficiency Particulate Air (HEPA) filter(s), or a respirator providing equivalent or greater protection, when performing high hazard procedures on AirID cases or suspected cases, unless the employer determines that this use would interfere with the successful performance of the required task or tasks. This determination shall be documented in accordance with the ATD Plan and shall be reviewed by the employer and employees at least annually in accordance with subsection (d)(3).

Appendix B provides an Alternate Respirator Medical Evaluation Questionnaire to be completed by the employee and t he Occupational Health Contractor through a referral from Risk Management when appropriate.

F. Respirator Requirement for Laboratories

Respirators used in laboratory operations to protect against infectious aerosols shall be selected in accordance with the risk assessment and biosafety plan, in accordance with subsection (f).

G. Multiple Use Respirators

1. The respirator may be worn until:

   a. The respirators integrity is compromised;
   b. It has been splashed or contaminated by fluid; or is soiled; AND/OR
   c. The HEP staff member has difficulty breathing.

2. The multiple use respirator may be stored in a paper bag (if plastic is used, HEP must vent with holes) between uses.

3. HEPs will replace their re-use respirator by notifying their supervisor or designee and receiving a replacement respirator from the authorized person in their work area. A supply of respirators will be kept within the Public Health Emergency Preparedness Unit and Risk Management office.

H. Single Use Respirators

1. Are to be used once and discarded.

2. Each employee is to be provided with an ample supply of single use respirators.

3. Reuse of single use respirator due to a pandemic or other public health emergency will be based on current CDPH/CDC guidance.

VII. RESPIRATOR FIT TESTING

An assessment of the need for respirator re-fit testing will be done at the time of the HEP staff's annual evaluation. If there are factors that may change the fit of the respirator, the employee will be retested. Fit testing may be done by Risk Management Staff trained to do fit-testing.

Procedure

A. No food or drink, except water, for 30 minutes prior to fit test. No one with facial hair interfering with the respirator will be fit tested.

B. Show respirator fitting instruction video. **DO NOT** allow HEPs to open the packages until they have been assisted in picking the correct size.

C. Demonstrate proper procedure for fit checking and removal. Assist HEP with picking the correct size.

D. HEP must do a return demonstration of proper donning, fit checking, and removal.

E. Fit Test Procedure

1. Fill nebulizers below "O" ring; use threshold solution first to determine if the HEP can taste the saccharin. Start with five squirts to maximum of 20. If unable to taste the saccharin have the HEP rinse mouth with water. If still unable to taste the saccharin, the HCW may have to be retested with a bitter solution or wear PAPR.

2. Have HEP put respirator on, place hood over head, and have HCW close eyes. Using Qualitative solution squirt five times into hood.

a.	Head stationary - breathe normal	30 seconds - 1 minute
b.	Head stationary - deep breathe	30 seconds - 1 minute
c.	Head turning side-to-side	30 seconds - 1 minute
d.	Head moving up and down	30 seconds - 1 minute
e.	Have HEP speak and repeatedly open and close mouth.	

3. After speaking and repeatedly opening and closing mouth, have the HEP indicate whether he/she can taste or smell saccharin.

4. If the HEP can taste saccharin at any time during the test, have the HEP remove the mask and drink water. Reposition the respirator and start the test over.

5. If the HEP passes the test, complete the Respiratory Fit Testing Report and the Assignment Form, and the Respiratory ID Card for the HEP. All "Fit Test Reports" are kept by the Occupational Health Nurse. HEPs retain the ID card to present when requesting replacement of their respirator.

This concludes County of Humboldt's Aerosol Transmissible Diseases Exposure Control Plan.

Appendix A – Aerosol Transmissible Diseases/Pathogens (Mandatory)

This appendix contains a list of diseases and pathogens which are to be considered aerosol transmissible pathogens or diseases for the purpose of Section 5199. Employers are required to provide the protections required by Section 5199 according to whether the disease or pathogen requires airborne infection isolation or droplet precautions as indicated by the two lists below.

Diseases/Pathogens Requiring Airborne Infection Isolation

Aerosolizable spore-containing powder or other substance that is capable of causing serious human disease, e.g.
Anthrax/*Bacillus anthracis*
Avian influenza/Avian influenza A viruses (strains capable of causing serious disease in humans)
Varicella disease (chickenpox, shingles)/Varicella zoster and Herpes zoster viruses, disseminated disease in any patient. Localized disease in immunocompromised patient until disseminated infection ruled out
Measles (rubeola)/Measles virus
Monkeypox/Monkeypox virus
Novel or unknown pathogens
Severe acute respiratory syndrome (SARS)
Smallpox (variola)/Varioloa virus
Tuberculosis (TB)/*Mycobacterium tuberculosis* -- Extrapulmonary, draining lesion; Pulmonary or laryngeal disease, confirmed; Pulmonary or laryngeal disease, suspected
Any other disease for which public health guidelines recommend airborne infection isolation

Diseases/Pathogens Requiring Droplet Precautions

Diphtheria pharyngeal
Epiglottitis, due to *Haemophilus influenzae* type b
Haemophilus influenzae Serotype b (Hib) disease/*Haemophilus influenzae* serotype b -- Infants and children
Influenza, human (typical seasonal variations)/influenza viruses
Meningitis
- *Haemophilus influenzae*, type b known or suspected
- *Neisseria meningitidis* (meningococcal) known or suspected

Meningococcal disease sepsis, pneumonia (see also meningitis)
Mumps (infectious parotitis)/Mumps virus
Mycoplasmal pneumonia
Parvovirus B19 infection (erythema infectiosum)
Pertussis (whooping cough)
Pharyngitis in infants and young children/Adenovirus, Orthomyxoviridae, Epstein-Barr virus, Herpes simplex virus,
Pneumonia
- Adenovirus
- Haemophilus influenzae Serotype b, infants and children
- Meningococcal
- *Mycoplasma, primary atypical*
- *Streptococcus Group A*

Pneumonic plague/*Yersinia pestis*
Rubella virus infection (German measles)/Rubella virus
Severe acute respiratory syndrome (SARS)
Streptococcal disease (group A streptococcus)
- Skin, wound or burn, Major
- Pharyngitis in infants and young children
- Pneumonia
- Scarlet fever in infants and young children
- Serious invasive disease

Viral hemorrhagic fevers due to Lassa, Ebola, Marburg, Crimean-Congo fever viruses (airborne infection isolation and respirator use may be required for aerosol-generating procedures)
Any other disease for which public health guidelines recommend droplet precautions

Appendix B – Alternate Respirator Medical Evaluation Questionnaire

To the Licensed Care Provider: Answers to questions in Section 1, and to question 6 in Section 2 do not require a medical examination. Employees must be provided with a confidential means of contacting the health care professional who will review this questionnaire.
To the employee: Can you read and understand this questionnaire (circle one): Yes No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Section 1. The following information must be provided by every employee who has been selected to use any type of respirator (please print).

Today's date: _____

Name: _____ **Job Title**: _____

Your age (to nearest year): _____ **Sex** (circle one): Male Female

Height: _____ ft. _____ in. **Weight**: _____ lbs.

Phone number where you can be reached (include the Area Code):

(____) _____

The best time to phone you at this number: _____

Has your employer told you how to contact the health care professional who will review this questionnaire (circle one) : Yes No
Check the type of respirator you will use (you can check more than one category):
N, R, or Po disposable respirator (filter-mask, non-cartridge type only).
Other type (ex,o half- or full-facepiece type, PAPR, supplied-air, SCBA**). (fill in type here)**

_____
Have you worn a respirator (circle one): Yes No
If "yes," what type(s):

_____

Section 2. Questions 1 through 6 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Have you ever had any of the following conditions?
Allergic reactions that interfere with

			What did you react to?
your breathing:	Yes	No	_____
Claustrophobia (fear of closed-in	Yes	No	

places)

2. Do you currently have any of the following symptoms of pulmonary or lung illness?

Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes No

Have to stop for breath when walking at your own pace on level ground: Yes No

Shortness of breath that interferes with your job: Yes No

Any other symptoms that you think may be related to lung problems: Yes No

Coughing that produces phlegm (thick sputum): Yes No

Coughing up blood in the last month: Yes No

Wheezing that interferes with your job: Yes No

Chest pain when you breathe deeply: Yes No

3. Do you currently have any of the following cardiovascular or heart symptoms?

Frequent pain or tightness in your chest: Yes No

Pain or tightness in your chest during physical activity: Yes No

Pain or tightness in your chest that interferes with your job: Yes No

Any other symptoms that you think may be related to heart or circulation problems: Yes No

4. Do you currently take medication for any of the following problems?

Breathing or lung problems: Yes No

Heart trouble: Yes No

Nose, throat or sinuses Yes No

Are your problems under control with these medications? Yes No

5. If you've used a respirator, have you ever had any of the following problems while respirator is being used?

*(If you've never used a respirator, check the following space and go to question 6:)*_____

Skin allergies or rashes: Yes No

Anxiety: Yes No

General weakness or fatigue: Yes No

Any other problem that interferes with your use of a respirator: Yes No

6. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes No

Employee Signature _____ Date _____ PLHCP Signature _____ Date _____

Appendix C1– Vaccination Declination Statement (Mandatory)

The employer shall ensure that employees who decline to accept a recommended vaccination offered by the employer sign and date the following statement as required by subsection (h)(5)(E):

I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring infection with _____ (name of disease or pathogen).

I have been given the opportunity to be vaccinated against this disease or pathogen at no charge to me. However, I decline this vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring _____, a serious disease.

If in the future I continue to have occupational exposure to aerosol transmissible diseases and want to be vaccinated, I can receive the vaccination at no charge to me.

Employee Signature	Date

Supervisor Signature	Date

Appendix C2 –

Seasonal Influenza Vaccination Declination Statement (Mandatory)

The employer shall ensure that employees who decline to accept the seasonal influenza vaccination offered by the employer sign and date the following statement as required by subsection (h)(10):

I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring seasonal influenza. I have been given the opportunity to be vaccinated against this infection at no charge to me. However, I decline this vaccination at this time. I understand that by declining this vaccine, I continue to be at increased risk of acquiring influenza. If, during the season for which the CDC recommends administration of the influenza vaccine, I continue to have occupational exposure to aerosol transmissible diseases and want to be vaccinated, I can receive the vaccination at no charge to me.

_____ _____

Employee Signature Date

_____ _____

Supervisor Signature Date

Appendix D: Aerosol Transmissible Pathogens – Laboratory (Mandatory)

This appendix contains a list of agents that, when reasonably anticipated to be present, require a laboratory to comply with Section 5199 for laboratory operations by performing a risk assessment and establishing a biosafety plan that includes appropriate control measures as identified in the standard.

Adenovirus (in clinical specimens and in cultures or other materials derived from clinical specimens)
Arboviruses, unless identified individually elsewhere in this list (large quantities or high concentrations* of arboviruses for which CDC recommends BSL-2, e.g., dengue virus; potentially infectious clinical materials, infected tissue cultures, animals, or arthropods involving arboviruses for which CDC recommends BSL-3 or higher, e.g., Japanese encephalitis, West Nile virus, Yellow Fever)
Arenaviruses (large quantities or high concentrations of arenaviruses for which CDC recommends BSL-2, e.g., Pichinde virus; potentially infectious clinical materials, infected tissue cultures, animals, or arthropods involving arenaviruses for which CDC recommends BSL-3 or higher, e.g., Flexal virus)
Bacillus anthracis (activities with high potential for aerosol production**, large quantities or high concentrations, screening environmental samples from *b. anthracis* -contaminated locations)
Blastomyces dermatitidis (sporulating mold-form cultures, processing environmental materials known or likely to contain infectious conidia)
Bordetella pertussis (aerosol generation, or large quantities or high concentrations)
Brucella abortus, B. canis, B. "maris", B. melitensis, B. suis (cultures, experimental animal studies, products of conception containing or believed to contain pathogenic *Brucella* spp.)
Burkholderia mallei, B. pseudomallei (potential for aerosol or droplet exposure, handling infected animals, large quantities or high concentrations)
Cercopithecine herpesvirus (see Herpesvirus simiae)
Chlamydia pneumoniae (activities with high potential for droplet or aerosol production, large quantities or high concentrations)
Chlamydia psittaci (activities with high potential for droplet or aerosol production, large quantities or high concentrations, non-avian strains, infected caged birds, necropsy of infected birds and diagnostic examination of tissues or cultures known to contain or be potentially infected with *C. psittaci* strains of avian origin)
Chlamydia trachomatis (activities with high potential for droplet or aerosol production, large quantities or high concentrations, cultures of lymphogranuloma venereum (LGV) serovars, specimens known or likely to contain *C. trachomatis*)
Clostridium botulinum (activities with high potential for aerosol or droplet production, large quantities or high concentrations)
Coccidioides immitis, C. posadasii (sporulating cultures, processing environmental materials known or likely to contain infectious arthroconidia, experimental animal studies involving exposure by the intranasal or pulmonary route)
Corynebacterium diphtheriae
Coxiella burnetti (inoculation, incubation, and harvesting of embryonated eggs or cell cultures; experimental animal studies, animal studies with infected arthropods, necropsy of infected animals, handling infected tissues)
Crimean-Congo haemorrhagic fever virus
Cytomegalovirus, human (viral production, purification, or concentration)
Eastern equine encephalomyelitis virus (EEEV) (clinical materials, infectious cultures, infected animals or arthropods)
Ebola virus
Epstein-Barr virus (viral production, purification, or concentration)
Escherichia coli, shiga toxin-producing only (aerosol generation or high splash potential)
Flexal virus
Francisella tularensis (suspect cultures—including preparatory work for automated identification systems, experimental animal studies, necropsy of infected animals, high concentrations of reduced-virulence strains)
Guanarito virus
Haemophilus influenzae, type b
Hantaviruses (serum or tissue from potentially infected rodents, potentially infected tissues, large quantities or high concentrations, cell cultures, experimental rodent studies)
Helicobacter pylori (homogenizing or vortexing gastric specimens)
Hemorrhagic fever -- specimens from cases thought to be due to dengue or yellow fever viruses or which originate from areas in which communicable hemorrhagic fever are reasonably anticipated to be present
Hendra virus
Hepatitis B, C, and D viruses (activities with high potential for droplet or aerosol generation, large quantities or high concentrations of infectious materials)
Herpes simplex virus 1 and 2
Herpesvirus simiae (B-virus) (consider for any material suspected to contain virus, mandatory for any material known to contain

virus, propagation for diagnosis, cultures)
Histoplasma capsulatum (sporulating mold-form cultures, propagating environmental materials known or likely to contain infectious conidia)
Human herpesviruses 6A, 6B, 7, and 8 (viral production, purification, or concentration)
Influenza virus, non-contemporary human (H2N2) strains, 1918 influenza strain, highly pathogenic avian influenza (HPAI) (large animals infected with 1918 strain and animals infected with HPAI strains in ABSL-3 facilities, loose-housed animals infected with HPAI strains in BSL-3-Ag facilities)
Influenza virus, H5N1 - human, avian
Junin virus
Kyasanur forest disease virus
Lassa fever virus
Legionella pneumophila, other legionella-like agents (aerosol generation, large quantities or high concentrations)
Lymphocytic choriomeningitis virus (LCMV) (field isolates and clinical materials from human cases, activities with high potential for aerosol generation, large quantities or high concentrations, strains lethal to nonhuman primates, infected transplantable tumors, infected hamsters)
Machupo virus
Marburg virus
Measles virus
Monkeypox virus (experimentally or naturally infected animals)
Mumps virus
Mycobacterium tuberculosis complex (M. africanum, M. bovis, M. caprae, M. microti, M. pinnipedii, M. tuberculosis (aerosol-generating activities with clinical specimens, cultures, experimental animal studies with infected nonhuman primates)
Mycobacteria spp. other than those in the *M. tuberculosis* complex and *M. leprae* (aerosol generation)
Mycoplasma pneumoniae
Neisseria gonorrhoeae (large quantities or high concentrations, consider for aerosol or droplet generation)
Neisseria meningitidis (activities with high potential for droplet or aerosol production, large quantities or high concentrations)
Nipah virus
Omsk hemorrhagic fever virus
Parvovirus B19
Prions (bovine spongiform encephalopathy prions, only when supported by a risk assessment)
Rabies virus, and related lyssaviruses (activities with high potential for droplet or aerosol production, large quantities or high concentrations)
Retroviruses, including Human and Simian Immunodeficiency viruses (HIV and SIV) (activities with high potential for aerosol or droplet production, large quantities or high concentrations)
Rickettsia prowazekii, Orientia (Rickettsia) tsutsuagmushi, *R. typhi (R. mooseri),* Spotted Fever Group agents (*R. akari, R. australis, R. conorii, R. japonicum, R. rickettsii,* and *R. siberica*) (known or potentially infectious materials; inoculation, incubation, and harvesting of embryonated eggs or cell cultures; experimental animal studies with infected arthropods)
Rift valley fever virus (RVFV)
Rubella virus
Sabia virus
Salmonella spp. other than *S. typhi* (aerosol generation or high splash potential)
Salmonella typhi (activities with significant potential for aerosol generation, large quantities)
SARS coronavirus (untreated specimens, cell cultures, experimental animal studies)
Shigella spp. (aerosol generation or high splash potential)
Streptococcus spp., group A
Tick-borne encephalitis viruses (Central European tick-borne encephalitis, Far Eastern tick-borne encephalitis, Russian spring and summer encephalitis)
Vaccinia virus
Varicella zoster virus
Variola major virus (Smallpox virus)
Variola minor virus (Alastrim)
Venezuelan equine encephalitis virus (VEEV) (clinical materials, infectious cultures, infected animals or arthropods)
West Nile virus (WNV) (dissection of field-collected dead birds, cultures, experimental animal and vector studies)
Western equine encephalitis virus (WEEV) (clinical materials, infectious cultures, infected animals or arthropods)
Yersinia pestis (antibiotic resistant strains, activities with high potential for droplet or aerosol production, large quantities or high concentrations, infected arthropods, potentially infected animals)

* 'Large quantities or high concentrations' refers to volumes or concentrations considerably in excess of those typically used for identification and typing activities. A risk assessment must be performed to determine if the quantity or concentration to be used carries an increased risk, and would therefore require aerosol control.

** 'activities with high potential for aerosol generation' include centrifugation

Appendix E: Aerosol Transmissible Disease Vaccination Recommendations for Susceptible Health Care Workers (Mandatory)

Vaccine	Schedule
Influenza	One dose annually
Measles	Two doses
Mumps	Two doses
Rubella	One dose
Tetanus, Diptheria, and Acellular Pertussis (Tdap)	One dose, booster as recommended
Varicella-zoster (VZV)	Two doses

Source: California Department of Public Health, Immunization Branch
Immunity should be determined in consultation with *Epidemiology and Prevention of Vaccine-Preventable Diseases.*

Appendix F

SUPERVISOR'S REPORT OF EMPLOYEE INJURY OR ILLNESS

Name of injured: _____

Date of birth: _____ Job title: _____

Date of injury/illness: _____ Time injury/illness occurred: _____ a.m./p.m.

Accident location: _____

Specific injury/illness and part of body affected: _____

_____

Did employee go to a physician/hospital/clinic for treatment: YES_____ NO_____

Does employee anticipate seeing a doctor at a later date: YES _____ NO _____

Name of medical facility: _____

Did employee leave work? _____ Date: _____ Time: _____ a.m./p.m.

Did employee return to work? _____ Date: _____ Time: _____ a.m./p.m.

Describe how accident occurred: _____
_____
_____
_____

Names of witnesses: _____
_____
_____
_____

What steps have been taken to prevent a similar accident?: _____
_____
_____
_____

Supervisor's signature: _____ Date: _____

Employee: _____