

ALPINE COUNTY

COMMUNICABLE DISEASE (CD) EXPOSURE CONTROL PLAN



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Developed by:

Richard O. Johnson, M.D., MPH
Health Officer

Reviewed and approved by:

Nichole Williamson, HHS Director
Sarah Simis, Risk Manager
Paul Washam, Chief, Eastern Alpine Fire
and Rescue Department
Tom Minder, Sheriff, Alpine County

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PURPOSE

Alpine County believes that there are a number of sound, safe, general principles that should be followed when working where communicable disease and potentially infectious materials may be encountered. These principles include:

- It is prudent to minimize to the extent that is feasible, all exposure to blood, Other Potentially Infectious Material (OPIM), and Aerosol Transmissible Pathogens (ATPs).
- Risk of exposure to bloodborne pathogens, OPIM, and ATPs should never be underestimated.
- Each department should institute as many work practice and engineering controls as practical to eliminate or minimize employee exposure to bloodborne pathogens, OPIM, and ATPs.

Alpine County has implemented this CD Exposure Control Plan to comply with Title 8, California Code of Regulations, Section 5193: Bloodborne Pathogens; Section 5199: Aerosol Transmissible Disease; Section 5144: Respiratory Protection; Cal OSHA Tuberculosis Control Enforcement Guidelines and any such subsequent code or regulations aimed at reducing occupational exposure to potentially communicable pathogens.

This plan:

- Outlines and summarizes the requirements of the cited standards.
- Evaluates routine tasks and procedures in the workplace that involves exposure to blood, OPIM, ATPs, identifies workers performing such tasks and uses a variety of methods to reduce risks.
- Establishes field guidelines for prehospital care personnel, outlines engineering and work practice controls, personal protective equipment, housekeeping procedures, and post-exposure evaluations to comply with the standard.
- Communicates hazards to applicable personnel and assists in minimizing the risk of being exposed, contracting and/or spreading communicable disease.
- Establishes guidelines for the management of personnel, who in the line of duty, may be exposed to or contract a communicable disease.
- Informs employees of the risks of occupational exposure to blood/airborne pathogens and aerosol transmissible diseases and how to reduce those risks.

The following are the primary goals of the exposure control plan:

- To prevent or minimize employee occupational exposure to blood, OPIM and aerosol transmissible pathogens.
- To protect personnel from the health hazards associated with bloodborne pathogens, OPIMs and aerosol transmissible pathogens.
- To provide appropriate treatment and counseling, should an employee be exposed to bloodborne pathogens, OPIMs and aerosol transmissible pathogens.

This plan is available on the Alpine County Web site to ensure accessibility to every employee. This plan will also be available to representatives from California and federal OSHA and NIOSH.

POLICY

Alpine County recognizes that communicable disease exposure is an occupational health hazard. Communicable disease transmission is possible during any aspect of emergency responses and other departmental operations. The health and welfare of each member is a joint concern of the employee, the management, and the county. While each employee is ultimately responsible for his or her own health, each department and the county recognizes a responsibility to provide as safe a workplace as possible. The goal of this program is to provide each employee with protection from occupationally acquired communicable disease.

It is the policy of Alpine County:

- Administrative Responsibilities
 - Have an exposure control plan that complies with Cal-OSHA standards that will be reviewed and revised at least annually and whenever necessary to:
 - Reflect new or modified tasks and procedures which affect occupational exposure.
 - Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens, Other Potentially Infectious Materials (OPIM) and aerosol transmissible pathogens.
 - Ensure an effective procedure for identifying currently available engineering controls and selecting such controls.
 - Include new or revised employee positions with occupational exposure.
 - To review and evaluate the exposure incidents which occurred since the previous update; and
 - Review and act on information indicating the plan is deficient in any area.
 - Provide all applicable employees with the necessary training, immunizations, tuberculin testing and Personal Protective Equipment (PPE) necessary for protection from communicable diseases.
 - Provide initial training to all new employees whose position may incur occupational exposure.
 - Provide annual training regarding any updates or modifications to the exposure plan. Training must be offered within 365 days of previous training. Training must be done with an instructor present. (BBP Standard 29CFR 1910.30)
 - Maintain training records for three years. (BBP Standards 29CFR 1910.30)
 - Regard all medical information as strictly confidential. No employee's health information will be released without the written consent of the employee.
 - Prohibit discrimination of any employee for health reasons, including infection and/or seroconversion with HIV/HBV virus.
 - Comply with recommendations made by Cal-OSHA Title 8 Bloodborne Pathogens Standard 5193(a) and the United States Health Service, Title 8 Aerosol Transmissible Disease Standard 5199(a) and the United States Health Service, and Tuberculosis Control Enforcement Guidelines.
- Personnel Responsibilities
 - Follow all guidelines outlined in the Alpine County CD Exposure Control Plan which includes personal protective equipment use, contaminated materials, scheduled cleaning, decontamination, engineering and work practice controls and post exposure management.

- Safely provide fire and rescue, law enforcement, emergency medical services, and other services to the public without regard to known or suspected diagnoses of communicable diseases.
- Regard all patient contacts as potentially infectious. Standard precautions will be observed at all times and will be expanded to include transmission-based precautions when indicated.
- Maintain strict patient confidentiality related to any source patient medical information released, related to post exposure notification.
- Comply with recommendations made by Cal-OSHA Title 8 Bloodborne Pathogens Standard 5193(a), the California Department of Industrial Relations Title 8 Aerosol Transmissible Disease Standard 5199(a), and the United States Public Health Service and Tuberculosis Control Enforcement Guidelines.

DEFINITIONS

AIDS: Acquired Immune Deficiency Syndrome.

AIRBORNE: an aerosol transmissible disease (ATD) or pathogen (ATP) transmitted through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing the disease agent for which PPE is recommended by the CDC or CDPH, or (2) the disease process caused by a novel or unknown pathogen for which there is no evidence to rule out, with reasonable certainty, the possibility that the pathogen is transmissible through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing novel or unknown pathogen. Diseases requiring airborne precautions include, but are not limited to: Measles, COVID-19, Severe Acute Respiratory Syndrome (SARS), influenza, Varicella (chickenpox), and *Mycobacterium tuberculosis*. Airborne precautions apply to patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei. Airborne precautions include Standard Precautions plus use of an N-95 respirator or PAPR.

ANTIBODIES: Proteins produced by the body in response to the presence of a foreign substance/invader (antigen) in the body. Antibodies are specific to the foreign invader. Some antibodies protect the body from re-infection by the same pathogen.

ANTIGEN: A substance foreign to a person's body which stimulates an immune response and the production of antibodies.

ANTIVIRAL: Literally "against the virus;" any drug that can destroy or weaken a virus.

ASYMPTOMATIC: Having an infectious organism within the body but showing no outward symptoms.

ATD: See "Airborne"

ATP: See "Airborne"

BACTERIA: Plural of bacterium. Single-cell microscopic organism which can cause disease. They live on their own in soil, water, organic matter or the bodies of plants and animals.

BIOHAZARD LABEL: Label affixed to containers of regulated waste, refrigerators/freezers, and other containers used to store, transport, or ship blood or other potentially infectious materials. The label must be fluorescent orange-red in color with the biohazard symbol and word biohazard on the lower part of the label.

BLOOD: Human blood, human blood components, and products made from human blood.

BLOODBORNE PATHOGEN: Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include but are not limited to hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

CDC (CENTERS FOR DISEASE CONTROL AND PREVENTION): A branch of the U.S. Department of Health and Human Services. The CDC provides national health and safety guidelines and statistical data on diseases.

CDPH: California Department of Public Health

CASE: Either: (1) A person who has been diagnosed by a health care provider who is lawfully authorized to diagnose, using clinical judgment or laboratory evidence, to have a particular disease or condition. (2) A person who is considered a case of a disease or condition that satisfies the most recent communicable disease surveillance case definitions established by the CDC and published in the Morbidity and Mortality Weekly Report (MMWR) or its supplements.

COMMUNICABLE DISEASE: Communicable diseases are spread from person to person or from animal to person. The spread or transfer can happen through the air, through contact with contaminated surfaces, or through direct contact with blood, feces, or other bodily fluids. A cold is an example of a communicable disease (a cold is the general term given to a viral infection of the upper respiratory tract). If a disease is caused by viruses, bacteria, fungi, or protozoa it's likely, although not always, communicable. Rabies, HIV, hepatitis B or C, influenza, and Ebola are just a few examples of communicable diseases.

CONTACT PRECAUTIONS: Intended to prevent transmission of infectious agents, including epidemiologically important microorganisms, which are spread by direct or indirect contact with the individual or the individual's environment. Contact Precautions also apply where the presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission.

CONTAMINATED: Presence, or the reasonably anticipated presence of blood, or other potentially infectious materials on the surface or in or on an item.

CONTAMINATED LAUNDRY: Laundry which has been soiled with blood or other potentially infectious material or may contain sharps.

DECONTAMINATION: Use of physical or chemical means to remove, inactivate, or destroy bloodborne and airborne pathogens and on a surface or item to the point where they are no longer

capable of transmitting infectious particles and the surface or the item is rendered safe for handling, use, or disposal.

DIAGNOSTIC: The use of scientific methods and skillful practice of diagnosis to identify a condition or disease.

DROPLET PRECAUTIONS: Intended to reduce the risk of transmission of pathogens spread through large particle droplets (>5 mm in size) from the mucous membranes of a susceptible person who has a clinical disease or who is a carrier of the microorganism (e.g., within 6 feet of someone who is coughing). Masking the person with a surgical mask is the first precautionary step to take.

EMERGENCY MEDICAL SERVICES: Medical care provided pursuant to Title 22 Division 9, by employees who are certified EMT/EMT-P personnel to the sick and injured at the scene of an emergency or during transport.

ENGINEERING CONTROLS: Controls (e.g. sharps containers, needleless systems and sharps with engineered sharps injury protection) that isolate or remove communicable disease pathogen hazard from the workplace.

ENGINEERED SHARPS INJURY PROTECTION: either: (1) A physical attribute built into a needle device used for withdrawing fluids, accessing a vein or artery, or administering medications or other fluids, which effectively reduces the risk of an exposure incident by a mechanism such as a barrier creation, blunting encapsulation, withdrawal or other effective mechanisms; or (2) A physical attribute built into any other type of needle device, or into a non-needle sharp, which effectively reduces the risk of an exposure incident.

EXPOSURE INCIDENT:

- Bloodborne: Specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood that results from the performance of an employee's duties.
- OPIM: Specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with other potentially infectious materials that results from the performance of an employee's duties.
- Aerosol Transmissible Disease: An event in which all of the following have occurred:
 - 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
 - The exposure occurred without the benefit of applicable exposure controls required by OSHA ATD standards, and
 - It reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation.

FALSE NEGATIVE: An erroneous test result that indicates no antibodies are present when in fact they are present.

FALSE POSITIVE: An erroneous test result that indicates antibodies are present when in fact there are none.

FIELD OPERATION: An operation conducted by employees that is outside of the employer's fixed establishment, such as paramedic and emergency medical services or transport, law enforcement, home health care, public health or non-medical emergency response or transportation.

GUIDELINE FOR ISOLATION PRECAUTIONS, PREVENTING TRANSMISSION OF INFECTIOUS AGENTS IN HEALTHCARE SETTINGS, Nov 27 2023, CDC: Reference for the sole purpose of establishing requirements for droplet and contact precautions.
<https://www.cdc.gov/hicpac/pdf/isolation/isolation2007.pdf> (Accessed 7/31/2025)

GUIDELINES FOR PREVENTING THE TRANSMISSION OF MYCOBACTERIUM TUBERCULOSIS IN HEALTH-CARE SETTINGS, DECEMBER 2005, CDC: Reference for the sole purpose of establishing requirements for airborne infection isolation.
<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm> (Accessed 7/31/2025)

HANDWASHING FACILITIES: Facility providing an adequate supply of running portable water, soap and single use towels or hot air drying machines.

HBV: Hepatitis B Virus

HCV: Hepatitis C Virus

HEALTH CARE WORKER (HCW): Health care worker is defined as persons working in health care settings who have the potential for exposure to patients and/or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air, and includes first responders (EMS, fire, and law).

HEALTH OFFICER: Health Officer for the local jurisdiction responsible for receiving and/or sending reports of communicable diseases, as defined in Title 17, CCR. Note: Title 17, Section 2500 requires that reports be made to the local health officer for the jurisdiction where the patient resides.

HIGH HAZARD PROCEDURES: Procedures performed on a person who is a case or suspected case of ATD in which the potential for being exposed to an ATP is increased due to the reasonably anticipated generation of aerosolized pathogens. Such procedures include, but are not limited to, laryngoscopy, intubation, suctioning, BVM ventilation, and aerosolized administration of medications.

HIGH RISK BEHAVIOR: A term used to describe certain activities that increase the risk of transmitting or acquiring a blood borne pathogen (e.g., unprotected sex, sharing intravenous needles).

HIV: Human Immunodeficiency Virus (causative agent of AIDS).

IMMUNE RESPONSE: Body's defensive reaction to substances that are interpreted as foreign.

IMMUNE SYSTEM: The body system that protects the body from foreign invaders.

IMMUNOGLOBULIN: A protein produced by the body which acts as an antibody.

INDIVIDUAL IDENTIFIABLE MEDICAL INFORMATION: Medical information that includes or contains any element of personal identifying information, sufficient to allow identification of the individual, such as the person's name, address, e-mail address, telephone number, or social security number, or other information that, alone or in combination with other publicly available information, reveals the individual's identity.

INFECTION: Condition in which the body or a part of it is invaded by a disease-causing agent, which under favorable conditions multiplies and produces effects which are harmful.

INVASIVE PROCEDURES: Diagnostic or surgical procedures that involve the incision or puncture of the skin, or the insertion of an instrument into the body.

INITIAL TREATMENT: Treatment provided at the time of the first contact a health care worker has with a person who is potentially a case or suspected case. Initial treatment does not include high hazard procedures.

LATENT TB INFECTION (LTBI): Infection with *M. tuberculosis* in which inactive bacteria are present in the body. Persons with LTBI but do not have TB disease are asymptomatic and are not contagious to others. They typically react positively to TB tests.

MEDICAL SURVEILLANCE PROGRAM: Formalized means to monitor the health status of personnel who have been exposed or are at risk for contracting a communicable disease. Surveillance lasts for at least one year (and may be for a lifetime) and may include the following: medical history, physical exam, testing/prophylactic treatment for communicable diseases and crisis intervention (employee, coworkers, dependents). Employee medical records are maintained for at least thirty (30) years following employment.

MUCOUS MEMBRANE: A thin sheet of tissue that covers or lines various parts of the body. It secretes mucus and absorbs water, salt and other liquids. It lines the body cavities that open to the outside, such as the mouth and nostrils.

NEEDLE OR "NEEDLE DEVICE": Needle of any type, including, but not limited to, solid and hollow-bore needles.

NEEDLELESS SYSTEM: Device that does not utilize needles for: the collection or withdrawal of body fluids after initial venous or arterial access is established; the administration of medications or fluids; and any other procedure involving the potential for an exposure incident due to percutaneous injuries from contaminated sharps.

NIOSH: Director of the National Institute for Occupational Safety and Health. U.S. Department of Health and Human Services or designee.

NON-MEDICAL TRANSPORT: Transportation by employees, other than health care providers or emergency medical personnel, during which no medical services are reasonably anticipated to be provided.

NOVEL OR UNKNOWN ATP: Pathogen capable of causing serious human disease, meeting the following criteria:

- There is credible evidence that the pathogen is transmissible to humans by aerosols; and the disease agent is:
 - Newly recognized pathogen, or
 - 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
 - A recognized pathogen that has been recently introduced into human population, or
 - 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.

OCCUPATIONAL EXPOSURE:

- Bloodborne: Specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood that results from the performance of an employee's duties.
- OPIM: Specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with other potentially infectious materials that results from the performance of an employee's duties.
- Aerosol Transmissible Disease: An event in which all of the following have occurred:
 - 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
 - The exposure occurred without the benefit of applicable exposure controls required by OSHA ATD standards, and
 - It reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation.

ONE-HAND TECHNIQUE: Procedure wherein the needle of a syringe is capped in a sterile manner. The technique shall require the use of only one hand holding the syringe so that the free hand is not exposed to the uncapped needle.

OPIM: Other Potentially Infectious Material.

- The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva (in dental procedures), any fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response.
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

PARENTERAL CONTACT: Piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

PATHOGEN: A disease-causing organism.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Specialized clothing or equipment worn or used by an employee for protection against a hazard. General work clothes (e.g. uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard, are not considered to be PPE. For an explanation of the levels of PPE:

<https://chemm.hhs.gov/ppe.htm> (Accessed 7/31/2025)

PROPHYLACTIC DRUGS: Medication utilized to prevent illness/disease in individuals when it has been determined that they have been exposed.

REGULATED WASTE: Any of the following:

- Liquid or semi-liquid blood or OPIM
- Contaminated items that are capable of releasing these materials when handled or compressed or caked with dried blood or OPIM
- Contaminated sharps
- Pathological or microbiological wastes containing blood or OPIM

RESPIRATOR: Device, which has met the requirements of 42, CFR Part 84, has been designed to protect the wearer from the inhalation of harmful atmospheres, and has been approved by NIOSH, for the purpose for which it is used.

RESPIRATOR USER: Employee who, in the scope of their current job, may be assigned to tasks which may require the use of a respirator.

SHARP: Object used or encountered that can be reasonably anticipated to penetrate the skin or any other part of the body, and to result in an exposure incident, including, but not limited to, needle devices, lancets, scalpels, broken glass, broken capillary tubes, exposed ends of dental wires and dental knives, drill, and burs.

SHARPS INJURY: Injury caused by a sharp, including, but not limited to: cuts, abrasions, or needlesticks.

SHARPS INJURY LOG: Written or electronic record satisfying the requirements within the OSHA Bloodborne Standard.

SEROCONVERSION: The process by which the blood of a person converts from antibody negative to testing positive for antibodies.

SIGNIFICANT EXPOSURE: Exposure to a source of bloodborne pathogens, OPIM, or ATPs in which circumstances of the exposure make the transmission of a disease sufficiently likely that the employee requires further evaluation by a healthcare provider.

SOURCE CONTROL MEASURES: Use of procedures, engineering controls, and other devices or materials to minimize the spread of airborne particles and droplets from the individual who has or exhibits signs or symptoms of having an ATD, such as persistent coughing.

SOURCE INDIVIDUAL: Individual, living or dead, whose blood, OPIM, airborne particles, or droplets may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

STANDARD PRECAUTIONS: Standard precautions as defined by the CDC are based on the principle that all blood, body fluids, secretions, excretions except sweat, non-intact skin, and mucous membranes may contain transmissible infectious agents. <https://www.cdc.gov/infection-control/hcp/basics/standard-precautions.html> (Accessed 7/31/2025)

SURGE: Rapid expansion beyond normal services to meet increased demand for qualified personnel, medical care, equipment, and public health services in the event of an epidemic, public health emergency, or disaster.

SUSCEPTIBLE PERSON: Person who is at risk of acquiring an infection due to lack of immunity as determined by a healthcare provider in accordance with applicable public health guidelines.

SUSPECTED CASE: Either (1) A person whom a healthcare provider believes, after weighing signs, symptoms, and/or laboratory evidence, to probably have a particular disease or condition (2) A person who is considered a probable case, or 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.

SYMPTOMATIC: Exhibiting symptoms of a particular disease or disorder.

TB CONVERSION: Change from negative to positive as indicated by TB test results, based upon current CDPH guidelines for interpretation of the TB test.

TEST FOR TUBERCULOSIS INFECTION (TB TEST): Any test, including the tuberculin skin test and interferon gamma release assays (IGRAs) which:

- has been approved by the Food and Drug Administration for the purpose of detecting tuberculosis infection, and
- is recommended by the CDC for testing for TB infection in the environment in which it is used, and
- is administered, performed, analyzed, and evaluated in accordance with those approvals and guidelines.

VECTORBORNE: Transmission of a disease-causing organism by an intermediate carrier (vector such as a tick, flea, bat, mouse, or mosquito)

WORK PRACTICE CONTROLS: Controls that reduce the likelihood of exposure by defining the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique and use of patient-handling techniques).

GENERAL PROGRAM MANAGEMENT

RESPONSIBLE PERSONS

In order to effectively implement a Exposure Control Plan, there needs to be a collaborative effort from all personnel. This plan outlines the responsibility of the following personnel.

- Department Head
- Health Officer
- Employee
- Risk Manager

The following section defines the roles of these individuals in carrying out the plan.

Department Head

Responsible for the implementation of the CD Exposure Control Plan. Responsibilities include, but are not limited to:

- Overall oversight of the CD Exposure Control Program.
- Ensuring the implementation of the CD Exposure Control Plan.
- Managing the CD Exposure Control Program by delegating authority and responsibility to appropriate members of the department.
- Work with the Health Officer to conduct an annual review and revise the Exposure Control Plan as indicated.
- Maintaining knowledge of current legal requirements concerning communicable diseases.
- Maintain a current list of employees and job classifications and duties with potential exposure to blood, OPIM, or ATPs within their department.
- Working with department personnel to develop and administer any additional communicable disease related policies and practices needed to support the effective implementation of this plan.
- Periodic review of workplace practices and engineering controls which affect the potential for occupational exposure to bloodborne pathogens or OPIMs.
- Solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls.
- Ensuring adequate supplies of personal protective equipment are maintained.
- Post Exposure Activities:
 - Ensure medical evaluation and treatment for the exposed personnel.
 - Notifying the Health Officer and the Risk Manager that a potential exposure has occurred.
 - If informed by the Health Officer that post-exposure testing is warranted, ensure that the employee is notified and encouraged to obtain the indicated testing.
 - Follow-up on the post exposure procedures and testing.
 - Ensure post exposure information is provided to exposed personnel by the Health Officer
- Ensuring annual medical evaluation is done prior to fit testing.
- Reviewing and developing departmental educational programs to ensure information is up-to-date.
 - Provide or arrange instructor-based annual training including new information on engineering controls, exposure statistics and any current issues.

- Maintain appropriate training documentation.
- Maintaining an up-to-date database of department personnel who are required to receive training.
- Ensure personnel are annually fit tested for NIOSH approved respiratory protection.
- Acting as the department's representative and liaison with OSHA during inspections.

Health Officer

The Health Officer's involvement with the CD Exposure Control Program is as follows:

- Advise and assist as needed in establishing policies and procedures related to communicable disease prevention and exposures.
- Develop or delegate the development and maintenance of the CD Exposure Control Plan.
- Conduct an annual review and revise the CD Exposure Control Plan as indicated.
- Advice regarding necessary vaccinations against communicable disease for department members.
- Medical Questionnaire review prior to fit testing.
- Maintain employee medical records including vaccination history, TB testing, medical questionnaires, and post-exposure documentation
- Post Exposure Activities:
 - Receive and evaluate reports of potential CD exposure.
 - Initiate medical evaluation and treatment for the exposed personnel as indicated.
 - Ensure that the employee is notified and encouraged to obtain the indicated testing.
 - Ensure that any hospital receiving a source patient is notified that an exposure occurred and voluntary testing is requested.
 - Follow-up on the post exposure procedures and testing.
 - Ensure post exposure information is provided to exposed personnel.
 - Ensure a follow-up testing and evaluation plan is created and documented, conveyed, and carried out with the exposed employee.

Employee

As with many of the department's activities, employees have the most important role in our CD Exposure Control Program. Ultimately, the execution of the plan is each department member's role. To fulfill this role each must do the following:

- Know which tasks they perform that have potential for occupational exposure to communicable diseases.
- Attend communicable disease training sessions.
- Plan and carry out all operations in accordance with the department's work practice controls.
- Develop and maintain good personal hygiene habits.
- Know – and follow - current procedures, if a potential occupational exposure occurs. This is especially true as many of the post-exposure procedures are time sensitive with lifechanging implications!

Risk Manager

- Oversee the education and training of county employees and volunteers who have the potential for exposure to blood, OPIM, and ATPs.
- Responsible for the implementation of the CD Exposure Control Plan in coordination with the Department Heads.
- County liaison during OSHA inspections
- Work with employees, department heads, and the Health Officer to review and update the plan as necessary on an annual basis.
- Work with employees, department heads, and the Health Officer to review and update the plan whenever new or modified tasks, procedures, or job descriptions or classifications are changed or implemented which may potentially cause exposure risk.

TASK/POSITION EXPOSURE DETERMINATION

EXPOSURE DETERMINATION

The California Division of Occupational Safety and Health (Cal/OSHA) requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood, Aerosol Transmissible Pathogens (ATP) or Other Potentially Infectious Materials (OPIM).

Occupational exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood, OPIM or ATP that may result from the performance of an employee's duties. Parenteral contact means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions. OPIM includes various contaminated human body fluids, unfixed human tissues or organs (other than skin), and other materials known, or reasonably likely to be infected with Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), or Hepatitis C Virus (HCV) through cells, tissues, blood, organs, culture mediums, or solutions.

The exposure determination is made without regard to the use of personal protective equipment. This review process involves identifying all job classifications, tasks, or procedures in which our employees may have occupational exposure.

- This exposure determination is required to list all job classifications in which employees may be expected to incur occupational exposure, regardless of frequency.

Job Classifications in Which All Employees Have Potential Occupational Exposure	
JOB TITLE	Task/Procedures in These Jobs That Have Occupational Exposure
EMT	Emergency First Aid and Medical Response
Paramedic	Emergency First Aid and Medical Response
Public Health Nurse	Emergency First Aid and Medical Response
Nurse Practitioner	Emergency First Aid and Medical Response
Health Officer	Emergency First Aid and Medical Response
Public safety (fire, law enforcement, probation)	Emergency First Aid and Medical Response Altercations/combative individuals

- In addition, Cal/OSHA requires a listing of job classifications in which some employees may occasionally have occupational exposure to bloodborne pathogens, Aerosol Transmissible Pathogens (ATP) or Other Potentially Infectious Materials (OPIM). These employees do not have responsibility for responding to medical aid with the purpose of rendering emergency medical care. Occasionally, while in the course of their duties, they may come across a medical emergency. In this situation, first-aid may be provided until the arrival of EMTs or Paramedics.

Job Classifications in Which Some Employees Have Potential Occupational Exposure	
JOB TITLE	Task/Procedures in These Jobs That Have Occupational Exposure
All other employees	Emergency First Aid Altercations/combative individuals
Environmental Health	Handling of solid or liquid waste
Maintenance staff	Handling of solid or liquid waste
Volunteers (SAR, volunteer fire)	Emergency First Aid

TASKS AND PROCEDURES WITH POTENTIAL EXPOSURE RISK

Tasks and procedures have been identified as having potential exposure risk of bloodborne, ATP or OPIM include, but are not limited to:

- Provision of emergency medical care to the sick or injured patients (e.g. taking vital signs, stabilizing bone fractures including spinal immobilization, control active bleeding, dressing and bandaging wounds, managing combative patients, child birth, etc.)
- Rescue and extrication victims from a variety of environments (e.g., road accidents, “SAR” incidents, earthquake, structure or wildland fire)
- Responding to hazardous materials emergencies.
- Handling of blood, blood products or body fluids, or objects contaminated with these substances (vomitus, urine, saliva, blood, etc.)
- Phlebotomy or vascular access procedures (e.g. establishing an intravenous or intraosseous line, obtaining a blood sample).
- Deliberate or unintentional contact with needles or syringes
- Delivery of direct client services (e.g., medical examination)
- Contact with mucous membranes or non-intact skin (e.g. wound care, inserting an airway, suctioning, performing CPR, and removing airway obstructions).
- Being in the presence of and providing care to a known or suspected ATP case, with increased caution when performing aerosol generating procedures that may result in increased exposure to airborne, droplet and contact transmission of an ATP, including, but not limited to suctioning, placement of an airway adjunct, providing ventilatory assistance, administering aerosolized medications.
- Transport of ATP case or suspected case.
- Working in a residence where an ATP case or suspected case is known to be present.
- Crime scene investigations
- Coroner investigations
- Detention and transport of subjects, including combative offenders
- Cleaning/processing/handling of work sites, facilities, and grounds, and contaminated work areas, equipment and or linen.
- Routine maintenance and cleanup along state and county roadways
- Handling/disposal of waste (includes sharps, regulated medical waste, and trash).

- Maintenance and repair of apparatus in which potentially infectious materials may be present.
- Handling bodily remains

METHODS OF COMPLIANCE

It is understood that there are several areas that must be addressed in departmental operations and practices, in order to effectively eliminate or reduce exposure to bloodborne pathogens, OPIM and ATP. The following represent the eight primary concerns to provide comprehensive adherence to the standard:

- The use of **CDC Precautions**
 - **Standard Precautions**
 - **Transmission Based Precautions**
 - Contact Precautions
 - Droplet Precautions
 - Airborne Precautions
- Establishing appropriate **Engineering and Work Practice Controls**
- Implementing appropriate **Decontamination**
- Using necessary **Personal Protective Equipment (PPE)**
- Determining **Exposure**
- Implementing appropriate **Pre-employment Testing and Vaccinations**
- **Communication of Hazards to Employees**
- Establishing **Record Keeping of This Standard**

Through strict adherence to Cal/OSHA's Standards in each of these areas, the department is confident that it will eliminate, or reduce the extent of communicable disease exposure of the department's personnel.

Standard Precautions

Since it is impossible to determine the infectious status of all individuals with reasonable accuracy, employees shall assume that all individuals are potential carriers of infectious diseases and universal precautions should be followed.

Standard precautions, as defined by the CDC, are based on the principle that all blood, body fluids, secretions, and excretions may contain transmissible infectious agents. Standard precautions include a group of infection prevention practices that apply to all individuals, regardless of suspected or confirmed infection status, in any setting in which a medical response or emergency first aid is delivered. These include: hand hygiene; use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure; respiratory hygiene/cough etiquette and safe injection practices.

TRANSMISSION-BASED PRECAUTIONS

There are three categories of Transmission-Based Precautions: Contact Precautions, Droplet Precautions, and Airborne Precautions.

Transmission-Based precautions are used when the route(s) of transmission is (are) not completely interrupted using Standard Precautions alone. For some diseases that have multiple routes of transmission (e.g., SARS), more than one Transmission-Based Precautions category may be used. When used either singly or in combination, **they are always used in addition to Standard Precautions.**

Contact Precautions

Contact precautions are intended to prevent transmission of infectious agents which are spread by direct or indirect contact with the individual or the individual's environment. Contact precautions also apply where the presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission.

Contact precautions include wearing a gown and gloves for all interactions that may involve contact with the individual or potentially contaminated areas in the individual's environment.

Droplet Precautions

Droplet precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. These pathogens do not remain infectious over long distances (three to six feet).

Droplet precautions include wearing a mask (a respirator is not necessary) for close contact with an infectious individual. When transporting individuals requiring droplet precautions, the individual should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.

Airborne Precautions

Airborne precautions prevent transmission of infectious agents that remain infectious over long distances when suspended in the air (e.g., rubeola virus (measles), varicella virus [chickenpox], Mycobacterium tuberculosis).

When caring for individuals requiring airborne precautions, wear a fit-tested NIOSH-approved N95 or higher level respirator. Whenever possible, non-immune personnel should not care for individuals with vaccine-preventable airborne diseases (e.g., COVID-19, influenza, measles, chickenpox).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Alpine County recognizes that personnel will sometimes be exposed to communicable diseases and is committed to minimizing that exposure risk. PPE is the “last line of defense” against blood, OPIM, and ATPs. All personnel with an identified exposure risk as outlined in the Task/Position Exposure Determination, will be provided with personal protective gear and receive training on when to use, how to use, and how to dispose of such gear after use. This equipment will be replaced as needed to maintain its effectiveness at no cost to the personnel.

This equipment includes, but is not limited to:

- Gloves
- Safety glasses
- Goggles (hypoallergenic gloves or glove liners and similar alternatives are readily available)

- Face shields/masks
- Mouthpieces
- Resuscitation bags
- N-95 respirators or PAPRs
- Moisture resistant disposable gowns
- One-way CPR barrier shields (pocket masks)

Each Department Head is responsible for ensuring that all work areas in their department have appropriate PPE for their job classifications and tasks or procedures they perform. In addition, the Department Head is responsible for ensuring that all personnel have the appropriate level of training to minimize risks and to utilize the recommended PPE. Any new position or job function will require an evaluation by the Department Head of the need for potential additional training and equipment.

The following safety procedures and information shall be utilized regarding personal protective equipment:

Required Personal Protective Equipment

All emergency response vehicles shall be required to maintain minimum inventories of personal protective equipment listed below:

- Each person assigned to a unit will be responsible to maintain, for their personal use, a minimum of one set of the following:
 - One pair of disposable goggles
 - One N95 NIOSH -approved face mask (fit tested)
 - One P100 NIOSH –approved face mask (fit tested)
 - One disposable gown
 - One pair of disposable gloves
 - Hand sanitizer
- All Alpine County EMS apparatus shall have additional equipment:
 - Two boxes of disposable gloves
 - N95 NIOSH for restock
 - P100 NIOSH for restock
 - Disposable gowns
 - Pediatric and adult ventilation bag
 - Disposable red “infectious waste” plastic bags
 - Antimicrobial hand cleaner
 - Portable sharps container
 - Communicable Disease Kit
- All other emergency response vehicles (Squad or other vehicles) shall maintain personal protective equipment. It shall be the responsibility of the person assigned to the unit to ensure the required items are available.

Respirator Selection

Only respirators approved by the National Institute for Occupational Safety and Health (NIOSH) and OSHA will be selected and used. This approval can be recognized by the NIOSH approval or TC number on the respirator.

Respirator Fit Testing

Public Health will require a medical evaluation of all employees with occupational exposure to aerosol transmissible diseases to determine each employee's ability to use a respirator before the employee is fit tested or required to use a respirator. (See Appendix A for the Respirator Questionnaire which must be filled out and evaluated by the Health Officer prior to fit testing. At the discretion of the Health Officer, further medical evaluation including physical examination and other testing such as cardiac or pulmonary tests may be required.)

Fit tests are conducted to determine that the respirator fits the user adequately and that an adequate face seal, without leakage, can be obtained. Respirators that do not seal do not offer adequate protection. All personnel who wear respirators will be fit-tested prior to initial use and at least annually thereafter or more frequently if there is a change in the status of the wearer (10% weight change, facial scarring, dental change, cosmetic surgery or change in facial hair growth) or if the model or type of respirator changes. If, after passing a fit test, the employee subsequently notifies the department that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator and to be retested for proper fit.

All personnel will be fit-tested with the make, model and size of the respirator that they will actually wear. The method of fit testing shall be in compliance with the manufacturer's recommendation for fit testing. Personnel who wear corrective glasses or other PPE with their respirator should wear them during the fit-test.

Seal Checks before Each Use:

Respirators shall be checked for the proper sealing by the user whenever the respirator is first put on, using the seal check procedure recommended by the manufacturer.

Proper Respirator Use and Disposal

Personnel will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of the selected models. In addition, the respirator shall not be used in a manner for which it was not certified by NIOSH or recommended by the manufacturer.

- Safety glasses or goggles should be worn in a way that doesn't interfere with the seal.
- Prior to donning the respirator, inspect to see if the respirator is damaged, misshapen or soiled. If so, discard the respirator.
- When donning the respirator, determine whether the straps hold the respirator tightly against the face, and if the metal nose clip is in place and functions properly. If not, discard the respirator.
- Personnel will conduct seal checks each time they wear a respirator following the manufacturer's recommended procedures. In general, the seal check involves placing both hands completely over the filtering face piece, inhaling sharply and repositioning the respirator if air leaks are detected between the face and face seal. If a proper seal cannot be achieved, do not enter a contaminated area.
- Personnel should leave a contaminated area if the respirator needs to be changed.
- N-95/P-100 disposable respirators should be stored in a clean, dry area where they won't be crushed or misshapen.

Respirator Training

Training of personnel will be done when respirators are issued and annually thereafter. If a new type of respirator is issued, or conditions affecting respirator use change, additional training in using that respirator will be provided. After completing training, personnel must be able to demonstrate their understanding of the topics covered in the training. Training will include the elements required by the Cal/OSHA Aerosol Transmissible Disease Regulation:

- Why the respirator is necessary - potential hazards and health effects.
- The respirator's capabilities and limitations.
- How improper fit, use or maintenance can make the respirator ineffective.
- How to properly inspect, put on, seal, check use and remove the respirator.
- Where to find the county's written respiratory protection program and the Cal/OSHA regulation.

Use of Personal Protective Equipment

Personal protective equipment shall be made available to all personnel identified in Task/Position Exposure Determination with exposure hazard risk, and the following safety procedures shall be followed governing their usage:

Where a reasonable expectation of blood or body fluid splashes may occur, personnel shall wear goggles or safety glasses, gowns, respirators and/or face masks as indicated by the circumstances of the emergency. These items are provided by the department and are readily accessible and shall be used in all situations where a potential risk for exposure is evident.

In addition, personal protective equipment shall be worn under the following conditions:

- Gloves – The wearing of medical gloves for personnel is mandatory for:
 - all “patient contacts”,
 - whenever equipment/materials is used to work on patients,
 - whenever hand contact is anticipated with infectious materials,
 - or when handling or touching contaminated items or surfaces.Disposable gloves are replaced as soon as practical after contamination, or if they are torn, punctured or otherwise lose their ability to function as an exposure barrier. Disposable single use gloves shall not be washed or decontaminated for reuse.
- Protective clothing (such as gowns and aprons) shall be worn whenever potential exposure to the body is anticipated.
- Masks and eye protection (such as goggles, face shields, etc.) are used whenever splashes or spray may generate droplets containing blood, OPIM, or ATPs.
- NIOSH-Approved N95 Face Mask – In circumstances where an individual has an active productive cough, the use of the N95 face mask is required for use by all personnel attending the individual.
 - In cases of airborne disease transmission, it should be noted that some diseases (i.e., tuberculosis) may be transmitted by particular dust particles which are contaminated by the individual in non-ventilated, confined spaces in addition to direct contact with sputum. These contaminated dust particles may then be disturbed by personnel who are working in the room causing them to become airborne again. This may then allow them to be inhaled by people within the room and potentially contribute to disease transmission over a period of time.
 - Personnel coming in contact with aerosol transmissible diseases are to follow the procedures as outlined in the “Exposure” section.

- Additionally, it is recommended that the individual be moved to an uncontaminated environment (such as the ambulance) or a well-ventilated area for further assessment or treatment.
- If the individual's condition permits, surgical mask (do not use a N95 or P100) may be utilized on the individual.
 - Do not place on individuals who are exhibiting obvious signs of respiratory compromise, escalating anxiety, or passing excreta that may restrict ventilatory ability.
- NIOSH-Approved P100 respirator – as of September 1, 2010, EMS personnel shall wear a fit tested P100 respirator instead of the N95 respirators when performing high hazard procedures on ATP cases or suspected cases. Procedures include:
 - BVM ventilation
 - Suctioning
 - Endotracheal intubation
 - Aerosolized medication administration
 - Transport in a closed vehicle
- Adjunct Devices for airway ventilation: Personnel will utilize all provided airway equipment and devices in the resuscitation of patients. Mouth-to-Mouth or Mouth-to-Tube Resuscitation ventilation without the aid of mechanical or adjunct devices shall not be done.
- To ensure that all PPE remains uncontaminated and is maintained in a condition capable of protecting employees, the Department Head shall be responsible for ensuring that all employees adhere to the following practices:
 - All PPE shall be inspected periodically and shall be repaired/replaced as necessary to maintain its effectiveness.
 - Reusable PPE shall be cleaned, laundered, and decontaminated as needed.
 - Single-use PPE (any PPE that cannot be cleaned or decontaminated) is to be disposed of and replaced prior to the next service call.
 - Personal protective equipment shall be replaced anytime the integrity of the equipment is compromised (i.e., torn, punctured).
 - Personal protective equipment shall only be disposed of in approved containers and as soon as possible upon leaving the scene or work area.

Recommended PPE for Tasks in the Workplace

Procedure	Gloves	Safety Glasses	Surgical Mask	N95 Mask	P100 Mask	Gown/ Turnouts
Any “patient contact”	X					
Light contact with blood or other body fluids. This includes starting IV’s, finger sticks and applying dressings to wounds.	X					
Heavy bleeding or large amounts of other body fluids, including vomiting, childbirth, urine/fecal contamination, etc.	X	x	x			X
Spraying/splattering body fluids or situations when this can be anticipated.	X	x	x			X

Endotracheal intubation, BVM ventilation, suctioning and/or	X	x		x		
Pt. coughing, sneezing, or febrile	X			x		
Known or suspected ATP cases	X	x		x		
Known or suspected ATP cases where high risk procedures are being performed - Endotracheal intubation, BVM ventilation, suctioning and/or administering aerosolized medications	X	x			x	X
Handling solid or liquid waste, deceased victims, or body parts	X					
Handling liquid waste with splash potential	X	x				
Cleaning	X					

ENGINEERING CONTROLS

One of the key aspects of the CD Exposure Control Plan is the use of Engineering Controls to eliminate, and/or minimize, employee exposure to communicable diseases. As a result, employees shall use cleaning and a maintenance technique, along with other equipment, that is designed to prevent contact with blood, OPIMs or droplets or small particles from aerosolized transmissible pathogens.

The department head is responsible for periodically reviewing the tasks and procedures performed in the department's operations to determine if engineering controls need to be implemented, upgraded, or updated.

The following Engineering Controls are to be used.

Sharps Engineering Controls:

- Implementation of “needleless” intravenous supplies and self-sheathing needles.
- Needleless systems shall be used in any procedure involving the potential for an exposure incident for which a needleless system is available as an alternative to the use of needle devices.
- When a needleless system is not used, needles with engineered sharps injury protection shall be used for any procedure involving the potential for an exposure incident. Exceptions include:
 - If not available in the marketplace
 - If a licensed healthcare professional directly involved in a patient's care determines, in the reasonable exercise of clinical judgment, that use of the engineering control will jeopardize the patient's safety or success of a medical procedure involving the patient. The determination shall be documented.
- Prohibited Practices for Sharps
 - Shearing or breaking of contaminated needles and other contaminated sharps
 - Contaminated sharps shall not be bent, recapped, or removed from devices, unless it can be demonstrated that there is no feasible alternative or the action is required by specific medical procedure.
 - Exception: Contaminated sharps may be recapped if the procedure is performed using a one-handed technique, or appropriate other medical device.
 - Sharps contaminated with blood or OPIM shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.
 - Disposable sharps shall not be reused.
 - Broken glassware, which may be contaminated, shall not be picked up directly with hands; it shall be cleaned up using mechanical means, such as a brush and dust pan, tongs or forceps.
 - The contents of sharps containers shall not be accessed.
 - Sharps containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of sharps injury.
- Sharps Containers shall be used for contaminated sharps and must meet the following engineering control measures:
 - Rigid
 - Puncture resistant
 - Leak proof on the sides and bottom
 - Portable, if portability is necessary to ensure easy access by the user
 - Labeled in accordance to Cal/OSHA standards

- Closeable and sealable. When sealed, the container must be leak resistant and incapable of being reopened manually, with and without the use of tools.
- Requirements for Handling Contaminated Sharps.
 - All procedures involving the use of sharps in connection with patient care, such as withdrawing body fluids, accessing a vein or artery, or administering vaccines, medications or fluids, shall be performed using effective patient-handling techniques and other methods designed to minimize the risk of a sharps injury.
 - Immediately, or as soon as possible after use, contaminated sharps shall be placed in containers meeting the requirements above.
 - At all times, during the use of sharps, containers for contaminated sharps shall be:
 - Easily accessible to personnel and located as close as is feasible to areas where sharps are used or can be anticipated (e.g., fire station, patient treatment sites, etc.);
 - Maintained upright throughout use, where feasible; and
 - Replaced as necessary to avoid overfilling.
 - Disposal: When any container of contaminated sharps is moved from the area of use for the purpose of disposal, the container shall be:
 - Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping; and
 - Placed in a secondary container if leakage is possible. The second container shall be:
 - Closable;
 - Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
 - Labeled according to Cal/OSHA standards.

Hand Washing Facilities

Areas to wash hands and/or antiseptic hand cleaners or wipes are provided by the department.

Labels and Signs

Departments shall ensure red biohazard waste bags and sharps containers are labeled with the universal biohazard symbol and the legend “Biohazard.” Any regulated waste, items or containers holding or used to store or transport blood or OPIM, should be placed in these labeled biohazard bags. Additionally, the following items shall have biohazard labels:

- Containers of infectious waste
- Sharps disposal containers
- Other containers used to store or transport blood or OPIMs.

Regulated waste that has been decontaminated and household waste is not required to comply with these labeling requirements.

WORK PRACTICE CONTROLS

In addition to engineering controls, departments need to use several work practice controls to help eliminate or minimize employee exposure to communicable diseases. Department heads shall be

responsible for overseeing the work practice control policies, with the ultimate implementation responsibility resting directly with the employee himself/herself.

The following work practice controls are part of the county's CD Exposure Control Plan. These work practice controls shall be reviewed annually by the Department Head to determine compliance with state and local standards.

The following work practices shall be utilized as indicated:

Hand Washing Work Practices

Hand washing is the single most important way of preventing the spread of infection. Wash hands with soap and water for at least twenty (20) seconds. If soap and water are not available on scene, an antiseptic hand cleanser may be used (rub hands together until dry) but a soap and water wash must be done immediately upon return to quarters/base/office/shop, or upon arrival at the hospital.

Personnel shall wash their hands:

- After removing PPE
- After each patient contact
- After handling potentially infectious materials
- After cleaning or decontaminating equipment

Note: Under no circumstances shall personnel wash hands in kitchen areas after exposure to a possible infectious substance.

Food / Drinks

In order to reduce the possibility of an infectious exposure through ingestion, the following procedures shall apply:

- Eating, drinking, applying cosmetics or lip balm, and handling contact lenses in work areas where there is potential for exposure to bloodborne pathogens or OPIMs is prohibited (includes areas where infectious materials are stored).
- Under no circumstances shall personnel bring contaminated clothing/equipment into food processing or eating areas.
- Storage of infectious substances in refrigerators utilized for food/drinks is prohibited.
- Food and drinks shall not be kept in refrigerators, freezers, on countertops, or in other storage areas where blood or OPIMs may be present.

Contaminated Waste Material and Disposal

Personnel are directed to handle contaminated waste following "standard precautions." The following guidelines shall be observed when handling and/or disposing of contaminated waste:

- Any contaminated disposable equipment or materials shall not be disposed of in regular waste containers.
- All contaminated waste/materials--*except sharps*--from medical responses will be placed in an infectious waste bag (red biohazard bag). All contaminated waste is placed in containers located at the fire stations. These bags must meet the Cal/OSHA standards:
 - Closeable
 - Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
 - Labeled according to Cal/OSHA standards; and

- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
- Where the possibility of leakage exists, waste/materials placed in an infectious waste container shall be "double bagged" and sealed.
- Vehicles used where contaminated waste or materials are generated shall be equipped with portable waste containers; i.e., infectious waste bags.
- Personnel shall make every effort to ensure all items, and equipment used on emergency scenes is properly disposed of. In the event an individual's clothing or other articles need to be transported with him/her to the hospital, and the possibility exists that these materials are contaminated, they are to be placed in a separate infectious waste bag and sealed.
- Personnel shall wear gloves when handling disposable waste containers including, but not limited to, sharps containers and infectious waste bags.
- All infectious waste shall be placed in infectious waste bags and disposed of in the bio-waste containers.
- All infectious waste will be delivered weekly by "authorized personnel" (persons who have received training on the Alpine County CD Exposure Control Plan) to the designated infectious waste collection point (Health Department) to be stored in the fixed facility waste container. It is picked up monthly by an approved infectious waste disposal company (Stericycle).

Handling Contaminated Sharps

The following work practices regarding sharps shall be adhered to:

- All procedures involving the use of sharps in connection with patient care, such as withdrawing body fluids, accessing a vein or artery, intraosseous injections, administering medications or fluids, or any other procedure involving the potential for an exposure incident with a sharps device, shall be performed using effective patient-handling techniques and other methods designed to minimize the risk of a sharps injury.
- Contaminated needles and other contaminated sharps shall not be sheared or purposely broken.
- Contaminated sharps shall not be bent, recapped, or removed from devices.
 - Exception: Contaminated sharps may be recapped if:
 - The procedure is performed using a one-handed technique (see definitions).
- Broken glassware, which may be contaminated, shall not be picked up directly with the hands; it shall be cleaned up using mechanical means, such as a brush and dust pan, tongs or forceps.
- Sharps contaminated with blood or OPIM shall not be stored or processed in a manner that requires employees to reach--by hand--into the containers where these sharps have been placed.
- Immediately, or as soon as possible after use, contaminated sharps shall be placed in an approved contaminated sharps container. At all times during the use of sharps, containers for contaminated sharps shall be:
 - Easily accessible to personnel and located as close as possible to the immediate area where sharps are used, or can be reasonably anticipated to be found.
 - Maintained upright throughout use, where feasible; and
 - Replaced as necessary to avoid overfilling.
- Disposal of Sharps Containers
 - Sharps containers shall be disposed of when three-quarters full. Do not allow the sharps containers to become filled to a level making it difficult to insert a sharp.

- Sharps containers shall not be opened, emptied, reused or cleaned manually or in any other manner which would expose employees to the risk of sharps injury.
- Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping; and
- The contents of sharps containers shall not be accessed.
- Placed in a secondary container if leakage is possible. The second container shall be:
 - Closeable;
 - Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
 - Labeled according to Cal/OSHA standards.
- Sharps containers are to be disposed of in station bio-waste containers.
- Sharps containers will be picked up on the same schedule as infectious waste and transported to the designated infectious waste collection point for proper disposal.

Servicing or Shipping Contaminated Equipment

Equipment which may become contaminated with blood or OPIM shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible, or will interfere with a manufacturer's ability to evaluate failure of the device.

- A readily observable biohazard warning label in accordance Cal/OSHA standards shall be attached to the equipment stating which portions remain contaminated.
- If outside contamination of a primary specimen container occurs, that container is placed in a designated leak-proof container, appropriately labeled, for handling and storage. If the specimen can puncture the primary container, the secondary container must be puncture-resistant as well.
- Equipment which becomes contaminated is examined prior to servicing or shipping and decontaminated as necessary, unless it can be demonstrated that decontamination is not feasible.
- Information concerning all remaining contamination shall be conveyed to all affected employees, the servicing representative, and/or the manufacturer--as appropriate--prior to handling, servicing, or shipping so that appropriate precautions will be taken.

Source Control Measures

- Early identification of potential risk of communicable disease is key in prevention.
- Early identification of potential Aerosol Transmissible Pathogen (ATP):
 - Identification from dispatch. Patients identified of having flu like symptoms shall be communicated to field personnel.
 - Six (6) foot assessment: First responders (EMS, law, fire) will conduct a six (6) foot assessment upon arriving on scene to determine if anyone on scene is at risk of transmitting an ATP.
- Separation: In field emergency response, there are no isolation rooms; the following measures of separation shall be utilized:
 - Surgical mask on patients suspected of having an aerosolized transmissible disease.
 - The Medical Group Supervisor shall determine which personnel are needed for patient care; all other personnel should wait outside where there is adequate ventilation.
- Cough Etiquette
 - “Cover your cough” will be part of first responder communicable disease training.
- Information on those entering the work setting:

- Communication with patients, family and those on scene regarding the needed source control measures and personal protective equipment utilized by first responders shall be done by first responder personnel.

Transporting a Aerosol Transmissible Disease (ATD) Source Patient

The following procedures shall be exercised:

- Activate the non-circulating air conditioning system and exhaust system in the patient compartment to reduce the concentration of airborne particulate.
- Encourage the source case to cover his/her mouth with a tissue prior to coughing or any action that may propagate additional airborne particulate.
- If medically acceptable, ask the source patient to wear a surgical mask.

Miscellaneous Work Practices

The following work practice shall be adhered to:

- All procedures involving blood or OPIMs must be performed with cautious attention to avoid splashing, spraying, spattering or generating airborne droplets of these materials.
- Any contaminated equipment must be examined and decontaminated as necessary prior to servicing and/or shipping (unless it can be demonstrated that decontamination is not feasible). Information concerning the contamination shall be conveyed to all affected employees or equipment representatives prior to handling, servicing, or shipping.
- Consider the use of plasticized disposable blankets for use where excessive body fluids are present.
- Mouth pipetting/suctioning of blood or OPIM is prohibited.

Surge Procedures

- The Alpine County Health Department will maintain procedures for pandemic/surge situations in which PPE will be stockpiled, accessed and procured, and how the Alpine County EMS system will interact with local and regional emergency plans. (See Appendix K)

DECONTAMINATION

It is essential for all personnel to follow decontamination guidelines in order to reduce the communicability of an infectious disease. Personal Protective Equipment (PPE) must be utilized during all phases of decontamination.

Field Decontamination

- A Registered Trauma Scene Management Practitioner (RTSMP) is necessary when a scene requires professional decontamination. RTSMPs are registered with the California Department of Public Health pursuant to CA HSC Section 118321 of the Medical Waste Management Act. Alpine County Environmental Health has a list of approved RTSMPs.
- Although RTSMPs are not required when properly OSHA-trained EMS personnel clean such sites incidentally while performing their duties, RTSMPs are recommended and encouraged when department cleanup and disposal capabilities may not be adequate.
- Only the Environmental Health Director can authorize the use of a RTSMP.

- The Coroner's Office should handle removal of any body parts on-scene. All body tissue that can be removed from the scene should be picked up and placed into a red bio-hazard bag. Human tissue should not be allowed to enter a storm drain system.
- Cleanup/decontamination of potentially infectious bio-waste material on public property will be decontaminated and removed using supplies carried on the responding apparatus. The material will then be placed in a red bio-hazard bag and disposed of as outlined in this plan.
- After sanitizing the site, pressure wash the area using tank water. Engine companies should use a stream and pump pressure in a manner that is consistent with displacing the bio-waste product, but does not expose personnel or surrounding areas. Enough water should be used to return the area to a status that would not appear to be contaminated by the general public.
- Bio-waste poses a minimal threat to the public. Dilution with common water will virtually eliminate any threat, but every effort should be made to only use enough water to accomplish the task. In all cases, attempt to prevent the water from entering the sewer system or storm drain.
- The Medical Group Supervisor, or EMS personnel, shall ensure that nothing such as contaminated bandage material; patient clothing, if contaminated with blood or other bodily fluids; needles; or any such item that may pose a threat to the public, shall be left unattended at the emergency scene.
- Cleanup/decontamination of potentially infectious bio-waste material on private property is the responsibility of the property owner. The property owner should be referred to a RTSMP. The county does not provide recommendations on companies, and the owner should be advised to use a phone directory or the California State web site which lists current RTSMPs.
- Private property owners are allowed to cleanup/decontaminate the affected area themselves as long as the wastes are disposed of properly.
- If the biohazard condition on private property is caused by a law enforcement action, the cleanup may be the responsibility of the law enforcement agency. The decision to contact a RTSMP is the responsibility of the Alpine County Sheriff's Office Watch Commander.

Personnel Decontamination

- Personnel shall promptly wash with an antimicrobial skin wash if there was the slightest chance that blood or bodily fluid contact was made.
- Contaminated non-intact skin shall be cleaned using a skin disinfectant and then dressed and bandaged as required. Contaminated mucous membranes shall be flushed using 1000 cc's of normal saline solution over a 15-minute period.
- All drying material that was used for the purpose of hand and skin drying after a possible exposure shall be deemed contaminated and will be placed into a designated container/red plastic bag and taken care of in the proper aforementioned manner.
- Contaminated items such as disposable gloves, gowns, airways, airway adjuncts and any contaminated bandaging material, shall be collected, placed into a red plastic bag and carefully disposed of in a bio-waste container.
- Contaminated work surfaces shall be cleaned and decontaminated with a disinfectant immediately or as soon as feasible when:
 - Surfaces become contaminated.
 - There is a spill of blood or OPIM.
 - Procedures are completed; and
 - At the end of the work shifts if the surface may have become contaminated since the last cleaning.

Equipment, Vehicle and EMS Station Decontamination

- Disposable gloves, goggles and/or safety glasses shall be worn when washing or handling contaminated equipment, clothing or materials.
- As soon as possible, either at the receiving hospital or--at minimum--immediately upon return to quarters/office, etc., wash exposed portions of the apparatus (including passenger spaces and seats when contaminated with contaminated clothing or turnout gear), gurney and all equipment after contamination with blood or other potentially infectious material.
 - After removal of gross contamination with soap and water, use an EPA approved germicidal solution or a 1:10 bleach solution (1/4 cup to 1 hot gallon of water), rinse, and allow to air dry.
 - A spray bottle of the approved germicidal solution must be carried on all apparatus to facilitate expedient cleanup.
- Bleach solution should be prepared only when intending to use, since potency is only effective for 24 hours after mixed.
- DO NOT MIX BLEACH AND AMMONIA!!
- Delicate electronic equipment such as monitor/defibrillators, radios, suction equipment, etc. are to be cleaned and decontaminated following the manufacturer's recommendation and never immersed in water.
- All equipment being disinfected shall be cleaned in designated areas only (such as apparatus floor deep sinks) and where the waste water can enter the sewer system.
- Do not allow contaminated spray and water runoff from cleaning equipment to enter the storm drain system.
- Communicable disease designated brushes, buckets and cleaning material are to be used for communicable disease cleaning only.
- Porous surfaces such as nylon bags, pediatric immobilization devices, etc., should be scrubbed with detergent and hot water, laundered and allowed to air dry.

Contaminated Clothing Decontamination

- Disposable gloves shall be used when coming into contact with contaminated laundry.
- Front-loading, commercial duty extractor clothes washers at designated locations are to be used for laundering contaminated clothing.
- Contaminated laundry shall be placed in the washing machine with laundry detergent and disinfectant. Hot water must be used to help destroy bacteria. Once the laundry has been done, a second cycle, without laundry, should be run using a 1:10 bleach solution. All of this must be accomplished before other laundry can be put in the machine.
- Work uniforms should be removed as soon as reasonably possible after exposure to a contaminated substance.
 - Shall be placed and transported in red plastic bags labeled in accordance with the Cal/OSHA standard.
 - Scrub uniform pants and shirts with detergent and hot water, then launder according to the manufacturer's recommendation and allow to completely air dry.
- Turnout gear should be washed using information sheet (IS) and job sheet (JB) II-B-1 as a guide.
- Non-textile items (boots, leather items, etc.) should be brushed/scrubbed with a mild soap and hot water to remove contaminants.

HOUSEKEEPING

Maintaining facilities, worksites, and equipment in a clean and sanitary condition is an important part of the CD Exposure Control Program. Personnel perform the following practices:

- The worksite is maintained in a clean and sanitary condition.
- Workout equipment and weights should be wiped down and sanitized between users.
- All contaminated equipment and work surfaces shall be cleaned and decontaminated immediately (or as soon as feasible) after medical procedures and/or suspected contact with blood or OPIMs.
- Designated brushes, buckets and cleaning material are to be used for communicable disease cleaning only.
- At the start, and throughout each shift, all protective coverings (such as linens, trashcan liners, etc.) shall be removed and replaced should they appear to be contaminated with blood or OPIM.
- At the start, and throughout each shift, all trash containers, pails, bins, and other receptacles--intended for routine use--shall be inspected, cleaned and decontaminated when found to be contaminated with blood or OPIM.
- Potentially contaminated broken glassware shall not be picked up by hands and is to be picked up by using mechanical means (such as dustpan and brush, tongs, forceps, etc.)
- The appropriate Department Head or designee is responsible for setting up cleaning and decontamination schedule and making sure it is carried out in county facilities and on county equipment.
- *In addition to cleaning apparatus* when contaminated, all apparatus shall be disinfected on a regularly scheduled basis. Special attention shall be paid to frequently used equipment, cabs and patient areas (e.g. handles, seats, steering wheel, headsets, EMS clipboards, etc.).
- The County is also dedicated to carefully handling regulated waste (waste which contains recognizable fluid blood, fluid blood products, containers or equipment containing blood that is fluid). The following procedures are used with all of these type of waste:
 - They are discarded or bagged in containers that are:
 - Closable;
 - Puncture-resistant if the discarded material have the potential to penetrate the container;
 - Leak proof if the potential for fluid spill or leakage exists; Red in color or labeled with the appropriate biohazard warning label.
 - Containers for this regulated waste are placed in appropriate locations in the facility with easy access of employees as close as possible to the sources of waste.
 - Waste containers are maintained upright, routinely replaced and not allowed to overfill.
 - Laundry, which has been soiled with blood or other potentially infectious materials, is handled as little as possible and is not sorted or rinsed where it is used. Contaminated laundry shall be placed and transported in appropriately labeled or color-coded containers. Any employee handling contaminated laundry shall wear protective gloves and other appropriate personal protective equipment.
 - Whenever employees move containers or regulated waste from one area to another, the containers are immediately closed and placed in an appropriate secondary container if leakage is possible from the first container.
 - Each department head is responsible for the collection and handling of their facility's contaminated waste.

INFORMATION AND TRAINING

Each department head shall ensure that training is provided to all employees, whose occupation puts them at risk for exposure to communicable disease, at the time of their initial employment and annually thereafter. Additional training will also be provided when changes such as introduction of new engineering, administrative or work place practice controls, modification of or new tasks affect the employee's occupational exposure or control measures. Training shall be appropriate in content and vocabulary to the educational level of the employees and be offered by an individual who is knowledgeable in the subject matter; and shall provide an opportunity for interactive questions and answers. Training not given in person will provide a mechanism to answer questions within 24 hours of obtaining the information. Additionally, all employees changing jobs or job functions will be given additional training as required by their new assignment. The training shall be offered during working hours at no cost to the employee.

Training Program

The topics covered in the training program will include, but are not limited to, the following:

- The OSHA and Cal/OSHA Standards on Occupational Exposure to Bloodborne Pathogens and Aerosol Transmissible Disease with an explanation of the content.
 - A copy of the OSHA and Cal/OSHA regulatory standards will be available at the training sessions (accessed 7/31/2025):

<https://www.dir.ca.gov/title8/5199.html>

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=12716

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051

- A general explanation of the epidemiology, signs and symptoms of communicable diseases.
- The modes of transmission of communicable diseases.
- An explanation of the CD Exposure Control Plan and the means by which employees can obtain a copy
 - Annual updates will include changes and/or modifications to the exposure control plan.
- The appropriate methods of recognizing tasks and other activities that may involve exposure risks to blood, OPIMs and aerosol transmissible pathogens.
- Use and limitations of methods to prevent and reduce exposure, including standard precautions, engineering controls, work practice controls, and personal protective equipment.
 - Information on the selection and use of PPE including: types available, review of latex/allergy sensitivity issues, proper use, location within the facility, removal, handling, decontamination and disposal.
- Appropriate clean up and/or disposal of contaminated materials.
- Explanation of visual warnings of biohazards within the department, including labels, signs and color-coded containers.
- Hepatitis B vaccination and other vaccinations, information including information on its efficacy, safety, methods of administration, the benefits of being vaccinated and that vaccination is being offered free of charge.
- Information on the TB testing including efficacy, safety, method of administration, benefits, and that TB testing will be offered free of charge.
- Post-exposure management, including:
 - Actions to take and persons to contact in an emergency involving blood, OPIMs or aerosol transmissible pathogens.

- Procedures to follow in the event an occupational exposure, including incident reporting.
- Information on the post-exposure medical evaluation and follow-up counseling the Health Officer provides to exposed employees.
- Information on the surge plan as it pertains to the duties that first responders will perform. This training will include patient isolation procedures; access to supplies needed for the response including personal protective equipment; N95 masks; and P100 masks; decontamination procedures; and coordination with other agencies.
- Review of department annual exposure data
- Employees may seek information regarding bloodborne pathogens, OPIM, or ATPs at any time from the Health Officer.
- All trainings will include time allotted for the opportunity to ask questions.
- In order to document the training process, training records will contain:
 - Dates
 - Contents/summary
 - Names and titles of instructors
 - Names and job titles of employees in attendance
- Training records will be available for examination to employees and their representatives, as well as OSHA and their representatives.
- Training records will be kept for three years from the date of training.

PRE-EMPLOYMENT TESTING AND VACCINATIONS

General

Alpine County shall make available all recommended vaccines and vaccination series to employees who may have or have had occupational exposure, and post exposure follow-up to employees who have had an exposure incident.

The Department Head shall ensure that all medical evaluations and procedures, including vaccines and vaccination series and post-exposure follow-up, including prophylaxis, are:

- Made available at no cost to the employees;
- Made available to the employee at a reasonable time and place;
- Performed by or under the supervision of the Health Officer, or under the supervision of another licensed healthcare professional; and
- Provided according to the recommendations of the CDC.

Refusal for Required Baseline Testing/Vaccinations

Personnel are not required to receive mandated "Baseline Testing" and subsequent "Pre-Exposure Vaccinations." However, it is mandatory that if a person refuses such "testing" and "vaccinations," they must sign a "Declination of Recommended Testing/Vaccination" form (see Appendix D). At any time, personnel may elect to receive the refused "testing" or "vaccinations" and it will be made available to them at no cost. *The most current declination form on file will supersede any previously dated forms.*

Hepatitis B Vaccination

It is recognized that even with adequate adherence to the proper exposure prevention practices, accidental exposures may occur. In order to provide the greatest possible protection from HBV infection to department personnel, vaccinations are available to all department personnel who are at risk for occupational exposure to HBV. All department personnel have received information regarding the HBV vaccination program as part of their bloodborne pathogens training, including discussion of the safety and effectiveness of the vaccine.

The following are the standard operating procedures for the effective management of the HBV vaccination program:

- All medical evaluations and procedures involving the hepatitis B vaccine and vaccination series shall be:
 - Made available at no cost to the employee.
 - Performed by, or under the supervision of, the Health Officer, or other licensed healthcare professional.
 - Provided according to the recommendations of the CDC.
- The hepatitis B vaccination shall be made available to employees within 10 working days of initial assignment to any job classification with potential exposure to bloodborne pathogens, and after the employee has received the required training regarding occupational exposure and the safety and effectiveness of the vaccine, unless:
 - The employee has previously received the complete hepatitis B vaccination series
 - Antibody testing has revealed that the employee is immune, or
 - The vaccine is contraindicated for medical reasons.
- Participation in a pre-screening program shall not be a prerequisite for receiving hepatitis B vaccinations.
- If the employee initially declines the hepatitis B vaccination, but at a later date - while still employed by the county - decides to accept, the vaccination shall then be made available at no cost to the employee.
- All employees who decline the hepatitis B vaccination shall sign the declination statement provided (see Appendix B).
- Repeat series and routine booster doses of hepatitis B vaccine shall be made available as recommended by the CDC.
- Hepatitis B vaccinations, as well as antibody (immunity level) testing, shall be performed in accordance with recommendations of the CDC.
- The Department Head shall ensure that all unvaccinated personnel who have rendered assistance, or in the course of assigned duties been in any situation involving the presence of blood and other potentially infectious materials (regardless of whether an actual exposure incident occurred), are offered the hepatitis B vaccination.

Other Vaccinations

The county will make available to all susceptible employees with occupational exposure all vaccines recommended by the CDC at no cost and at a reasonable time and place. These vaccines will be made available after the employee receives the training required and within 10 working days of the initial assignment. This includes:

- Tetanus Toxoid with Diphtheria Booster Td: Offered routinely every 10 years. Tetanus Toxoid with Diphtheria and Acellular Pertussis (Tdap) booster shall be offered if not previously administered (no minimum interval).
- Measles Mumps and Rubella (MMR): Shall be offered as recommended by the Health Officer.
- Varicella: Shall be offered if no evidence of immunity, as recommended by the Health Officer.
- Seasonal Influenza vaccine: Recommended annually.
- Novel or Pandemic Influenza vaccine (Offered when there is an occurrence and recommended by the CDC and/or CDPH or the Health Officer).
- Any additional vaccine doses within 120 days of the issuance of official new applicable public health guidelines.

(Reference Appendix C – Table 2: Immunizing agents and immunization schedules for health-care personnel, from *Immunization of Health-Care Personnel*, <https://www.cdc.gov/port-health/media/pdfs/CDCs-vaccine-recommendations-for-healthcare-personnel.pdf> (Accessed 7/31/2025))

Exceptions:

- Employee has previously received the recommended vaccination(s) and is not due to receive another vaccination dose; or
- The Health Officer has determined that the employee is immune in accordance with applicable public health guidelines.
- The vaccine(s) is contraindicated for medical reasons.
- The vaccine(s) is not available: The Health Officer shall document efforts made to obtain the vaccine, including when the vaccine is likely to become available.
- If the employee initially declines a vaccination, but at a later date, while still employed by the county, decides to accept the vaccination(s), the county shall make the vaccination (s) available within 10 working days of receiving a written request from the employee.
- The Health Officer shall ensure that employees, who decline to accept a recommended and offered vaccination, sign a declination statement for each declined vaccine.
- If a recommended vaccine is not available, the Health Officer shall maintain a record of the name of the person who determined that the vaccine was not available, the name and affiliation of the person providing the vaccine availability information, and the date of contact. This record shall be retained for three years.

Immunization Record (see Appendix B).

An immunization record detailing the employee's name and identifier, vaccine, administration date, dose, and results of immunity testing when applicable and obtained, shall be made available to all employees who received vaccine(s) provided by the Health Department. Additionally, the Health Department will provide to the employee a Vaccination Information Sheet (VIS) for each vaccination given, and whether an additional vaccination dose is required, and if so, the date the additional vaccination dose should be provided.

Tuberculosis (TB)

The Health Department will conduct medical surveillance for latent tuberculosis infection as required by California statute. For EMS personnel, this shall include pre-placement evaluation, administration and interpretation of the tuberculin skin tests or IGRA upon hire. Every 2 years thereafter a symptom screen will be required. These evaluations shall also be offered at no cost to employees following an exposure to

active TB and more frequently, if applicable public health guidelines or the Health Officer recommends more frequent testing.

Employees with a positive TB skin test or with skin test conversion on repeat testing, or who exhibit signs of TB shall be referred to a licensed healthcare provider knowledgeable about TB evaluation.

The Health Officer shall provide the licensed healthcare provider a copy of the Aerosol Transmissible Disease and Tuberculosis Standards, and the employee's TB test records. If the source of the infection has been determined/known, any available diagnostic test results will be provided including drug susceptibility patterns.

- The Health Officer will request that the licensed healthcare provider, with the employees consent, perform any necessary diagnostic tests and inform the employee about appropriate treatment options.
- The Health Officer will request that the licensed healthcare provider determine if the employee is a TB case or suspected case, and do all of the following, if the employee is a case or suspected case:
 - Inform the employee and the Health Officer in accordance with Title 17.
 - Consult with the Health Officer and inform him/her of any infection control recommendations related to the employee's activity in the workplace.
 - Make a recommendation to the employee regarding precautionary removal due to active disease and provide the employee with a written opinion.
- TB conversions shall be recorded in accordance with California Code of Regulations, Title 8, Section 14300 et seq.
- Unless it is determined that the TB test conversion is not occupational, the Health Officer shall investigate the circumstances of the conversion, and correct any deficiencies found during the investigation.

EXPOSURE

- **STEP 1 – Before anything else is done, administer first aid. Cleanse any wounds with antimicrobial skin wash (or water if not available) and irrigate mucous membranes with 1000 cc's of normal saline solution (or water if not available) ASAP. County personnel who, during the course of their duties, receives a parenteral (needlestick or cut), mucous membrane (splash to eyes or mouth) exposure to blood or body fluids (oral secretions, feces, etc.) or insect bite (mosquito, tick, etc.) or infestation (scabies, lice, etc.) shall be medically evaluated as soon as possible (ASAP), but no later than 24 hours.**
- **STEP 2 – The employee shall immediately contact their Department Head and the Health Officer, ASAP (Richard Johnson, cell: 760-914-0496, 24/7, or through Sheriff's Dispatch if no answer). but no later than 24 hours. The employee will complete the Incident Exposure Reporting Form and provide this information to their Department Head and the Health Officer.**

DETERMINATION OF AN EXPOSURE

What Is An Exposure/Exposure Incident (according to OSHA)?

Regarding communicable disease, "exposure" is the condition of being subjected to a fluid or substance capable of transmitting an infectious agent in a manner that may have a harmful effect.

Bloodborne/OPIM

Following any suspected exposure to blood or (other potentially infectious materials (OPIM), the employee and the Health Officer shall determine if an exposure has occurred by answering the following questions:

- Is the fluid or substance with which the employee had contact one of the following: blood, semen, vaginal secretions, any body fluid or matter containing blood (e.g., vomitus or saliva mixed with obvious blood)?
- Did the fluid or substance enter the employee's body through any of the following sites: needle stick, laceration, open cut or wound, splash or contact with eyes/mouth/nose?

If the answer to Either question is NO

If the answer to either of the above questions is “no” the employee shall receive counseling regarding the risks of exposure and protective/preventative actions.

If the answer to Both questions is YES

If the answer to both of the questions above is “yes,” the employee is considered to have a bloodborne exposure and post exposure management shall be done.

Airborne

Following any suspected exposure to Aerosol Transmissible Pathogen (ATP), the employee and the Health Officer shall determine if an exposure has occurred.

An airborne exposure has occurred if all three (3) of the following conditions have been met:

- Exposure to an individual who is suspected of having a reportable ATD or to equipment that is reasonably expected to contain ATP associated with a reportable ATD; and
- Exposure occurred without the benefit of applicable controls prior to entering contaminated environment (e.g.: personal protective equipment) required by the OSHA and/or ATD standards; and
- It reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation. Considerations:
 - Infectiousness of the exposure source
 - Proximity of the employee to the exposure source
 - Extent to which the employee was protected from the exposure
 - Length of the exposure event.

- **STEP 3: If there is reason to believe that an exposure has occurred, according to the criteria stated above, the following post-exposure and follow-up procedures shall be followed:**

POST-EXPOSURE MANAGEMENT

Focus of Post Exposure Management

The following shall be the immediate focus of post-exposure management for employees who have had an infectious disease exposure:

- Ensuring that the employee receives complete medical consultation and treatment (if required) as expeditiously as possible.
- Investigating the circumstances surrounding the exposure incident.

The Health Officer will ensure all post-exposure medical evaluations, procedures, and treatments are made available at no cost to the employee and are in accordance with the recommendations of CDC/CDPH current at the time of the exposure/evaluation. This examination will be performed by or under the supervision of the Health Officer at the nearest healthcare facility or with his/her own private healthcare provider. All laboratory test(s) will be conducted by an accredited laboratory at no cost to the employee. The Health Officer will maintain records of all exposure incidents. Information regarding each exposure or potential exposure shall be considered confidential and shall only be released to those persons directly involved in the follow-up care of the employee.

These records shall include:

- The date of the exposure.
- The disease or pathogen to which the personnel may have been exposed.
- The names and any other employee identifiers used in the workplace, of personnel who were had an exposure.
- The route(s) of the exposure and the circumstances under which the exposure occurred.
- The result of the source individual's tests. The source individuals test shall be conducted as soon as feasible, and when needed, after consent is obtained.
- The name and job title of the person performing the evaluation.
- The identity of any licensed healthcare provider consulted.
- The date of the evaluation.
- The date of contact and contact information for any other employer who either notified the employer or was notified by the receiving facility regarding the potential employee exposure.
- PPE in use at the time of the exposure.
- Actions taken as a result of the exposure.
 - Employee decontamination
 - Cleanup
 - Notifications made

It is the responsibility of any healthcare provider who is consulted by an exposed employee to report all cases of reportable diseases to the Health Officer in accordance with Title 17. The Health Officer will, to the extent that the information is available, advise all employees who may have had contact with the case or suspected case while performing work activities. The Health Officer will notify employees within a timeframe for the employee to receive effective medical intervention to prevent disease or mitigate the disease course and will also permit the prompt initiation of an investigation to identify exposed employees. In no case, shall the notification be longer than 72 hours after the report to the Health Officer. The notification shall include the date, time, and nature of the potential exposure, and provide any other information that is necessary for the other employer(s) to evaluate the potential exposure of their employees. In this notification, the identity of the source patient shall not be revealed.

Note: Some potential exposures may necessitate temporarily removing an employee from duty or certain duties during the potential period of communicability. This action will be determined by the Health Officer.

Confidentiality

The county recognizes that a significant portion of the information contained in the reports surrounding exposure management and follow-up must be respected as confidential. The privacy rights of the employee shall be protected throughout the process. The following individuals shall oversee the post-exposure evaluation and follow-up procedure:

- Health Officer
- Department Head
- Risk Manager

Post Exposure Reporting and Evaluation

Post-exposure shall be initiated according to the following process:

Employee and Health Officer:

- Administer first aid. Cleanse wound or irrigate mucous membranes as soon as possible.
- In consultation with Health Officer, determine if exposure has occurred.

- Following the determination that an exposure to a communicable disease has occurred (in consultation with the Health Officer), exposed personnel shall:
 - Notify the Department Head of the exposure
 - Complete the following
 - Exposure Report Form (Appendix E)
 - This form must be filled out for all possible exposures to a communicable disease whether treatment is determined or not. This form must be completed by the exposed employee, and submitted to the Health Officer for determination of exposure, and then the Department Head and Risk Management ASAP.
 - Sharps Injury Log (If injury occurred due to a sharp) (Appendix F).
 - This form must be filled out for any exposure incident involving a sharp and forwarded to the Department Head, the Health Officer, and Risk Management.
 - State of California Employer's Report of Occupational Injury (<https://www.dir.ca.gov/dosh/DoshReg/Form5020.pdf>)
 - This is a copy of a form that will be typed by clerical staff. The Department Head and employee must answer as many questions as possible. This form must be completed for all injuries or work related illness whether treated or not.
 - Workers' Compensation Claim Form (DWC 1 Form) (<http://www.dir.ca.gov/dwc/dwcform1.pdf>)
 - The top portion of this form is completed and signed by the injured employee. The Department Head, acting as the employer, completes the bottom section and signs as the employer representative. This form must be completed and signed for all injuries and work-related illness whether treated or not. The employee is then given the pink temporary copy of the form. Forward to HR/Risk Management.

- **Step 4: Medical Surveillance Program (MSP)**

Employee and Health Officer decide if employee desires enrollment in the Medical Surveillance Program based on:

- Test results, if any;
- Likelihood of a disease being transmitted;
- Likelihood of infection in the patient; and
- Other pertinent concerns.

Note: Enrollment in the Medical Surveillance Program is voluntary. Test results are privileged information between employee and the Health Officer and are not reported to the Department Head or Risk Management. Employee will decide in consultation with the Health Officer if enrollment is desired, and Health Officer will notify the Risk Manager of the decision (but not the results of any testing).

Post Exposure Testing/Treatment

Upon determination of a bloodborne exposure by the Health Officer, the Health Officer shall:

- Contact the receiving hospital (where the patient was transported) or the coroner (if the patient died) (Appendix M is a sample hospital blood/body fluid occupational exposure policy). Give them the patient's name and request that source testing be done for bloodborne exposures:
 - HBSAG
 - HCVAB
 - Rapid HIV-1/HIV-2 AB – STAT
 - Syphilis if source is HIV or HCV positive.
 - If results of rapid HIV have not been received in one-hour, call charge nurse to get information.
 - Note: it is not a HIPAA violation to release source patient test results.
 - At this time, the employee shall be made aware of any applicable laws and regulations concerning disclosure of the identity and infectious status of a “Source Patient.”
 - The Health Officer shall make contact with the source patient's health care provider to determine the patient's HIV, HBV and HCV status or ensure testing is done.
- Ensure a medical evaluation of exposed employee is conducted by the Health Officer or other licensed healthcare provider knowledgeable about communicable disease, including baseline testing, vaccination, prophylaxis, and treatment. Depending on the nature of the wound and the circumstances of the exposure, the emergency room physician at the receiving hospital may provide the initial evaluation. The Health Officer can also be consulted as needed. When appropriate, additional referrals to specialty physicians will be made.
- Employees do not need to get baseline labs unless the source patient is positive for HIV, hepatitis B, or hepatitis C. If needed, the Health Officer will order baseline labs once the source patient's lab results are known. If the source person is NOT infected with a bloodborne pathogen, baseline testing or further follow-up of the exposed person is NOT necessary. When needed, a sample order is available and can be provided to the laboratory (See Appendix M [for expired patients]).
 - The options for the exposed employee are:
 - If not vaccinated against Hepatitis B,
 - HIV-1 and HIV-2 ANTIBODY V73.89
 - HEPATITIS C ANTIBODY – HCVAB V82.89
 - HEPATITIS B SURFACE ANTIBODY – HBSAB
 - ALT
 - If vaccinated against Hepatitis B,
 - HIV-1 and HIV-2 ANTIBODY V73.89
 - HEPATITIS C ANTIBODY – HCVAB V82.89
 - ALT
 - For cases of suspected Tuberculosis (TB) exposure: post exposure TB skin test; a chest x-ray screening within one week, if the skin test converts from negative to positive.
- Ensure the Health Officer or other qualified licensed healthcare provider, who provides care to an exposed employee, has the following information:
 - Copies/access of all applicable standards and guidelines.
 - Description of the exposed employee's duties as they relate to the exposure incident.

- Circumstances under which the exposure incident occurred.
 - Any available diagnostic test results, including drug susceptibility pattern or other information relating to the source of exposure that could assist in the medical management of the employee.
 - All of employer's medical records for the employee that are relevant to the management of the employee, including vaccination status, determination of immunity, tuberculin skin test results, and relevant tests for bloodborne pathogens and ATP infections.
- It will be required that any qualified licensed healthcare provider, if consulted, convey to the Health Officer any recommendation for precautionary removal from work via phone and document the recommendation in a written opinion. A copy of this opinion shall be provided to the employee within 15 working days of the completion of all medical evaluations. In all cases, any recommendation will be immediately provided to the Health Officer for final determination.
 - Ensure an analysis of the exposure scenario is done to determine if other employees had significant exposure.
 - Within a timeframe that is reasonable for the specific disease, but in no later than 96 hours of becoming aware of the potential exposure, notify employees who had significant exposures of the date, time, and nature of the exposure.
 - This analysis shall be conducted by an individual knowledgeable in the mechanisms of exposure to bloodborne pathogens, ATPs and other communicable diseases, and shall record the names and any other employee identifier in the workplace of persons included in this analysis.
 - The analysis shall also record the basis for any determination that an employee did not have significant exposure or because the qualified licensed healthcare provider or the Health Officer determined that the employee is immune to the infection in accordance with applicable public health guidelines.
 - The exposure analysis shall be made available to the Health Officer. The name of the person making the determination, and the identity of a qualified licensed healthcare provider consulted in making the determination, shall be recorded.
 - If enrollment in the Medical Surveillance Program is requested, the Risk Manager will schedule an appointment for the employee with the Health Officer.
 - Notify the employee and the Department Head of the appointment.
 - All subsequent appointments will be arranged through the Risk Manager.

Procedure for Unknown Source

- For unknown sources, consider the likelihood of bloodborne pathogen infection among patients in the exposure setting.
- For sources whose infection status remains unknown (e.g., if source patient refuses testing), consider medical diagnoses, clinical symptoms, and history or risk behavior to help determine exposure risk.
- Do not test discarded needles or other sharps instruments for bloodborne pathogens. The reliability and interpretation of findings in such circumstances are unknown, and testing might be hazardous to persons handling the sharp instrument.
- If a death occurs on scene, as determined by BLS or ALS personnel according to the LEMSA protocol, custody of the body belongs to the Coroner, represented on scene by Deputies from the Sheriff's Office. Once the Coroner's Office has granted permission to draw blood, ALS personnel shall draw blood as follows. Specimens shall be transported to a laboratory ASAP by available personnel. Chain of custody shall be rigorously maintained.
 - HCVAB – Hep C antibody, V82.89 serology for hepatitis
 - HBSAG – Hep B surface antigen STAT, V82.89 serology for hepatitis
 - HIV-1/HIV-2 AB – STAT, V73.89 serology for HIV
 - Needed: 3-4 gold top or 2 tiger top tubes on each rig for each draw, so will need 2-3 kits per rig
 - See Appendix M: Standing Orders for the above tests.
 - Costs will be paid for by the Coroner's Office.
 - Goal: identification of any source with positive serology, and evaluation and initiation of treatment of exposed staff within 2 hours of evaluation (for HIV).

Post Exposure Follow-up

- Following the completion of the preliminary steps, the exposed employee shall be provided with the following:
 - Written documentation of the potentially infectious material constituting the exposure.
 - Identification of the source patient. (Unless unavailable or prohibited by law).
 - Counseling regarding the likelihood of transmission, limitations of HIV testing, and the need for follow-up testing and procedures to be followed regardless of the HIV/HBV/HCV status of the source patient.
 - Transmission rates in occupational exposures (positive source) for:
 - HIV: needlesticks 0.3%, mucous membranes 0.09%, non-intact skin – unknown, but estimated to be less than mucous membrane exposure
 - HBV: needlesticks 6-30%
 - HCV: needlesticks 1.8%
 - Source patients who are positive for HIV or status cannot be determined: Employees whose baseline test is negative for HIV on the initial test after exposure will be retested at 6-weeks, 12-weeks, 6-months and 12-months following the exposure to determine whether transmission has occurred.
 - Source patients who test negative for HIV may be in the “window period” of seroconversion. Employees exposed to these patients will receive follow-up care and testing for a period of 6-months.

- All employees who have been exposed to HIV shall be offered post exposure antiviral treatment as recommended by the CDC (See Appendix C). The exposed employee shall be made aware of the likelihood of transmission, the effectiveness and limitations of the prophylaxis treatment, and the safety and side effects of the drugs to be given. In instances where the source patient cannot be identified or tested, decisions regarding post exposure treatment should be based on the exposure risk and whether the source is likely to be a person who is HIV positive.
- Any employee with possible exposure to HIV will be advised of the CDC recommendations for preventing transmission of HIV during this follow-up period.
- Any employee who has not previously received the hepatitis B vaccine, and is exposed to a source patient found to be positive for HBV, shall be advised to receive the vaccination series and a single dose of hepatitis B immune globulin.
- Employees who have previously received the hepatitis B vaccine, and are exposed to a source patient found positive for HBV, shall be tested for HBV immunity and given one booster dose of vaccine and one dose of hepatitis B immune globulin if antibody levels are inadequate.
- If source patient positive for Anti-HCV, employee will be tested for Anti-HCV at baseline and at 4-6 weeks after exposure.

Sharps Injury Log

Any department using Sharps equipment shall establish and maintain a Sharps Injury Log, which is a record of each exposure incident involving a sharp. The exposure incident shall be recorded on the log within fourteen (14) working days of the date the incident is reported to the employer. The information recorded shall be maintained for five-years and include the following information, if known or reasonably available:

- Date and time of the exposure incident.
- Type and brand of sharp that was involved in the exposure incident.
- Job classification of the exposed employee.
- Work area where the exposure incident occurred.
- Procedure that the exposed employee was performing at the time of the incident.
- How the incident occurred.
- Body part involved in the exposure incident.
- If the sharp had engineered sharps injury protection, whether the protective mechanism was activated, and whether the injury occurred before, during or after the protective mechanism was activated.
- If the sharp had no engineered sharps injury protection, the injured employee's opinion as to whether and how such a mechanism could have prevented the injury.
- The employee's opinion about whether any engineering, administrative or work practice control could have prevented the injury.
- Information in the Sharps Injury Log shall be recorded and maintained in such a manner as to protect the confidentiality of the injured or exposed employee.
- The Sharps Injury Log shall be maintained five years from the date the exposure incident occurred.

RECORDKEEPING

Confidentiality Standards

- The employee, Department Head, Health Officer, and Risk Manager will maintain confidentiality at all times regarding information of an exposed employee and/or the source patient.

Health and Safety Code Section 120975 protects the privacy of individuals who are the subject of blood testing for antibodies to the probable causative agent of Acquired Immune Deficiency Syndrome (AIDS). A person who negligently discloses results of an HIV test to a third party that identifies or provides identifying characteristics of the person to whom the test results apply, shall be assessed a civil penalty plus court costs.

- The Ryan White Care Act provides for information sharing with the employer's Health Officer. The Health Officer and the exposed employee will have the right to information regarding the source patient lab results.
- The exposed employee will be given results of the baseline blood work directly.
- Crews involved with an exposure should not discuss the characteristics of the source patient to outside parties as it could put them at risk of divulging confidential source patient information.
- The exposed employee should limit discussion on his or her own lab results and plan of care.

Medical Record Keeping

The Health Officer shall maintain a record for each employee with an occupational exposure. This record shall be kept confidential and not disclosed without the employee's express written consent to any person within or outside the workplace except as required by regulations and statutes. The Health Officer shall maintain these records for at least the duration employment plus 30 years. This record shall include:

- The name and employee number.
- A record of the employee's hepatitis B vaccination status including the dates of all hepatitis B vaccinations, hepatitis B antibody titer results, and any medical records relative to the employee's ability to receive the vaccine.
- A record of TB skin test shall include the date of the test, results of the test in millimeters of induration and interpretation of the result.
- A record of any other vaccinations/immunity testing provided by the Health Department and any signed declination forms.
- A copy of all results of examinations, medical testing, any qualified licensed healthcare provider written opinion and follow-up procedures following an exposure.
- Any copies of medical records must be provided free of charge.

Exposure logs, to include the Sharps injury information, shall be maintained five-years from the date the exposure incident occurred.

Records of the respiratory protection program shall be established and maintained for two-years.

Training Record Keeping

Documentation of training records shall be maintained on both hard copy forms and the department training records. The Department Head shall be responsible for ensuring that current and up-to-date records are maintained for three years. The training records shall be kept in the administrative office of the Department Head and contain the following information:

- Training session dates.
- Contents or summary of the material presented.
- The names and qualifications of persons conducting the training or who is designated to respond to interactive questions.
- The names and job titles of employees attending the training sessions.

All training records are available for examination and copying to all employees, or to their designated representative. Additionally, all employee records shall be made available to representatives of Cal/OSHA upon request.

Availability and Transfer of Records

Departments will comply with requirements involving transfer of employee medical and exposure records. Employee medical records, as it pertains to exposures, immunizations and TB testing, shall be provided upon request of the employee - or anyone having a written consent from the employee – to the Health Officer, to a qualified licensed healthcare provider, or to the Chief of Cal/OSHA and NIOSH for examination, as requested.

AVAILABILITY OF THE COMMUNICABLE DISEASE EXPOSURE CONTROL PLAN TO DEPARTMENT PERSONNEL

To enable department personnel to familiarize themselves with the content of the CD Exposure Control Plan, it shall be available on the county web site. All personnel will be informed of the plan's availability and directed to become familiar with its scope.

APPENDICES

- A. FIT TESTING RESPIRATORY MEDICAL EVALUATION QUESTIONNAIRE
- B. TB POLICY, VACCINE QUESTIONNAIRE. AND MMR, CHICKENPOX, Tdap, INFLUENZA, AND HEPATITIS B DECLINATIONS
- C. RECOMMENDED VACCINATIONS, POST-EXPOSURE PROPHYLAXIS, AND WORK RESTRICTIONS
- D. AUTHORIZATION FOR DISCLOSURE OF RESULTS FOR HIV

EXPOSURE INCIDENT RESPONSE FORMS:

E. EMPLOYEE INCIDENT EXPOSURE REPORTING FORM

F. SHARPS INJURY LOG

G. ALPINE COUNTY POST-EXPOSURE DOCUMENTATION

H. ALPINE COUNTY POST-EXPOSURE FLOW SHEET

- I. ANNUAL PLAN EVALUATION
- J. REPORTABLE DISEASES (CMR)
- K. COMMUNICABLE DISEASE SURGE PLAN
- L. LEGAL REFERENCES AND OSHA REGULATIONS
- M. STANDING ORDERS: SCREENING OF EMPLOYEE FOR EXPOSURE TO POTENTIALLY HAZARDOUS BODY FLUIDS, AND STANDING ORDER: SCREENING OF SOURCE (EXPIRED) FOR POTENTIALLY HAZARDOUS BODY FLUID

APPENDIX A
FIT TESTING RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

Sec. 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory Prior to Fit Testing)

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

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.

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

1. Today's date: _____
 2. Your name: _____
 3. Your age (to nearest year): _____
 4. Sex (circle one): Male/Female
 5. Your height: _____ ft. _____ in.
 6. Your weight: _____ lbs.
 7. Your job title: _____
 8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____
 9. The best time to phone you at this number:
 10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No
 11. Check the type of respirator you will use (you can check more than one category):
 - a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
 - b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
 12. Have you worn a respirator (circle one): Yes/No
- If "yes," what type(s):

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you *currently* smoke tobacco, or have you smoked tobacco in the last month: Yes/No

APPENDIX A
FIT TESTING RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

2. Have you *ever had* any of the following conditions?

- a. Seizures: Yes/No
- b. Diabetes (sugar disease): Yes/No
- c. Allergic reactions that interfere with your breathing: Yes/No
- d. Claustrophobia (fear of closed-in places): Yes/No
- e. Trouble smelling odors: Yes/No

3. Have you *ever had* any of the following pulmonary or lung problems?

- a. Asbestosis: Yes/No
- b. Asthma: Yes/No
- c. Chronic bronchitis: Yes/No
- d. Emphysema: Yes/No
- e. Pneumonia: Yes/No
- f. Tuberculosis: Yes/No
- g. Silicosis: Yes/No
- h. Pneumothorax (collapsed lung): Yes/No
- i. Lung cancer: Yes/No
- j. Broken ribs: Yes/No
- k. Any chest injuries or surgeries: Yes/No
- l. Any other lung problem that you've been told about: Yes/No

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

- a. Shortness of breath: Yes/No
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
- c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
- d. Have to stop for breath when walking at your own pace on level ground: Yes/No
- e. Shortness of breath when washing or dressing yourself: Yes/No
- f. Shortness of breath that interferes with your job: Yes/No

APPENDIX A
FIT TESTING RESPIRATORY MEDICAL EVALUATION QUESTIONNAIRE

- g. Coughing that produces phlegm (thick sputum): Yes/No
- h. Coughing that wakes you early in the morning: Yes/No
- i. Coughing that occurs mostly when you are lying down: Yes/No
- j. Coughing up blood in the last month: Yes/No
- k. Wheezing: Yes/No
- l. Wheezing that interferes with your job: Yes/No
- m. Chest pain when you breathe deeply: Yes/No
- n. Any other symptoms that you think may be related to lung problems: Yes/No
- 5. Have you *ever had* any of the following cardiovascular or heart problems?
 - a. Heart attack: Yes/No
 - b. Stroke: Yes/No
 - c. Angina: Yes/No
 - d. Heart failure: Yes/No
 - e. Swelling in your legs or feet (not caused by walking): Yes/No
 - f. Heart arrhythmia (heart beating irregularly): Yes/No
 - g. High blood pressure: Yes/No
 - h. Any other heart problem that you've been told about: Yes/No
- 6. Have you *ever had* any of the following cardiovascular or heart symptoms?
 - a. Frequent pain or tightness in your chest: Yes/No
 - b. Pain or tightness in your chest during physical activity: Yes/No
 - c. Pain or tightness in your chest that interferes with your job: Yes/No
 - d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
 - e. Heartburn or indigestion that is not related to eating: Yes/No
 - d. Any other symptoms that you think may be related to heart or circulation problems: Yes/No
- 7. Do you *currently* take medication for any of the following problems?
 - a. Breathing or lung problems: Yes/No
 - b. Heart trouble: Yes/No

APPENDIX A
FIT TESTING RESPIRATORY MEDICAL EVALUATION QUESTIONNAIRE

c. Blood pressure: Yes/No

d. Seizures: Yes/No

8. If you've used a respirator, have you *ever had* any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

a. Eye irritation: Yes/No

b. Skin allergies or rashes: Yes/No

c. Anxiety: Yes/No

d. General weakness or fatigue: Yes/No

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

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

APPENDIX B

TB POLICY, VACCINE QUESTIONNAIRE, AND MMR, CHICKENPOX, Tdap, INFLUENZA, and HEPATITIS B
DECLINATIONS

**Alpine County EMS
Immunizations/TB testing/Health History**

Date: August 2025

As part of our Infection Prevention and Control Program, we have developed policy derived from the Recommendations of the Advisory Committee on Immunization Practices (ACIP), as published in the Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report (MMWR), Recommendations and Reports/ Vol.60/ No. 7, November 25, 2011. Health-care personnel as defined in this document include emergency medical service personnel.

In addition, various groups (e.g., Cal/OSHA, California Department of Public Health, and others) have weighed in on the frequency of TB testing that is recommended for emergency medical services personnel. There is no statutory requirement for a given frequency, and the ultimate decision is left up to the local health officer. It is the decision of our Health Officer that testing will be performed upon hire, and then a symptom screen every 2 years following hire.

Therefore, we are requiring you to provide the following information which is required to comply with the OSHA regulation on Aerosol Transmissible Diseases (CCR, Title 8, Section 5199). This regulation became effective on September 1, 2010. This information will be available only to our Health Officer and is considered a part of your employee medical record. Privacy and confidentiality will be respected as such, and the record will be kept secure in a locked file.

Each employee's record will be reviewed by the Health Officer, who will contact you with any questions. If you are unable to provide appropriate documentation, you will be provided the opportunity to become up-to-date as defined in the recommendations as cited above. Doing so will be a condition of continued employment. This is both to protect you and the public that you are serving.

If you have any questions or concerns, please direct them to me at
530-694-2146, Ext 249

Richard O. Johnson, M.D., MPH
Health Officer, Alpine County Health Department

APPENDIX B

TB POLICY, VACCINE QUESTIONNAIRE, AND MMR, CHICKENPOX, Tdap, INFLUENZA, and HEPATITIS B DECLINATIONS

ALPINE COUNTY EMS VACCINATION QUESTIONNAIRE

Name: _____

DOB: _____

Phone # where you can be reached by the Health Officer:

Hepatitis B vaccine:

Primary series: _____

Titer (result/date) (if any): _____

Subsequent doses (if any): _____

Measles-mumps-rubella vaccine (MMR):

Lab evidence of immunity: _____

Lab confirmation of disease: _____

Birth before 1957? Yes No

Tetanus and diphtheria and acellular pertussis (Tdap): _____

Varicella vaccine (Chickenpox): _____

Lab evidence of immunity: _____

Lab confirmation of disease: _____

History of disease (chickenpox or zoster): (circle) Yes No

Influenza vaccine (last annual): _____

TB skin test/IGRA (most recent) (date and result): _____

Have you ever been diagnosed with (circle)?

hepatitis, tuberculosis (infection or disease), HIV

Do you have allergies to any medication or latex (circle)? Y N

DECLINATIONS

The declination below must be signed for each vaccine that you are declining.

Measles/Mumps/Rubella

I understand that due to my occupational exposure to aerosol transmissible disease, I may be at risk of acquiring infection from measles, mumps or rubella. I have been given the opportunity to be vaccinated against these diseases at no charge to me. However, I decline this vaccination at this time. I understand that by declining the vaccine (if not previously vaccinated), I continue to be at risk of acquiring measles, mumps or rubella, serious diseases. If, in the future, I continue to have occupational exposure to aerosol transmissible diseases and want to be vaccinated, I can receive the vaccine at no charge to me.

Print Employee Name:

Employee Signature:

Date:

Chickenpox

I understand that due to my occupational exposure to aerosol transmissible disease, I may be at risk of acquiring infection from chickenpox. I have been given the opportunity to be vaccinated against this disease at no charge to me. However, I decline this vaccination at this time. I understand that by declining the vaccine (if not previously vaccinated), I continue to be at risk of acquiring chickenpox, 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 vaccine at no charge to me.

Print Employee Name:

Employee Signature:

Date:

Tetanus, Diphtheria, and Pertussis

I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring infection from Tetanus, Diphtheria and Pertussis. I have been given the opportunity to be vaccinated against this disease at no charge to me. However, I decline this vaccination at this time. I understand that by declining the vaccine (if not previously vaccinated), I continue to be at risk of acquiring Tetanus, Diphtheria and Pertussis, serious diseases. If in the future I continue to have occupational exposure to aerosol transmissible diseases, and want to be vaccinated, I can receive the vaccine at no charge to me.

Print Employee Name:

Employee Signature:

Date:

APPENDIX B

TB POLICY, VACCINE QUESTIONNAIRE, MMR, CHICKENPOX, Tdap, and INFLUENZA DECLINATIONS

The Cal/OSHA Aerosol Transmissible Disease Standard, Section 5199 of Title 8, Chapter 4 subsection (h)(5)(E): mandates that the employer shall ensure that employees who decline to accept recommended vaccinations offered by the employer sign and date the following statement found in Appendix C of the standard:

Seasonal influenza

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 vaccines, 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.

Print Employee Name:

Employee Signature:

Date:

APPENDIX B

TB POLICY, VACCINE QUESTIONNAIRE, MMR, CHICKENPOX, Tdap, INFLUENZA, and HEPATITIS B DECLINATIONS

HEPATITIS B VACCINE DECLINATION

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Print Employee Name:

Employee Signature:

Date:

Summary of Recommendations for Immunization of Health-Care Personnel, Postexposure Prophylaxis, and Work Restrictions:

<https://www.cdc.gov/port-health/media/pdfs/CDCs-vaccine-recommendations-for-healthcare-personnel.pdf>

<https://www.immunize.org/wp-content/uploads/catg.d/p2017.pdf>

Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis:

<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>

Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis.

• 9/25/2013

<https://stacks.cdc.gov/view/cdc/20711>

Hepatitis B

VACCINES AND RECOMMENDATIONS IN BRIEF

COVID-19 — If not up to date, give COVID-19 vaccine according to current CDC

recommendations (see www.cdc.gov/acip-recs/hcp/vaccine-specific/covid-19.html).

Hepatitis B — If no previous dose, give either a 2-dose series of Heplisav-B or a 3-dose series of either Engerix-B or Recombivax HB. A 3-dose series of Twinrix vaccine, which prevents hepatitis A and B, is an option. For HCP who perform tasks that may involve exposure to blood or body fluids, obtain antibody serology 1–2 months after final dose.

Influenza — Give 1 dose of influenza vaccine annually.

MMR – For healthcare personnel (HCP) born in 1957 or later without serologic evidence of immunity or prior vaccination, give 2 doses of MMR, 4 weeks apart. For HCP born prior to 1957, see below.

Varicella (chickenpox) — For HCP who have no serologic proof of immunity, prior vaccination, or diagnosis or verification of a history of varicella or herpes zoster (shingles) by a healthcare provider, give 2 doses of varicella vaccine, 4 weeks apart.

Tetanus, diphtheria, pertussis — Give 1 dose of Tdap as soon as feasible to all HCP who have not received Tdap previously and to pregnant HCP with each pregnancy (see below). Give Td or Tdap boosters every 10 years thereafter.

Meningococcal — Give both MenACWY and MenB to microbiologists who are routinely exposed to isolates of *Neisseria meningitidis*. As long as risk continues: boost with MenB after 1 year, then every 2–3 years thereafter; boost with MenACWY every 5 years.

Hepatitis A, typhoid, and polio vaccines are not routinely recommended for HCP who may have on-the-job exposure to fecal material. Polio vaccination is recommended for adults known or strongly suspected of being unvaccinated (see CDC recommended adult immunization schedule at www.cdc.gov/vaccines/hcp/imz-schedules/adult-age.html).

All HCP who cannot document previous vaccination should receive either a 2-dose series of Heplisav-B at 0 and 1 month or a 3-dose series of Engerix-B, Recombivax HB, or Twinrix at 0, 1, and 6 months. HCP who perform tasks that may involve exposure to blood or body fluids should be tested for hepatitis B surface antibody (anti-HBs) 1–2 months after dose #2 of Heplisav-B or dose #3 of Engerix-B or Recombivax HB to document immunity.

- If anti-HBs is at least 10 mIU/mL (positive), the vaccinee is immune. No further serologic testing or vaccination is recommended.
- If anti-HBs is less than 10 mIU/mL (negative), the vaccinee is not protected from hepatitis B virus (HBV) infection, and should receive another 2-dose or 3-dose series of HepB vaccine on the routine schedule, followed by anti-HBs testing 1–2 months later. A vaccinee whose anti-HBs remains less than 10 mIU/mL after 2 complete series is considered a “non-responder.”

For non-responders: HCP who are non-responders should be considered susceptible to HBV and should be counseled regarding precautions to prevent HBV infection and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to hepatitis B surface antigen (HBsAg)-positive blood or blood with unknown HBsAg status. Non-responders

should be tested for HBsAg and anti-HBc to determine infection status. Infected HCP should be counseled and medically evaluated.

For HCP with documentation of a complete 2-dose (HepB-containing vaccines) series but no documentation of anti-HBs of at least 10 mIU/mL (e.g., those vaccinated in childhood): HCP who are at risk for occupational blood or body fluid exposure might undergo anti-HBs testing upon hire or matriculation. See references 2 and 3 for details.

Influenza

All HCP, including students and volunteers, in any healthcare setting should receive annual influenza vaccination. Live attenuated influenza vaccine (LAIV) may only be given to non-pregnant healthy HCP age 49 years and younger. HCP who receive LAIV should avoid close contact with severely immunosuppressed patients (e.g., stem cell transplant recipients) who require protective isolation for at least 7 days after vaccine administration.

Measles, Mumps, Rubella (MMR)

HCP who work in medical facilities should be immune to measles, mumps, and rubella.

HCP born in 1957 or later can be considered immune to measles, mumps, or rubella only if they have documentation of (a) laboratory confirmation of disease or immunity or (b) appropriate vaccination against measles, mumps, and rubella (i.e., 2 doses of live measles and mumps vaccines given on or after the first birthday and separated by 28 days or more, and at least 1 dose of live rubella vaccine). HCP with 2 documented doses of MMR are not recommended to be serologically tested for immunity; but if they are tested and results are negative or equivocal for measles, mumps, and/or rubella, these HCP should be considered to have presumptive evidence of immunity to measles, mumps, and/or rubella and are not in need of additional MMR doses.

- Although birth before 1957 is considered acceptable evidence of measles, mumps, and rubella immunity, 2 doses of MMR vaccine should be considered for unvaccinated HCP born before 1957 who do not have laboratory evidence of disease or immunity to measles and/or mumps. One dose of MMR vaccine should be considered for HCP with no laboratory evidence of disease or immunity to rubella. For these same HCP who do not have evidence of immunity, 2 doses of MMR vaccine are recommended during an outbreak of measles or mumps and 1 dose during an outbreak of rubella. HCP who have had 2 doses of MMR and are identified by public health authorities as being at increased risk for mumps because of an outbreak should receive a third dose of MMR to improve protection.

Varicella

All HCP should be immune to varicella. Evidence of immunity in HCP includes documentation of 2 doses of varicella vaccine given at least 28 days apart, laboratory evidence of immunity, laboratory confirmation of disease, or diagnosis or verification of a history of varicella or herpes zoster (shingles) by a healthcare provider.

Tetanus/Diphtheria/Pertussis (Td/Tdap)

All HCPs who have not or are unsure if they have previously received a dose of Tdap should receive a dose of Tdap as soon as feasible, without regard to the interval since the previous dose of Td. Pregnant HCPs should be revaccinated during each pregnancy. All HCPs should then receive Td or Tdap boosters every 10 years thereafter.

Meningococcal

Microbiologists who are routinely exposed to isolates of *N. meningitidis* should be vaccinated with both MenACWY and MenB vaccines. MenACWY and MenB vaccination may be administered on the same day. A combination MenABCWY vaccine is an option when both products are indicated at the same visit. The minimum interval between MenABCWY doses is 6 months.

REFERENCES

- 1 CDC. Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices (ACIP). [MMWR, 2011; 60\(RR-7\)](#).
- 2 CDC. Prevention of Hepatitis B Virus Infection in the United States. Recommendations of the Advisory Committee on Immunization Practices. [MMWR, 2018; 67\(RR1\):1–30](#).
- 3 [Immunize.org](#). Pre-exposure Management for Healthcare Personnel with a Documented Hepatitis B Vaccine Series Who Have Not Had Post-vaccination Serologic Testing. Accessed at www.immunize.org/catg.d/p2108.pdf.

For additional specific ACIP recommendations, visit CDC's website at www.cdc.gov/acip-recs/site.html or visit Immunize.org's website at www.immunize.org/official-guidance/cdc/acip-recs/vaccines/.

www.immunize.org/catg.d/p2017.pdf Item #P2017 (1/23/2025)

TABLE 2. Immunizing agents and immunization schedules for health-care personnel (HCP)*

Generic name	Primary schedule and booster(s)	Indications	Major precautions and contraindications	Special considerations
Immunizing agents recommended for all HCP				
Hepatitis B (HB) recombinant vaccine	2 doses 4 weeks apart; third dose 5 months after second; booster doses not necessary; all doses should be administered IM in the deltoid	Preexposure: HCP at risk for exposure to blood or body fluids; postexposure (see Table 4)	On the basis of limited data, no risk for adverse effects to developing fetuses is apparent. Pregnancy should not be considered a contraindication to vaccination of women. Previous anaphylactic reaction to common baker's yeast is a contraindication to vaccination.	The vaccine produces neither therapeutic nor adverse effects in HBV-infected persons. Prevaccination serologic screening is not indicated for persons being vaccinated because of occupational risk but might be indicated for HCP in certain high-risk populations. HCP at high risk for occupational contact with blood or body fluids should be tested 1–2 months after vaccination to determine serologic response.
Hepatitis B immune globulin (HBIG)	0.06 mL/kg IM as soon as possible after exposure, if indicated	Postexposure prophylaxis (see Table 4)	See package inserts	
Influenza vaccine (TIV and LAIV)	Annual vaccination with current seasonal vaccine. TIV is available in IM and ID formulations. LAIV is administered intranasally.	All HCP	History of severe (e.g., anaphylactic) hypersensitivity to eggs; prior severe allergic reaction to influenza vaccine	No evidence exists of risk to mother of fetus when the vaccine is administered to a pregnant woman with an underlying high-risk condition. Influenza vaccination is recommended for women who are or will be pregnant during influenza season because of increased risk for hospitalization and death. LAIV is recommended only for healthy, non-pregnant persons aged 2–49 years. Intradermal vaccine is indicated for persons aged 18–64 years. HCP who care for severely immunosuppressed persons who require a protective environment should receive TIV rather than LAIV.
Measles live-virus vaccine	2 doses SC; ≥28 days apart	Vaccination should be recommended for all HCP who lack presumptive evidence of immunity;¶ vaccination should be considered for those born before 1957.	Pregnancy; immunocompromised persons,** including HIV-infected persons who have evidence of severe immunosuppression; anaphylaxis to gelatin or gelatin-containing products; anaphylaxis to neomycin; and recent administration of immune globulin.	HCP vaccinated during 1963–1967 with a killed measles vaccine alone, killed vaccine followed by live vaccine, or a vaccine of unknown type should be revaccinated with 2 doses of live measles virus vaccine.
Mumps live-virus vaccine	2 doses SC; ≥28 days apart	Vaccination should be recommended for all HCP who lack presumptive evidence of immunity.†† Vaccination should be considered for those born before 1957.	Pregnancy; immunocompromised persons,** including HIV-infected persons who have evidence of severe immunosuppression; anaphylaxis to gelatin or gelatin-containing products; anaphylaxis to neomycin	HCP vaccinated before 1979 with either killed mumps vaccine or mumps vaccine of unknown type should consider revaccination with 2 doses of MMR vaccine.
Rubella live-virus vaccine	1 dose SC; (However, due to the 2-dose requirements for measles and mumps vaccines, the use of MMR vaccine will result in most HCP receiving 2 doses of rubella-containing vaccine.)	Vaccination should be recommended for all HCP who lack presumptive evidence of immunity.§§	Pregnancy; immunocompromised persons,** including HIV-infected persons who have evidence of severe immunosuppression; anaphylaxis to gelatin or gelatin-containing products; anaphylaxis to neomycin	The risk for rubella vaccine-associated malformations in the offspring of women pregnant when vaccinated or who become pregnant within 1 month after vaccination is negligible.¶¶ Such women should be counseled regarding the theoretical basis of concern for the fetus.

TABLE 2. (Continued) Immunizing agents and immunization schedules for health-care personnel (HCP)*

Generic name	Primary schedule and booster(s)	Indications	Major precautions and contraindications	Special considerations
Tetanus and diphtheria (toxoids) and acellular pertussis (Tdap)	1 dose IM as soon as feasible if Tdap not already received and regardless of interval from last Td. After receipt of Tdap, receive Td for routine booster every 10 years.	All HCP, regardless of age.	History of serious allergic reaction (i.e., anaphylaxis) to any component of Tdap. Because of the importance of tetanus vaccination, persons with history of anaphylaxis to components in Tdap or Td should be referred to an allergist to determine whether they have a specific allergy to tetanus toxoid and can safely receive tetanus toxoid (TT) vaccine. Persons with history of encephalopathy (e.g., coma or prolonged seizures) not attributable to an identifiable cause within 7 days of administration of a vaccine with pertussis components should receive Td instead of Tdap.	Tetanus prophylaxis in wound management if not yet received Tdap***
Varicella vaccine (varicella zoster virus live-virus vaccine)	2 doses SC 4–8 weeks apart if aged ≥13 years.	All HCP who do not have evidence of immunity defined as: written documentation of vaccination with 2 doses of varicella vaccine: laboratory evidence of immunity+++ or laboratory confirmation of disease; diagnosis or verification of a history of varicella disease by a health-care provider,§§§ or diagnosis or verification of a history of herpes zoster by a healthcare provider.	Pregnancy; immunocompromised persons;** history of anaphylactic reaction after receipt of gelatin or neomycin. Varicella vaccination may be considered for HIV-infected adolescents and adults with CD4+ T-lymphocyte count >200 cells/uL. Avoid salicylate use for 6 weeks after vaccination.	Because 71%–93% of adults without a history of varicella are immune, serologic testing before vaccination is likely to be cost-effective.
Varicella-zoster immune globulin	125U/10 kg IM (minimum dose: 125U; maximum dose: 625U)	Persons without evidence of immunity who have contraindications for varicella vaccination and who are at risk for severe disease and complications¶¶¶ known or likely to be susceptible who have direct, nontransient exposure to an infectious hospital staff worker or patient		Serologic testing may help in assessing whether to administer varicella–zoster immune globulin. If use of varicella–zoster immune globulin prevents varicella disease, patient should be vaccinated subsequently. The varicella–zoster immune globulin product currently used in the United States (VariZIG) (Cangene Corp. Winnipeg Canada) can be obtained 24 hours a day from the sole authorized U.S. distributor (FFF Enterprises, Temecula, California) at 1-800-843-7477 or http:// www.fffenterprises.com .

Other immunobiologics that might be indicated in certain circumstances for HCP

Quadrivalent meningococcal conjugate vaccine (tetraivalent (A,C,Y,W) for HCP ages 19–54 years, Quadrivalent meningococcal polysaccharide vaccine for HCP age >55 years	1 dose; booster dose in 5 years if person remains at increased risk	Clinical and research microbiologists who might routinely be exposed to isolates of <i>Neisseria meningitidis</i>	The safety of the vaccine in pregnant women has not been evaluated; it should not be administered during pregnancy unless the risk for infection is high.
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TABLE 2. (Continued) Immunizing agents and immunization schedules for health-care personnel (HCP)*

	Primary schedule and Generic name	booster(s) contraindications	Major precautions and Indications Special considerations	
Typhoid vaccine IM, and oral	IM vaccine: 1 dose, booster every 2 years. Oral vaccine: 4 doses on alternate days. Manufacturer recommends revaccination with the entire 4-dose series every 5 years.	Workers in microbiology laboratories who frequently work with <i>Salmonella typhi</i> .	Severe local or systemic reaction to a previous dose. Ty21a (oral) vaccine should not be administered to immunocompromised persons** or to persons receiving antimicrobial agents.	Vaccination should not be considered an alternative to the use of proper procedures when handling specimens and cultures in the laboratory.
Inactivated poliovirus vaccine (IPV)	For unvaccinated adults, 2 doses should be administered at intervals of 4–8 weeks; a third dose should be administered 6–12 months after the second dose.	Vaccination is recommended for adults at increased risk for exposure to polioviruses including health-care personnel who have close contact with patients who might be excreting polioviruses. Adults who have previously received a complete course of poliovirus vaccine may receive one lifetime booster if they remain at increased risk for exposure.	Hypersensitivity or anaphylactic reactions to IPV or antibiotics contained in IPV. IPV contains trace amounts of streptomycin, polymyxin B, and neomycin.	

Abbreviations: IM = intramuscular; HBV = hepatitis B virus; HBsAg = hepatitis B surface antigen; SC = subcutaneous; HIV = human immunodeficiency virus; MMR = measles, mumps, rubella vaccine; TB = tuberculosis; HAV = hepatitis A virus; IgA = immune globulin A; ID = intradermal; TIV = trivalent inactivated split-virus vaccines; LAIV = live attenuated influenza vaccine; BCG = bacille Calmette-Guérin; OPV = oral poliovirus vaccine.

* Persons who provide health care to patients or work in institutions that provide patient care (e. g., physicians, nurses, emergency medical personnel, dental professionals and students, medical and nursing students, laboratory technicians, hospital volunteers, and administrative and support staff in health-care institutions). **Source:** U.S. Department of Health and Human Services. Definition of health-care personnel (HCP). Available at <http://www.hhs.gov/ask/initiatives/vacctoolkit/definition.html>.

† Health-care personnel and public safety workers at high risk for continued percutaneous or mucosal exposure to blood or body fluids include acupuncturists, dentists, dental hygienists, emergency medical technicians, first responders, laboratory technologists/technicians, nurses, nurse practitioners, phlebotomists, physicians, physician assistants, and students entering these professions. **Source:** CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices. Part II: immunization of adults. MMWR 2006;55(No. RR-16).

§ The package insert should be consulted to weigh the risks and benefits of giving HBIG to persons with IgA deficiency, or to persons who have had an anaphylactic reaction to an IgG containing biologic product.

¶ Written documentation of vaccination with 2 doses of live measles or MMR vaccine administered ≥28 days apart, or laboratory evidence of measles immunity, or laboratory confirmation of measles disease, or birth before 1957.

** Persons immunocompromised because of immune deficiency diseases, HIV infection (who should primarily not receive BCG, OPV, and yellow fever vaccines), leukemia, lymphoma or generalized malignancy or immunosuppressed as a result of therapy with corticosteroids, alkylating drugs, antimetabolites, or radiation. †† Written documentation of vaccination with 2 doses of live mumps or MMR vaccine administered ≥28 days apart, or laboratory evidence of mumps immunity, or laboratory confirmation of mumps disease, or birth before 1957.

§§ Written documentation of vaccination with 1 dose of live rubella or MMR vaccine, or laboratory evidence of immunity, or laboratory confirmation of rubella infection or disease, or birth before 1957, except women of childbearing potential who could become pregnant; though pregnancy in this age group would be exceedingly rare.

¶¶ **Source:** CDC. Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. MMWR 2001;50:1117.

*** **Source:** CDC. Update on adult immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1991;40(No. RR-12).

+++ Commercial assays can be used to assess disease-induced immunity, but they often lack sensitivity to detect vaccine-induced immunity (i.e., they might yield false-negative results).

§§§ Verification of history or diagnosis of typical disease can be provided by any health-care provider (e.g., school or occupational clinic nurse, nurse practitioner, physician assistant, or physician). For persons reporting a history of, or reporting with, atypical or mild cases, assessment by a physician or their designee is recommended, and one of the following should be sought: 1) an epidemiologic link to a typical varicella case or to a laboratory-confirmed case or 2) evidence of laboratory confirmation if it was performed at the time of acute disease. When such documentation is lacking, persons should not be considered as having a valid history of disease because other diseases might mimic mild atypical varicella.

¶¶¶ For example, immunocompromised patients or pregnant women.

TABLE 3. Summary of recommendations for immunization of health-care personnel* (HCP) with special certain conditions — Advisory Committee on Immunization Practices, United States, 2011

Vaccine	Pregnancy	HIV infection	Severe immunosuppression†	Asplenia	Renal failure	Diabetes	Alcoholism and alcoholic cirrhosis
Hepatitis B	R	R	R	R	R	R	R
Influenza	R§	R	R	R	R	R	R
Measles, mumps, rubella	C	R¶	C	R	R	R	R
Meningococcus	UI	UI	UI	R**	UI	UI	UI
IPV ††	UI	UI	UI	UI	UI	UI	UI
Pertussis, tetanus, diphtheria	R	R	R	R	R	R	R
Typhoid, inactivated Vi§§	UI	UI	UI	UI	UI	UI	UI
Typhoid, Ty21a	UI	C	C	UI	UI	UI	UI
Varicella	C	UI¶¶	C	R	R	R	R

Abbreviations: R = recommended; C = contraindicated; UI = use if indicated; IPV = inactivated poliovirus vaccine.

* Persons who provide health care to patients or work in institutions that provide patient care (e. g., physicians, nurses, emergency medical personnel, dental professionals and students, medical and nursing students, laboratory technicians, hospital volunteers, and administrative and support staff in health-care institutions).

Source: U.S. Department of Health and Human Services. Definition of health-care personnel (HCP). Available at <http://www.hhs.gov/ask/initiatives/vacctoolkit/definition.html>.

† Severe immunosuppression can be caused by congenital immunodeficiency, leukemia, lymphoma, generalized malignancy or therapy with alkylating agents, antimetabolites, ionizing radiation, or large amounts of corticosteroids.

§ Women who are or will be pregnant during the influenza season.

¶ Contraindicated in HIV-infected persons who have evidence of severe immunosuppression.

** Recommendation is based on the person's underlying condition rather than occupation.

†† Vaccination is recommended for unvaccinated HCP who have close contact with patients who may be excreting wild polioviruses. HCP who have had a primary series of oral poliovirus vaccine (OPV) or IPV who are directly involved with the provision of care to patients who may be excreting poliovirus may receive another dose of either IPV or OPV. Any suspected case of poliomyelitis should be investigated immediately. If evidence suggests transmission of poliovirus, control measures to contain further transmission should be instituted immediately.

§§ Capsular polysaccharide parenteral vaccine.

¶¶ Varicella vaccine may be considered for HIV-infected adults without evidence of immunity and with CD4 T-lymphocyte count ≥200 cells/UL.

TABLE 4. Recommended postexposure prophylaxis for percutaneous or permucosal exposure to hepatitis B virus — Advisory Committee on Immunization Practices, United States

Vaccination and antibody response status of exposed person	Treatment		
	Source HBsAg-positive	Source HBsAg-negative	Source not tested or status unknown
Unvaccinated	HBIG x 1; initiate HB vaccine series	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder	No treatment	No treatment	No treatment
Known nonresponder			
After 3 doses	HBIG x 1 and initiate revaccination	No treatment	If known high-risk source, treat as if source were HBsAg-positive
After 6 doses	HBIG x 2 (separated by 1 month)	No treatment	If known high-risk source, treat as if source were HBsAg-positive
Antibody response unknown	Test exposed person for anti-HBs If adequate,* no treatment If inadequate,* HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs If adequate,* no treatment If inadequate,* initiate revaccination

Abbreviations: HBsAg = Hepatitis B surface antigen; HBIG = hepatitis B immune globulin; anti-HBs = antibody to hepatitis B surface antigen; HB = hepatitis B.

Source: Adapted from CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part II: immunization of adults. MMWR 2006;55(No. RR-16).

* A seroprotective (adequate) level of anti-HBs after completion of a vaccination series is defined as anti-HBs ≥ 10 mIU/mL; a response < 10 mIU/mL is inadequate and is not a reliable indicator of protection.

Sources: Adapted from CDC. Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures. MMWR 1991;40(No. RR-8); CDC. Guideline for isolation precautions in hospitals: recommendations of the Hospital Infection Control Practices Advisory Committee (HICPAC) and the National Center for Infectious Diseases. Infect Control Hosp Epidemiol 1996;17:53–80; Williams WW. CDC guideline for infection control in hospital personnel. Infect Control 1983;4(Suppl):326–49; CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).

* Persons who provide health care to patients or work in institutions that provide patient care (e. g., physicians, nurses, emergency medical personnel, dental professionals and students, medical and nursing students, laboratory technicians, hospital volunteers, and administrative and support staff in health-care institutions). **Source:** U.S. Department of Health and Human Services. Definition of health-care personnel (HCP). Available at <http://www.hhs.gov/ask/initiatives/vacctoolkit/definition.html>.

† Includes children aged < 5 years, adults aged ≥ 65 years, pregnant women, American Indians/Alaska Natives, persons aged < 19 years who are receiving long-term aspirin therapy, and persons with certain high-risk medical conditions (i.e., asthma, neurologic and neurodevelopmental conditions, chronic lung disease, heart disease, blood disorders, endocrine disorders, kidney disorders, liver disorders, metabolic disorders, weakened immune system due to disease or medication, and morbid obesity).

§ Includes hospitalized neonates and pregnant women.

¶ Includes patients who are susceptible to varicella and at increased risk for complications of varicella (i.e., neonates, pregnant women, and immunocompromised persons of any age).

TABLE 5. Advisory Committee on Immunization Practices work restrictions for health-care personnel* (HCP) exposed to or infected with certain vaccine-preventable diseases and conditions

Disease/Condition	Work restriction	Duration
<p>Hepatitis B HCP positive for HBsAg (e.g., acute or chronic hepatitis B infection): HCP who do not perform exposure-prone invasive procedures HCP who perform exposure-prone invasive procedures</p>	<p>Exclude from duty</p>	<p>Until afebrile ≥ 24 hours (without the use of fever-reducing medicines such as acetaminophen). Those with ongoing respiratory symptoms should be considered for evaluation by occupational health to determine appropriateness of contact with patients. If returning to care for patients in a protective environment (e.g., hematopoietic stem cell transplant patients), consider for temporary reassignment or exclusion from work for 7 days from symptom onset or until the resolution of symptoms, whichever is longer.</p>
<p>Upper respiratory infections HCP in contact with persons at high risk for complications of influenza[†]</p>	<p>No restriction unless linked epidemiologically to transmission of hepatitis B virus infection These HCP should not perform exposure-prone invasive procedures until they have sought counsel from an expert review panel, which should review and recommend the procedures the worker can perform, taking into account the specific procedure as well as the skill and technique of the worker</p>	<p>Those who develop acute respiratory symptoms without fever should be considered for evaluation by occupational health to determine appropriateness of contact with patients and can be allowed to work unless caring for patients in a protective environment; these personnel should be considered for temporary reassignment or exclusion from work for 7 days from symptom onset or until the resolution of all noncough symptoms, whichever is longer. If symptoms such as cough and sneezing are still present, HCP should wear a facemask during patient care activities. The importance of performing frequent hand hygiene (especially before and after each patient contact) should be reinforced. Standard precautions always should be observed</p> <p>Per recommendation of expert panel</p>

Measles

Active	Exclude from duty	4 days after rash appears
Postexposure (HCP without presumptive last exposure and/or evidence of measles immunity)	Exclude from duty	5 days after first exposure through 21 days after 4 days after the rash appears

Mumps

Active	Exclude from duty	5 days after onset of parotitis
Postexposure (HCP without presumptive after last exposure or 5 evidence of mumps immunity)	Exclude from duty	12 days after first exposure through 25 days days after onset of parotitis

Pertussis

Active after onset of	Exclude from duty	Beginning of catarrhal stage through third week paroxysms or until 5 days after start of effective antimicrobial therapy
Postexposure		
Symptomatic personnel therapy	Exclude from duty	5 days after start of effective antimicrobial
Asymptomatic personnel – HCP likely to expose a patient at risk for severe pertussis	No restriction from duty; on antimicrobial prophylactic therapy	
Asymptomatic personnel – other HCP	No restriction from duty; can receive postexposure prophylaxis or be monitored for 21 days after pertussis exposure and treated at the onset of signs and symptoms of pertussis	

TABLE 5. (Continued) Advisory Committee on Immunization Practices work restrictions for health-care personnel* (HCP) exposed to or infected with certain vaccine-preventable diseases and conditions

Disease/Condition	Work restriction	Duration
Rubella		
Active	Exclude from duty	7 days after the rash appears
Postexposure (personnel without evidence of after last exposure rubella immunity)	Exclude from duty	7 days after first exposure through 23 days and/or 7 days after rash appears
Varicella		
Active that do not crust	Exclude from duty	Until all lesions dry and crust. If only lesions
Postexposure (HCP without evidence of varicella immunity)	Exclude from duty unless receipt of the second dose within 3-5 days after exposure	8th day after 1st exposure through 21st day (28th day if varicella-zoster immune globulin administered) after the last exposure; if varicella occurs, until all lesions dry and crust or, if only lesions that do not crust (i.e., macules and papules), until no new lesions appear within a 24-hour period
Herpes zoster		
Localized in immunocompetent person	Cover lesions; restrict from care of high-risk patients¶	Until all lesions dry and crust
Disseminated or localized in immunocompromised person until disseminated infection is ruled out	Exclude from duty	Until all lesions dry and
Postexposure (HCP without evidence of varicella immunity)		
Disseminated zoster or localized zoster with uncontained/uncovered lesions	Exclude from duty unless receipt of the second dose of varicella vaccine within 3–5 days after exposure	8th day after 1st exposure through 21st day (28th day if varicella-zoster immune globulin administered) after the last exposure; if varicella occurs, until all lesions dry and crust or, if only lesions that do not crust (i.e., macules and papules), until no new lesions appear within a 24-hour period
Localized zoster with contained/covered lesions	For HCP with at least 1dose of varicella vaccine, no work restrictions. For HCP with no doses of varicella vaccine, restrict from patient contact	8th day after 1st exposure through 21st day (28th day if varicella-zoster immune globulin administered) after the last exposure; if varicella occurs, until all lesions dry and crust or, if only lesions that do not crust (i.e., macules and papules), until no new lesions appear within a 24-hour period (i.e., macules and papules), until no new lesions appear within a 24-hour period

Abbreviation: HBsAg = hepatitis B surface antigen.

Sources: Adapted from CDC. Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures. MMWR 1991;40(No. RR-8); CDC. Guideline for isolation precautions in hospitals: recommendations of the Hospital Infection Control Practices Advisory Committee (HICPAC) and the National Center for Infectious Diseases. Infect Control Hosp Epidemiol 1996;17:53–80; Williams WW. CDC guideline for infection control in hospital personnel. Infect Control 1983;4(Suppl):326–49; CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).

* Persons who provide health care to patients or work in institutions that provide patient care (e. g., physicians, nurses, emergency medical personnel, dental professionals and students, medical and nursing students, laboratory technicians, hospital volunteers, and administrative and support staff in health-care institutions). **Source:** U.S. Department of Health and Human Services. Definition of health-care personnel (HCP). Available at <http://www.hhs.gov/ask/initiatives/vacctoolkit/definition.html>.

† Includes children aged <5 years, adults aged ≥65 years, pregnant women, American Indians/Alaska Natives, persons aged <19 years who are receiving long-term aspirin therapy, and persons with certain high-risk medical conditions (i.e., asthma, neurologic and neurodevelopmental conditions, chronic lung disease, heart disease, blood disorders, endocrine disorders, kidney disorders, liver disorders, metabolic disorders, weakened immune system due to disease or medication, and morbid obesity).

§ Includes hospitalized neonates and pregnant women.

¶ Includes patients who are susceptible to varicella and at increased risk for complications of varicella (i.e., neonates, pregnant women, and immunocompromised persons of any age).

Bloodborne Infectious Disease Risk Factors

Feb. 13, 2025

<https://www.cdc.gov/niosh/healthcare/risk-factors/bloodborne-infectious-diseases.html>

AT A GLANCE

- Healthcare workers are at risk from exposure to bloodborne pathogens.
- Human immunodeficiency virus, hepatitis B virus, and hepatitis C virus are three of the most common bloodborne pathogens.
- Knowing how to treat exposures and prevent risk of a bloodborne disease is vital.

Exposure risk and treatment

Sharps injuries can cause exposure to bloodborne pathogens.

Healthcare workers should be aware of exposure risks to [hepatitis B](#), [hepatitis C](#), and [HIV](#).

Hepatitis B and C cause serious liver damage. HIV disables the body's immune system so it cannot fight infection. Exposure can occur by:

- A needlestick puncture
- Another sharps injury
- Contact with patient blood or other body fluids

Substances posing infection transmission risks include:

- Blood
- Body fluids, including saliva and urine contaminated with blood
- Other potentially infectious materials (semen; vaginal secretions; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) or tissue
- Concentrated virus or other bloodborne pathogens

Treatment

Wash puncture wounds, blood, or other bodily fluids with soap and water.

Provide immediate care after exposure by taking the following steps:

- Wash needlestick or sharp punctures and cuts with soap and water.
- Flush splashes to the nose, mouth, or skin with water.
- Irrigate eyes with clean water, saline, or sterile irrigants.
- Report the incident to your supervisor.

Immediately seek medical care to determine risk associated with the exposure.

Post-exposure prophylaxis

Healthcare providers or workers should deliver post-exposure prophylaxis (PEP) for exposures posing infection transmission risks.

- **HBV**
 - Give PEP as soon as possible, preferably within 24 hours.
 - PEP can be given to pregnant women.
- **HCV** – PEP is not recommended for HCV.
- **HIV**
 - Initiate PEP as soon as possible, within hours of exposure.
 - Offer pregnancy testing to all women of childbearing age even if they are not known to be pregnant.
 - Seek expert consultation if viral resistance is suspected.
 - Administer PEP for 4 weeks if tolerated.

Perform follow-up testing and provide counseling.

- **HBV exposures**
 - Test for anti-HB 1 to 2 months after the last dose of the vaccine if only a vaccine is given.

- Follow-up is not needed if the exposed person is immune to HBV or has received hepatitis B immune globulin PEP.
- **HCV exposures**
 - Perform testing for anti-HCV and alanine transaminase 4 to 6 months after exposure.
 - Perform HCV RNA testing at 4 to 6 weeks if an earlier diagnosis of HCV infection is desired.
 - Confirm repeatedly reactive anti-HCV enzyme immunoassays with supplemental tests.
- **HIV exposures**
 - Evaluate exposed persons taking PEP within 72 hours after exposure and monitor them for drug toxicity for at least 2 weeks.
 - Perform HIV antibody testing for at least 6 months post-exposure (e.g., at baselines of 6 weeks, 3 months, and 6 months).
 - Perform HIV antibody testing for illness compatible with an acute retroviral syndrome.
 - Advise using precautions to prevent secondary transmission during the follow-up period.

Who to contact in an emergency

Call the Clinicians' Post Exposure Prophylaxis Line at **1-888-448-4911** if you have questions about medical treatment. Go to the [National Clinician Consultation Center](#) for more information.

Prevention

Reporting

Report blood and body fluid exposure immediately. Be sure to complete an incident report where applicable. This might initiate an investigation to prevent other incidents from occurring.

Collect the following information when reporting:

- Date and time of the exposure
- Procedure or action being performed during the injury
- Specific information about the exposure (e.g., profession, department or unit, shift, injury to user or non-user, etc.)
- Specific type of device being used, if known indicate brand and model

The [Occupational Safety and Health Administration \(OSHA\) Bloodborne Pathogens Standard](#) requires employers to identify, evaluate, and implement safer medical devices. This includes devices with sharps injury protection. The standard mandates reporting the following information in a sharps injury log:

- Information about the injury while protecting the employee confidentiality
- Type and brand of the device involved (if known)
- Department or work area where the exposure occurred
- Explanation of how the exposure occurred:
 - How deep was the injury?
 - Did the injury occur while the employee was using a safety device?
 - Was a protective mechanism activated?

It is also critical to abide by **confidentiality** requirements established in the [Health Insurance Portability and Accountability Act \(HIPAA\)](#) and the [OSHA Access to Employee Exposure and Medical Records](#).

Exposure protection

Using sharps-free equipment protects against possible exposure and injury. Healthcare workers and employers should take advantage of sharps-free equipment to prevent exposures and infection.

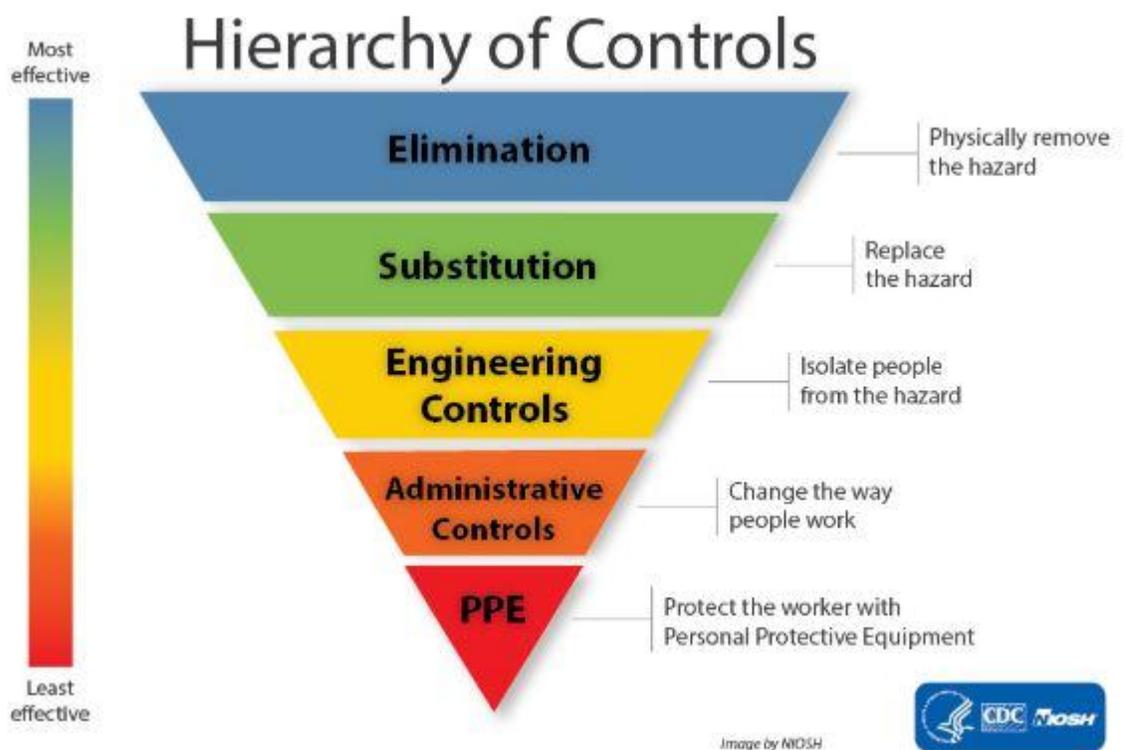
Devices with sharps injury protection (SIP) have built-in engineering controls and are designed to prevent injuries. SIPs include needles that retract or are covered by a shield. Go to the [International Safety Center](#) or the [International Sharps Injury Prevention Society](#) for more information on these devices.

Sharps disposal

Regularly monitor sharps disposal containers to help prevent exposures. Improper sharps disposal is a significant cause of injury in healthcare settings. Designated staff should:

- Ensure that all staff are educated in proper sharps disposal.
- Monitor the fill level of all containers.
- Prohibit placement of non-sharps waste in a sharps container.

Hierarchy of Controls



Using the Hierarchy of Controls to guide work practices can help to ensure exposure prevention.

When developing an exposure prevention plan, always consider the following [hierarchy of controls](#).

Elimination or substitution

Eliminating sharps or substituting with equipment that does not cause puncture wounds or lacerations can reduce risks. Examples include sharp-free medication delivery systems and blunt surgical suture needles.

Work practices and administrative controls

Policies and procedures can help protect healthcare workers from bloodborne pathogens. These include:

- An exposure control plan to identify work practices at risk of bloodborne pathogen exposure.
- Policies to reduce exposure risks including:
 - Clearly labeling biohazardous waste
 - Procedures for safely disposing biohazardous waste
 - Disposing full sharps containers regularly
- Protocols to follow when exposure occurs

Engineering controls

Engineering controls are important for protecting against bloodborne pathogen hazards. They include:

- Sharps disposal containers
 - Made with puncture-resistant plastic or metal
 - Specially designed lids that only allow sharps to be deposited
 - Specifically designed too small for a hand to enter
 - Clearly labeled in areas where needed
- Safety-engineered sharps devices
 - Retracting needles, sliding sheaths, and hinged needle shields

Personal protective equipment

Administrative and engineering controls are preferred methods of protecting healthcare workers. However, using personal protective equipment (PPE) such as gloves are a part of routine care with patients. When protecting against bloodborne pathogens, PPE includes:

- Facial protection
 - Masks or face shields
 - [Respirators](#)

- Eye protection
 - Goggles or glasses with side protection
- Gloves
- [Gowns and other protective clothing](#)

Resources

- [CDC Sharps Safety for Healthcare Settings](#)
- [Hand Hygiene in Healthcare Settings](#)
- [National Center for Emerging and Zoonotic Infectious Diseases](#)
- [National Center for HIV, Viral Hepatitis, STD, and TB Prevention](#)
- [Occupational Safety and Health Administration](#)
- [Protect Yourself and Others - Use Sharps with Safety Features](#)
- [Protection Healthcare Personnel](#)
- [Resources for Reducing Bloodborne Pathogen Exposures in Healthcare Settings](#)

APPENDIX D
AUTHORIZATION FOR DISCLOSURE OF RESULTS FOR HIV

ALPINE COUNTY

**AUTHORIZATION FOR DISCLOSURE OF THE RESULTS
OF A TEST TO DETECT ANTIBODIES TO THE
HUMAN IMMUNODEFICIENCY VIRUS**

A. This authorization for use or disclosure of the results of a blood test to detect antibodies to the Human Immunodeficiency Virus (HIV) is requested of you to comply with the terms of the Confidentiality of Medical Information Act, Civil Code Section 56 et seq. and Health and Safety Code Section 199.21 (g).

B. AUTHORIZATION:

I hereby authorize:

(Name of Physician or Health Care Provider)

To furnish to: Richard O. Johnson, M.D., MPH, Health Officer, Alpine County

the results of blood tests to detect antibodies to the HIV.

C. DURATION:

This authorization shall become effective immediately and shall remain in effect indefinitely unless a date for termination of authorization is listed here:

Date:

D. RESTRICTIONS:

I understand that the person receiving the result may not further disclose the medical information unless another authorization is obtained from me or unless such disclosure is specifically required or permitted by law.

Richard O. Johnson, M.D., MPH, Secure FAX 530-694-2770

Signature:

Date:

APPENDIX E
EMPLOYEE INCIDENT EXPOSURE REPORTING FORM

Employee Incident Exposure Reporting Form

Incident Date: _____ Incident Time: _____

Location of incident: _____

Potentially infectious material involved:

Type: Source:

Circumstances (work being performed, etc.):

How incident was caused (accident, equipment malfunction, etc.):

Personal protective equipment used:

Actions taken (decontamination, clean-up, reporting, etc.):

Recommendations for avoiding repetition:

Printed name: _____ Signature: _____

Date/Time: _____

Sent to (circle): Department Head Risk Manager **Health Officer (CALL 760-914-0496)**

APPENDIX F
SHARPS INJURY LOG
Sharps Injury Log
(CCR, Title 8, Section 5193)

Log Must be Completed for each Employee Exposure Incident Involving a Sharp.

Name: _____

Station/Shift: _____

Date filled out: _____ Incident #: _____

/ / : AM PM
 Date of ~~Month~~ **Month** Day Year Time of injury

Description of the exposure incident: (how injury occurred)

Job classification:

Captain

Engineer

Firefighter

Paramedic/Firefighter

Explorer

Student, type _____

Nurse Administrator

Other _____

Location of Incident:

Field

Station

Training

Hospital

Other _____

Procedure performed when exposure occurred:

Finger stick for chemstrip

IV Start

Intramuscular Injection

Intraosseous Injection

Unknown/not applicable

Other _____

Did the exposure incident occur:

During use of sharp Disassembling

Between steps of a multi-step procedure

After use and before disposal of sharp

While placing sharp into disposal container

Sharp set on scene (street, table, bed, etc.)

Other _____

Body part:
(check all that apply)

Finger Face/head

Hand Torso

Arm Leg

Other _____

Identify sharp involved:
(If known)

Type: _____

Brand: _____

Model: _____

e.g. 18g needle/A B C
Medical/"no stick" syringe

Did the device being used have engineered sharps injury protection? Yes No Don't know

Was the protective mechanism activated?
 yes-fully yes-partially no

Exposure incident occur:
 Before During After activation

Exposed employee: If sharp had no engineered sharps injury protection, do you have an opinion that such a mechanism could have prevented the injury?

Yes No

Explain: _____

Exposed employee: Do you have an opinion that any other engineering, administrative or work practice control could have prevented the injury?

Yes No

Explain: _____

Alpine County Post-Exposure Documentation

(See attached Sharps Injury Log or Employee Exposure Incident Reporting Form)

Name of exposed employee: _____ Gender: _____ Age: _____

Source person if known: _____ Gender: _____ Age: _____

Treating Facility: _____ MRN: _____

Voluntary consent to be tested (circle): Y N Date: _____

Pre-test HIV counseling (circle): Y N Date: _____

HIV Baseline results : _____ Date: _____

Post-test HIV disclosure/counseling (circle): Y N Date: _____

HBS Ag results (circle): positive negative Date: _____

Anti-HCV results: _____ Date: _____

Syphilis results (if HIV positive): _____ Date: _____

Final Diagnosis: _____

Employee labs:

Given source patient results (circle): Y N Date/time: _____

HIV, Hep B and C pre-counseling (circle): Y N Date/time: _____

Hep vaccination status (circle): complete series, incomplete series, anti-HBS titer positive

If source person is positive for any of the above:

Baseline test (if source patient is positive), date/results/date and time given to employee:

HIV: _____

Hep B surface antibody (if not previously known): _____

Anti-HCV: _____

ALT: _____

4-6 weeks post-exposure:

ALT: _____

Anti-HCV (and HCV RNA if positive): _____

Employee treatment:

HIV prophylaxis ordered (circle): Y N Date/time started: _____

Hepatitis B vaccine: #1 in series Date given: _____

#2 in series Date given: _____

#3 in series Date given: _____

Boosters Date(s) given: _____

HBIG: #1 Date given: _____ #2 Date given: _____

Physician referrals/consults: _____

Signatures:

Health Officer: _____ Date: _____

Employee: _____ Date: _____

Alpine County Post-Exposure Flow Sheet

Exposure Incident/Employee:

- Employee reports incident to the Health Officer and Department Head immediately by phone.
- Employee completes the Employee Incident Exposure Reporting Form and provides it to the Health Officer and Department Head.
- Employee completes the Sharps Injury Log when appropriate and provides it to the Department Head.
- Employee coordinates with the Department Head to ensure all necessary forms are completed
- The employee consults with the Health Officer or other qualified licensed healthcare provider to receive recommendations for post-exposure evaluation, testing, and treatment, and long-term follow-up.
- The employee signs and receives a copy of the final County Post-Exposure Documentation Form.

Department Head:

- The Department Head receives the verbal and written incident reports from the employee.
- The Department Head consults with the Health Officer to evaluate the incident and the exposure.
- The Department Head works with the employee to fill out all necessary forms.
- The Department Head works with the employee and the Health Officer to facilitate all recommended medical evaluation, testing, and treatment.
- The Department Head reviews the Employee Exposure Incident Reporting Form, and consults with the Health Officer, and Risk Manager, to formulate any corrective actions that need to be taken to minimize/prevent recurrences of similar events.

Health Officer

- The Health Officer receives and evaluates the incident exposure reports from the employee and the Department Head.
- The Health Officer reviews all available employee health and vaccination records.
- The Health Officer consults with receiving facilities/Coroner/healthcare providers to obtain as much information as possible on any source person.
- The Health Officer evaluates all laboratory results available from any source person.
- The Health Officer provides counseling to the exposed employee.
- The Health Officer makes recommendations for any baseline testing indicated for the employee.
- The Health Officer makes recommendations for any post-exposure prophylaxis for the exposed employee (e.g., vaccinations, immune globulin, medications).

- The Health Officer makes recommendations for any follow-up laboratory testing as indicated.
- The Health Officer implements a Medical Surveillance Program as indicated.

Risk Manager

- The Risk Manager receives the initial reports from the Department Head.
- The Risk Manager coordinates with the employee, the Department Head, and the Health Officer to ensure that all appropriate forms are completed.
- The Risk Manager coordinates with the employee, the Department Head, and the Health Officer to ensure that all medical recommendations are completed.
- The Risk Manager coordinates with the employee, the Department Head, and the Health Officer to ensure that all corrective actions are evaluated and implemented as appropriate.

Alpine County
Annual Communicable Disease Exposure Control Plan Evaluation

Evaluation Date:

List injuries, exposures or near misses attributable to failure of exposure control plan or failure to follow program:

Recommendations for additions to procedures/policies with explanation for each:

Recommendations for deletions of procedures/policies with explanation for each:

Recommendations for modifications to procedures/policies with explanation for each:

Description and date of actual modifications made:

APPENDIX J
CALIFORNIA MANDATORY REPORTABLE DISEASES (CMR)

<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdpH110a.pdf>

COMMUNICABLE DISEASE SURGE PLAN

BACKGROUND

International interest in the field of EMS communicable disease was accelerated by the U.S. Anthrax cases in October, 2001, concerns about Smallpox and bioterrorism, and by the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak in Toronto.

This surge plan is meant to include all communicable diseases that have the potential to overwhelm the Alpine County EMS system and not just pandemic influenza. Pandemic influenza can be an explosive global event in which most, if not all, populations worldwide are at risk for infection and illness. In contrast, many communicable disease outbreaks (e.g. SARS, Ebola, Smallpox, or West Nile Virus) can cause devastation; these infections are typically limited in their spread to either localized areas or regions, or to at-risk populations. Since these can be localized to specific areas, it is feasible that a communicable disease other than influenza could overwhelm the local EMS system.

During a communicable disease surge, it may be necessary to make painful decisions regarding limited care in the face of increased demand and decreasing resources. These decisions will be difficult, but must be made. As in triage at an MCI (multi-casualty incident), the goal of a response to an infectious disease surge must be to maximize the use of available resources and provide reasonable help to the greatest number of people.

It is important that these topics are given consideration now so the EMS system will be better prepared, not just operationally but also emotionally, should a communicable disease surge or any other natural/manmade disaster occur.

Note: *This plan is specific for the EMS system. A more in depth county-wide all risk plan and guidelines can be found in the Alpine County Emergency Operation Plan (EOP), the Medical and Health Operational Area Coordinator (MHOAC) Program Manual, and the Alpine County Public Health Department Operations Plan (DOP). These multi-hazard plans outline Alpine County's preparation and response to a potential pandemic flu threat.*

OBJECTIVE

A communicable disease outbreak would cause a staffing shortage of employees as well as an increase in pre-hospital run volume for the EMS system. The objective of this plan is to mobilize the resources of the EMS system during a communicable disease outbreak at an elevated level. This requires a commitment to pre-hospital care beyond normal daily EMS capabilities and operations.

The Administration of the EMS system will assemble to determine and facilitate the following during an infectious disease outbreak that affects the delivery of EMS Services:

- Analyze the emergency situation.
- Determine what EMS and other department resources are needed for the emergency.

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

- Prioritize response and resources as necessary.
- Reduce the transmission of the infectious disease illness.

LEVELS OF AWARENESS (SUBJECT TO MODIFICATION BY THE HEALTH OFFICER BASED ON CURRENT SITUATIONAL AWARENESS)

1. Normal Awareness and Operations:

Human Communicable Disease exists somewhere in the world

- No cases identified in the United States
- Response procedures are normal

2. Heightened Awareness and Operations

Human Communicable Disease cases identified in the United States

- No significant impact on EMS and medical systems
- Response may be altered

3. Extreme Awareness and Operations

Human Communicable Disease has achieved rapid human-to-human transmission with increased morbidity and mortality.

- Overwhelming impact on EMS and medical systems
- Response procedures are/may be altered

	EMS Level 1	EMS Level 2	EMS Level 3
DISPATCH	Normal	Normal	Modified response to call volume and determinants
RESPONSE	<ul style="list-style-type: none"> • Review and update internal emergency operations plans • Assess PPE supplies needed • Education on the communicable illness, how to prevent the spread of the illness • Participate with national, state, and local agencies in surge guidance efforts 	<ul style="list-style-type: none"> • Locate supplemental transport assets • Consider increased use of masks on all patients transported with pandemic symptoms • Order extra supplies of PPE • Educate personnel on the current situation 	<ul style="list-style-type: none"> • Modified response to call volume and determinants • Begin creating adjusted staffing patterns, consider redistribution of resources • Educate staff on the current situation and staffing and procedures changes • Implement guidelines from local EMS Agency
TRIAGE	Normal	Initial assessment for ILI (Influenza Like Illness) or communicable illness occurring at time	<ul style="list-style-type: none"> • Initial assessment for signs of communicable illness occurring at time with limited First Responders
TREATMENT	Normal	Enhanced awareness and specific treatment measures	Enhanced awareness and specific treatment measures
TRANSPORT	Normal	Normal with early notification of ILI or communicable illness occurring at time to ER	<ul style="list-style-type: none"> • Follow LEMSA guidelines for patient transport, as available • Private vehicle for stable pts. • Ambulance transport only if required.
DESTINATION	Normal	Normal	May transport to alternate sites set up by the county and hospitals
EQUIPMENT	Normal	Enhanced decontamination efforts with all patients	Limited equipment use and Enhanced decontamination efforts with all patients

DECON	Normal	Enhanced with decontamination supplies and techniques	Enhanced with decontamination supplies and techniques
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LEVEL 1

Human Communicable Disease exists somewhere in the world. No cases are reported in the United States.

- Continue with unfinished items in planning and preparations
- Normal responses
- Plan in place, increased awareness and use of PPE
 - Within 6-feet of patient with influenza like illness or the pandemic illness signs and symptoms
 - If patients on a ventilator, nebulizer treatment, BVM

LEVEL 2

Human Communicable Disease cases identified in the United States. No significant impact on EMS and medical systems.

- Dispatch will ask specific questions to determine if there are pandemic illness symptoms.
 - This will be relayed to the responders.
- Increased awareness of personal protection guidelines when responding to possible pandemic patients: (Mask, goggles, gloves, gowns, etc.)
- Prepare to manage increased volume of bio-hazard infectious waste.
- Minimize time spent in infectious environment.
- Minimize number of people in close contact with patient.
- Increase efforts at personal hygiene and decontamination.
- Decontaminate EMS equipment.
- Plan on an increased use of PPE, medical supplies, and other logistical items.

LEVEL 3

Human Communicable Disease has achieved rapid human-to-human transmission with increased morbidity and mortality.

- Direct activation of Surge Plan standing orders.
- In the case of an infectious disease surge, demand for EMS of all types may reach crisis proportions. In this event, significant adjustments may be necessary in the guidelines covering dispatch, response, treatment and transportation. The Surge Plan provides guidance for the EMS system when and if the crisis point is reached.

The decision to activate the Surge Plan will be made by the Health Officer. In a public health crisis, the situation may evolve rapidly. Depending on the situation, the Surge Plan-in its entirety or any portion--may be activated and adjusted as the crisis warrants.

In addition, the Health Officer is the MHOAC (Medical Health Operational Area Coordinator). As such, he is responsible for situational awareness, reporting, and the

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

coordination of all medical and health resource requesting out of the operational area (Alpine County). (Refer to the California Public Health and Medical Operations Manual (EOM) for more details:

<http://www.bepreparedcalifornia.ca.gov/ResourcesAndLinks/Pages/ResourcePublications.aspx>

<http://www.emsa.ca.gov/disaster/files/EOM712011.pdf>

From the EOM:

INCIDENT CONSIDERATIONS

INTRODUCTION

Incidents with public health and medical impact often require the coordinated involvement of emergency medical services, public health, environmental health, and health care providers. Key incident characteristics must be quickly determined and communicated in order to establish a common operating picture. This chapter identifies standardized terminology to assist response, support and coordinating partners to communicate more effectively during incidents with public health and medical implications.

Throughout this manual, three descriptive conditions are used to establish a common framework for operational response. These conditions are:

- Day-to-Day Activities;
- Unusual Events; and
- Emergency System Activation.

Day-to-Day Activities

Entities within the Public Health and Medical System conduct a myriad of day-to-day activities that may be described as "routine business". Local health departments (LHDs), local environmental health departments (EHDs), local emergency medical services agencies (LEMSAs) and State agencies conduct activities related to their statutory and regulatory authorities and responsibilities. On a daily basis, 911 calls lead to the dispatch of first responders and EMS providers, although these individual emergencies generally do not impact or threaten the overall capacity of the Operational Area to respond. Other activities are undertaken on a daily basis to maintain systems important to public health, environmental health, and emergency medical services.

Unusual Event

An unusual event is defined as an incident that significantly impacts or threatens public health, environmental health or emergency medical services'. An unusual event may be self-limiting or a precursor to emergency system activation. The specific criteria for an unusual event include any of the following:

*Please note that the EOM definition of "unusual event" is broadly applicable and differs from the specialized use of this term in reference to nuclear reactors. The Nuclear Regulatory Commission defines an unusual event as the potential degradation in the safety level of a nuclear power plant or nonpower reactor. It is the lowest emergency classification for nuclear reactors. No release of radioactive material requiring offsite response or monitoring is expected unless further degradation occurs.

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

- The incident significantly impacts or is anticipated to impact public health or safety;
- The incident disrupts or is anticipated to disrupt the Public Health and Medical System;
 - Resource; are needed or anticipated to be needed beyond the capabilities of the Operational Area, including those resources available through existing agreements (day-to-day agreements, memoranda of understanding, or other emergency assistance agreements);
 - The incident produces media attention or is politically sensitive;
 - The incident leads to a Regional or State request for information; and/or
 - Whenever increased information flow from the Operational Area to the State will assist in the management or mitigation of the incident's impact.

Emergency System Activation

Emergency system activation occurs when Department Operations Centers (DOCs) and/or Emergency Operation Centers (EOCs) are activated within the Operational Area.

PUBLIC HEALTH AND MEDICAL INCIDENT LEVEL

The Public Health and Medical Incident Level is based on the need for health and/or medical resources to effectively manage the incident. There are three levels (Level 1, 2 or 3) based on the need for resources:

Level 1	Requires resources or distribution of patients within the affected Operational Area only or as available from other Operational Areas through existing agreements including day-to-day agreements, memoranda of understanding or other emergency assistance agreements).
Level 2	Requires resources from Operational Areas within the Mutual Aid Region beyond existing agreements (including day-to-day agreements, memoranda of understanding or other emergency assistance agreements) and may include the need for distribution of patients to other Operational Areas.
Level 3	Requires resources or distribution of patients beyond the Mutual Aid Region. May include resources from other Mutual Aid Regions, State or federal resources.

Level 1 Public Health and Medical Incident

A Level 1 Public Health and Medical Incident can be adequately mitigated using available health and/or medical resources from within the affected Operational Area or by accessing resources from other Operational Areas through existing agreements (including day-to-day agreements, memoranda of understanding, or other emergency assistance agreements).

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

During Level 1 Incidents, a variety of response partners may be involved depending on the nature of the incident, including LEMSA, LHD, EHD and other Public Health and Medical System participants. The MHOAC Program should be notified of Level 1 Public Health and Medical Incidents, including the need for accessing resources through existing agreements, and assist in accordance with local policies and procedures. Health and medical resource requests within the Operational Area should be coordinated according to local policies and procedures.

Level 1 Public Health and Medical Incidents may require emergency system activation, including activation of DOCs or EOCs within the Operational Area.

Level 2 Public Health and Medical Incident

A Level 2 Public Health and Medical Incident requires health and/or medical resources from other Operational Areas within the Mutual Aid Region beyond those available through existing agreements and may include the need for distribution of patients to other Operational Areas. During a Level 2 Public Health and Medical Incident, resource requests should be coordinated by the MHOAC Program of the affected Operational Area as detailed in the Resource Management chapter of this manual.

A Level 2 Public Health and Medical Incident will typically require assistance from the RDMHC Program within the Mutual Aid Region and may require emergency system activation, including activation of DOCs or EOCs within the Operational Area and Mutual Aid Region.

Level 3 Public Health and Medical Incident

During a Level 3 Public Health and Medical Incident, the need for health and/or medical resources exceeds the response capabilities of the affected Operational Area and associated Mutual Aid Region. This determination is made from an assessment of health and medical resources relative to current and expected demands. As with Level 2 Public Health and Medical Incidents, requests for health and medical resources are coordinated by the MHOAC Program within the affected Operational Area(s), working in conjunction with the RDMHC Program(s), as detailed in the Resource Management chapter of this manual.

A Level 3 Public Health and Medical Incident will lead to activation of DOCs/EOCs within the Operational Area, Mutual Aid Region, and State.

If there is a clear need for significant out-of-region resources, or if communication with the affected area(s) is not available, State and/or federal government response agencies may begin mobilizing and pre-positioning resources while awaiting local req

PUBLIC HEALTH AND MEDICAL SYSTEM STATUS

The designation of Public Health and Medical Incident Level 1, 2 or 3 describes the need for resources. It is also important to assess and report the operational status of the Public Health and Medical System within the Operational Area. While these two assessments are likely to track in parallel, each provides different information on the impact of the emergency.

Public Health and Medical System Status is assessed using a color-coded system that describes conditions along a continuum from normal daily operations to major disaster. This system is generally modeled after the system developed to assess and report Health Care Surge Level described in CDPH's *Standards and Guidelines for Healthcare Surge During Emergencies*.

PUBLIC HEALTH AND MEDICAL SYSTEM STATUS	
Color	Condition
Green	The Public Health and Medical System is in usual day-to-day status. Situation resolved; no assistance is required.
Yellow	The Public Health and Medical System is managing the incident using local resources or existing agreements. No assistance is required.
Orange	The Public Health and Medical System requires assistance from within the local jurisdiction/Operational Area.
Red	The Public Health and Medical System requires assistance from outside the local jurisdiction/Operational Area.
Black	The Public Health and Medical System requires significant assistance from outside the local jurisdiction/Operational Area.
Grey	Unknown.

DECLARED SURGE PLAN EMERGENCY

COMMUNICATIONS/DISPATCH

Alpine County Dispatch will follow their surge plan and guidelines. This may include modifying dispatch protocols. In addition, during waves of the communicable disease outbreak, it may be impossible to make an ambulance response for every call. In these cases; a local emergency medical services agency (LEMSA) protocol for communicable disease surge responses may be utilized.

In managing calls for EMS service, call receivers must be alert to signs and symptoms which indicate the presence of an infectious disease or a potentially infectious condition, and relate this to the emergency responders.

EMERGENCY RESPONSE

- When a determination is made that requires reserve units placed in service, Mountain Valley Emergency Medical Services (MVEMS) will be notified.

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

- By decision of MVEMS and the Health Officer, routine transport of patients with pandemic signs and symptoms may be suspended because of over-taxed EMS and acute care resources.

RECALL OF OFF-DUTY PERSONNEL

Personnel may be recalled for replacement of vacancies caused by the incident, to place reserve companies in service, or to respond to the scene of an incident.

REDIRECTION OF RESOURCES

In the event of a major emergency situation, such as a communicable disease surge, the function of EMS is to provide personnel resources and transportation to support emergency operations.

- When a determination is made that the situation requires the recall of off-duty personnel to handle the increased EMS call volume or reduction in EMS staffing, the MHOAC, in collaboration with other resources, may determine that reconfiguration of EMS response and staffing is necessary and can be done.

SICK LEAVE

It is suggested by each and every resource and reference at the time of this plan that a stay-at-home sick policy be encouraged during an outbreak. Patients should stay at home during their contagious period, as determined by public health authority guidance.

EMERGENCY OPERATIONS

The operations responsibilities under this plan include:

- Provide and manage emergency services.
- The MHOAC will coordinate with EMS management to formulate an emergency medical response plan to best suit the needs of the community and the personnel of EMS.

SUPPLIES & VEHICLE MAINTENANCE

Supplies and Vehicle Maintenance responsibilities under this plan include:

Maintaining the following capabilities at all times:

- Prepare reserve apparatus to be placed in service without delay.
- The supply personnel will keep a pre-determined number of N95 masks, eye protection, gowns and gloves in stock for personnel use.
 - Estimates from OSHA:<http://www.osha.gov/Publications/OSHA3327pandemic.pdf> is 8 N95 masks per day equaling 960 N95 masks per person for 120 days. (Based on 24 weeks for two pandemic waves and the assumption to be five work days per week and thus 120 work days per employee over the two pandemic waves.
 - Converting the estimates from OSHA to the department schedule: Based on 24-weeks (168 days), 45 employees working every day requiring N95 masks, and 8 masks per person. Daily requirements are: 360 N95 masks every day for a total of 60,480 N95 masks for 24-weeks.

APPENDIX K
COMMUNICABLE DISEASE SURGE PLAN

- Provide for personnel to make emergency purchases or obtain emergency supplies and equipment from other sources and vendors. This would be an extension of basic stockpiling of PPE.

CONSIDERATIONS WHEN SUPPLY OF PPE IS CRITICALLY LOW IN SUPPLY

- Re-use of N-95 respirator.
 - External surface contaminated; handle with gloves followed by hand hygiene.
 - Do not re-use if face seal is compromised with perspiration or deformation.
- Tight-fitting surgical masks can be used if N95, P100 respirators are no longer available.

PUBLIC INFORMATION OFFICER

The Health Officer or designee will be responsible for establishing and maintaining media contact to establish rumor control (during the outbreak) by providing timely information regarding the factual current situation, scope of incident, and resource management issues. All release of information must be coordinated with the Joint Information System (JIS), and requires the approval of the highest ranking incident manager (e.g., EMS, Public Health, Alpine County) when emergency system activation has occurred with the opening of emergency operations centers.

EMS Management

Responsibilities under this plan include:

- Allow for the release of stockpiled personal protective equipment.
- Assist and coordinate with local health officials to provide health and safety measures during pandemic conditions.
- Disseminate information to department and employees regarding health and safety measures as current information is received.
- Enforce all pandemic wellness measures outlined in pandemic wellness plan.
- Personnel surveillance when reporting for work.
- Act as a liaison between EMS and Alpine County Health Department to ensure proper prevention and intervention protocols instituted in the case of pandemic conditions.

EMERGENCY MEDICAL SERVICES

Additional responsibilities include:

- Ensure that all special equipment and supplies are deployed to staging locations.
- Ensure that all EMS support staff are contacted or recalled. Personnel may be recalled for replacement of vacancies caused by the incident, to place reserve units in service, or to respond to the scene of an incident in a supervisory role.
- Ensure preventive medical measures and proper rehab for all personnel involved in a natural or manmade incident (including vaccination or antimicrobial prophylaxis).
- Ensure Coordination with the local public health department in the event of a public health emergency.
- Enforce all pandemic wellness measures outlined in the pandemic wellness plan.

EMS RESPONSE

During the response, EMS providers must pay close attention to the dispatch information provided for details indicating a possible infectious condition. As with all patients, use of appropriate PPE will be indicated. This may also include preliminary history, or other knowledge of known infectious patients/locations where these patients have been identified.

Every member of the responding crews must be informed and PPE readied for use. Units may consider staging until the scene is secured and PPE donned. Patient(s) may have been advised by dispatch to move outside to lessen the responding crew's exposure to the infectious environment.

Responding to patients with signs/symptoms of a pandemic illness, limited personnel should be included on the initial assessment. Paramedics should determine the minimum number of personnel needed to respond to a particular incident. If required, subsequent personnel may be added.

PATIENT DISPOSITION AND TRANSPORT

Individual patient transport destinations will be determined based on:

- The patient's medical needs and/or infectious disease status, suspected or known.
- Hospital status (bed availability).
- Availability of transport vehicles.
- Alternate care facilities (if indicated by the MHOAC).

During transport, ventilation within the patient compartment will be increased by opening windows and turning on mechanical ventilation.

On arrival at the hospital, PPE will be worn until patient transfer has occurred and the EMS equipment and vehicle have been decontaminated. Decontamination of vehicle, equipment and all potentially contaminated surfaces will take place using recommended disinfectant. Removal and disposal of contaminated PPE will take place in accordance with Alpine County procedure.

Health Officer

- The Health Officer will provide medical advice and assist with medical issues.

APPENDIX L
LEGAL REFERENCES AND OSHA REGULATIONS

Legal References and OSHA Regulations

Summary of Legal References

The purpose of this appendix is to provide a generalized list of federal and state laws that impact communicable disease-related concerns for emergency medical services workers. Because these laws are constantly changing and evolving, only summary information is provided.

This appendix is not intended as an exhaustive list of legal reference to communicable disease, but rather an informative guide for fire department personnel.

California Health and Safety Code

Section 1797.186

Entitles each employee to prophylactic medical treatment to prevent the onset of disease, provided that the exposed employee demonstrates that he /she was exposed while on-duty to a contagious disease, as listed in Section 2500 of Title 17 of the California Administrative Code, while performing first-aid or cardiopulmonary resuscitation services to any person.

Section 1797.188

Requires county health officers to notify prehospital emergency medical care personnel-volunteer or paid--when they have been exposed to a reportable disease, such as HIV, in the course of providing emergency services or rescues. The exposure must be one capable of transmitting the disease. The notification requirement applies only under specified circumstances in which the exposed personnel names and phone numbers have been provided to the health facility or the chief medical examiner-coroner at the time a patient is transferred, and that information is subsequently relayed to the county health officer.

Section 120975- 121020

Allows for the testing of source patients and provides for confidentiality.
Protects the privacy of individuals who are the subject of blood testing for antibodies to human immunodeficiency virus (HIV).
Allows for the disclosure of HIV status to the exposed employee or the Health Officer.

Section 120260 - 120263

Allow individuals who experience a significant exposure (capable of transmitting HIV) to the blood or other potentially infectious material of a patient, during the course of rendering health care-related emergency response, or other occupationally-related services, to request information on the source patient's HIV status. If the source patient is already known to be HIV-infected, the patient's attending physician may disclose this information to the exposed individual. The attending physician must first attempt to obtain the source patient's consent to release this information, but consent is not required.

APPENDIX L
LEGAL REFERENCES AND OSHA REGULATIONS

Section 121060

Allows court-ordered HIV testing of any person charged with interfering with the official duties of a peace officer, firefighter, or emergency medical personnel by biting, scratching, spitting, or transferring blood or other bodily fluids on, upon, or through the skin or membranes of the peace officer, firefighter, or emergency medical personnel. The test result must be reported to the accused, each peace officer, firefighter, or emergency medical personnel named in the petition for the test, their employing entities, and if the accused is in custody, the officer in charge and the chief medical officer of the detention facility.

California Penal Code

Section 1524.1

A court, at the request of the victim, may issue a search warrant for the purpose of testing the accused's blood or oral mucosal transudate saliva with any HIV test, as defined in Section 120775 of the Health and Safety Code when the court finds that there is probable cause to believe that the accused committed the offense, and that there is probable cause to believe that blood, semen, or any other bodily fluid identified by the State Department of Health Services in appropriate regulations as capable of transmitting the HIV has been transferred from the accused to the victim.

Federal

Ryan White Act

Requires the designation of a Designated Infection Control Officer.

Allows for the disclosure of HIV status to the exposed employee or the department's Designated Infection Control Officer.

OSHA AND CDC

Cal/OSHA Bloodborne Pathogen Standard CCR-T8 5193:

<http://www.dir.ca.gov/title8/5193.html>

Cal/OSHA Aerosol Transmissible Diseases Standard, Section 5199

<http://www.dir.ca.gov/title8/5199.html>

Cal/OSHA: Exposure Control Plan for Bloodborne Pathogens

http://www.dir.ca.gov/dosh/dosh_publications/expplan2.pdf

OSHA: Model Plans and Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards

<http://www.osha.gov/Publications/osha3186.pdf>

CDC Tuberculosis Guidelines for Prevention of TB in Healthcare Facilities:

<http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>

APPENDIX L
LEGAL REFERENCES AND OSHA REGULATIONS

CDC – Immunization of Health-Care Personnel

<http://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf>

CDC - Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>

CDC – Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis

<http://www.cdc.gov/mmwr/PDF/rr/rr5409.pdf>

CDC – Recommendations for Postexposure Interventions to Prevent Infection with Hepatitis B Virus, Hepatitis C Virus, or Human Immunodeficiency Virus, and Tetanus in Persons Wounded During Bombings and Similar Mass-Casualty Events – United States, 2008

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5706a1.htm?s_cid=rr5706a1_e

CDC – Sharps Safety for Healthcare Settings

<http://www.cdc.gov/sharpssafety/>

CDC – Healthcare-associated Infections

<http://www.cdc.gov/HAI/index.html>

CDC – Exposure to Blood: What Healthcare Personnel Need to Know

http://www.cdc.gov/HAI/pdfs/bbp/Exp_to_Blood.pdf

EMSA

Minimum Personal Protective Equipment (PPE) for Ambulance Personnel in California: Guidelines

<http://www.emsa.ca.gov/pubs/pdf/emsa216.pdf>

APPENDIX M
STANDING ORDERS FOR EMPLOYEE AND SOURCE SCREENING



COUNTY OF ALPINE
Health and Human Services
Nichole Williamson, Director
Angela Slais, Deputy Director
Richard O. Johnson, M.D., MPH, Health Officer

Standing Order - Alpine County

Screening of Employee for Exposure to Potentially Hazardous Body Fluids

EMPLOYEE NAME:

MED. REC #:

ENCOUNTER #:

DOB/SEX:

PHYSICIAN: Richard O. Johnson, M.D., MPH

California License G-29540

NPI: 1063528362

*BILL – Alpine County – patient not to be billed
75 Diamond Valley Rd
Markleeville CA 96120

Send Results to: Dr. Johnson
Cell: 760-914-0496
Secure Fax: 530-694-2770

DIAGNOSIS: V15.85 Exposure to potentially hazardous body fluids

____ **HEPATITIS C ANTIBODY (HCVAB)**

____ **HEPATITIS B SURFACE ANTIBODY (HBSAB) - STAT**

____ **HV 1 & 2 ANTIBODY - STAT**

____ **ALT**



COUNTY OF ALPINE
Health and Human Services
Nichole Williamson, Director
Angela Slais, Deputy Director
Richard O. Johnson, M.D., MPH, Health Officer

Standing Order - Alpine County

Screening of Source (Expired) for Potentially Hazardous Body Fluids

SOURCE NAME (IF KNOWN):

MED. REC #:

ENCOUNTER #:

DOB/SEX:

PHYSICIAN: Richard O. Johnson, M.D., MPH
California License G-29540
NPI: 1063528362

*BILL – Alpine County – patient not to be billed
75 Diamond Valley Rd
Markleeville CA 96120

Send Results to: Dr. Johnson
Cell: 760-914-0496
Secure Fax: 530-694-2770

DIAGNOSIS: V73.89 Screening for HIV and V82.89 Screening for Hepatitis

___ **HEPATITIS C ANTIBODY (HCVAB)**

___ **HEPATITIS B SURFACE ANTIGEN (HBSAG) - STAT**

HV 1 & 2 ANTIBODY - STAT