

WEST COUNTY TRANSPORTATION AGENCY



*West County
Transportation*

**INJURY AND ILLNESS
PREVENTION PROGRAM
(SB 198)**

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INJURY AND ILLNESS PREVENTION PROGRAM (IIPP) for West County Transportation Agency

RESPONSIBILITY

The Injury and Illness Prevention Program (IIP Program) administrator, Human Resources Coordinator, has the authority and responsibility for implementing the provisions of this program for West County Transportation Agency.

All managers and supervisors are responsible for implementing and maintaining the IIP Program in their work areas and for answering worker questions about the IIP Program.

COMPLIANCE

All workers, including managers and supervisors, are responsible for complying with safe and healthful work practices. Our system of ensuring that all workers comply with these practices include:

- 1) Informing workers of the provisions of our IIP Program.
- 2) Evaluating the safety performance of all workers.
- 3) Recognizing employees who perform safe and healthful work practices.
- 4) Providing training to workers whose safety performance is deficient.
- 5) Disciplining workers for failure to comply with safe and healthful work practices.

COMMUNICATION

All managers and supervisors are responsible for communicating with all workers about occupational safety and health in a form readily understandable by all workers. Our communication system encourages all workers to inform their managers and supervisors about workplace hazards without fear of reprisal.

Our communication system includes:

- 1) New worker orientation including a discussion of safety and health policies and procedures.
- 2) Review of our IIP Program.
- 3) Workplace safety and health training programs.
- 4) Regularly scheduled safety meetings.
- 5) Posted or distributed safety information.
- 6) A system for workers to anonymously inform management about workplace hazards.
- 7) Our establishment has less than ten workers and communicates with and instructs workers orally about general safe work practices and hazards unique to each worker's job assignment.
- 8) Website – www.schoolbusing.org

HAZARD ASSESSMENT

Periodic inspections to identify and evaluate workplace hazards shall be performed by a competent observer in the following areas of our workplace:

Competent Observer	Area
Executive Director	All Facilities
Supervisor of Transportation Operations and Safety	Dispatch/Drivers
Vehicle Maintenance and Facilities Manager	Maintenance/Shop/Service
Human Resources Coordinator (Risk Assessment Officer)	Staff

Periodic inspections are performed according to the following schedule:

1. Weekly.
2. When we initially establish our IIP Program.
3. When new substances, processes, procedures, or equipment that present potential new hazards are introduced into our workplace.
4. When new, previously unidentified hazards are recognized.
5. When occupational injuries and illnesses occur.
6. Whenever workplace conditions warrant an inspection.

ACCIDENT/EXPOSURE INVESTIGATIONS

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Visiting the accident scene as soon as possible.
2. Interviewing injured workers and witnesses.
3. Examining the workplace for factors associated with the accident/exposure.
4. Determining the cause of the accident/exposure.
5. Taking corrective action to prevent the accident/exposure from reoccurring.
6. Recording the findings and corrective actions taken.

Accident/Exposure Investigation is held by Risk Assessment Officer/Human Resources Coordinator and reported to Redwood Empire Schools Insurance Group (RESIG).

HAZARD CORRECTION

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

1. When observed or discovered.
2. When an imminent hazard exists that cannot be immediately abated without endangering employee(s) and/or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection.

Hazard Assessment and Correction Record is included in IIPP Plan.

TRAINING AND INSTRUCTION

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction is provided as follows:

1. When the IIP Program is first established.
2. To all new workers, except for construction workers who are provided training through a construction industry occupational safety and health program approved by Cal/OSHA.
3. To all workers given new job assignments for which training has not previously been provided.
4. Whenever new substances, processes, procedures, or equipment are introduced to the workplace and present a new hazard.
5. Whenever we are made aware of a new or previously unrecognized hazard.
6. To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed.
7. To all workers with respect to hazards specific to each employee's job assignment.

General workplace safety and health practices include, but are not limited to, the following:

1. Implementation and maintenance of the IIP Program.
2. Emergency action and fire prevention plan.
3. Provisions for medical services and first aid, including emergency procedures.
4. Prevention of musculoskeletal disorders, including proper lifting techniques.
5. Proper housekeeping, such as keeping stairways and aisles clear, work areas neat and orderly, and promptly cleaning up spills.
6. Prohibiting horseplay, scuffling, or other acts that tend to adversely influence safety.
7. Proper storage to prevent stacking goods in an unstable manner and storing goods against doors, exits, fire extinguishing equipment and electrical panels.
8. Proper reporting of hazards and accidents to supervisors.
9. Hazard communication, including worker awareness of potential chemical hazards, and proper labeling of containers.
10. Proper storage and handling of toxic and hazardous substances, including prohibiting eating or storing food and beverages in areas where they can become contaminated.

EMPLOYEE ACCESS TO THE IIPP

Our employees – or their designated representatives - have the right to examine and receive a copy of our IIPP. This will be accomplished by:

Agency will provide access in a reasonable time, place, and manner, but in no event later than five (5) business days after the request for access is received from an employee or designated representative. Whenever an employee or designated representative requests a copy of the Program, we will provide the requester a printed copy of the Program, unless the employee or designated representative agrees to receive an electronic copy of the Program. The IIPP may be accessed on the website under Employee Information at the www.schoolbusing.org website.

Any copy provided to an employee or their designated representative need not include any of the records of the steps taken to implement and maintain the written IIP Program.

Where we have distinctly different and separate operations with distinctly separate and different IIPPs, we may limit access to the IIPP applicable to the employee requesting it.

An employee must provide written authorization in order to make someone their “designated representative.” A recognized or certified collective bargaining agent will be treated automatically as a designated representative for the purpose of access to the company IIPP. The written authorization must include the following information:

- The name and signature of the employee authorizing the designated representative.
- The date of the request.
- The name of the designated representative.
- The date upon which the written authorization will expire (if less than 1 year).

RECORDKEEPING

Records of hazard assessment inspections, including the person(s) or persons conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded on a hazard assessment and correction form. Documentation of safety and health training for each worker, including the worker's name or other identifier, training dates, type(s) of training, and training providers are recorded on a spreadsheet maintained by the Human Resources Coordinator and/or Online Safety Training Program.

Inspection records and training documentation will be maintained for one year, except for training records of workers who have worked for less than one year which are provided to the worker upon termination of employment.

HAZARD ASSESSMENT AND CORRECTION RECORD

Date of Inspection: _____

Name of Person Conducting Inspection: _____

Unsafe Condition or Work Practice: _____

Corrective Action Taken: _____

Corrective Action Completion Date: _____

GENERAL SAFE WORK PRACTICES

JOB CATEGORY: **ALL EMPLOYEES**

Type of Facility: All Facilities

POTENTIAL HAZARD

GENERAL SAFE WORK PRACTICE

Slips and Falls on Same Level

- Clean up all spills immediately.
 - Report slick floors as a hazard.
 - Reduce tripping hazards through good housekeeping and safety awareness.
 - Unplug and roll up long electrical cords and extension cords when not in immediate use.
 - Wear appropriate shoes for job classification.
 - Use alternate routes when floors are wet or being mopped.
 - Watch where you are walking.
 - Turn on lights when entering an unlit area.
 - Use tread guards across walkways where it is not possible to re-route cords.
 - Maintain clear aisle ways.
 - Be especially cautious when walking during wet or icy weather conditions.
 - Be aware of gravel, sand, or other debris on walkways.
-

Falls From High Places

- Never use a broken ladder or step stool.
 - Use step ladder rather than chairs or tables.
 - Use appropriate ladder for the situation.
 - Make sure ladders and step stools are in good repair and are properly set before use.
 - Report any potentially hazardous condition, including missing or broken guardrails or other hazards.
 - Limit the amount of high storage and other reasons for needing ladders.
 - Secure help on high work or unusual circumstances.
 - Keep ladder area clear of obstructions.
 - Use handrails on ascending and descending stairs.
-

Back Injuries

- Achieve and maintain good personal fitness through regular stretching and exercise.
- Attend a back safety training program.
- Learn and use proper lifting techniques and practice good body mechanics.
- Secure assistance with heavy or bulky material.
- Keep objects as close to your body as possible when lifting.
- **DO NOT** twist while lifting. Lift first and then turn your body.
- Avoid reaching or lifting from an awkward position.
- Use step ladder and/or get help when lowering materials from high places.
- When carrying a load, plan your route before starting, block open doors, and be sure the route is clear of obstructions or tripping hazards.
- **DO NOT** attempt any unsafe lifting operation.
- Use hand truck, lifts, or other mechanical means to assist you.
- Use back support devices when load is heavy or a back problem exists.
- Make sure chair or furniture is comfortable and is properly adjusted.
- Stand and move about frequently.

POTENTIAL HAZARD

GENERAL SAFE WORK PRACTICE

Being Hit By Falling Objects/Caught In Or Between

- Limit high storage where possible.
 - Equip all cabinets over 5 feet with device, other than magnets, to prevent doors from opening in the event of an earthquake.
 - Secure material with shelf lips or other means.
 - Store glass products, breakables, and heavy materials on lower shelves.
 - Attach cabinets, shelving and certain fixtures to secure structures.
 - Toe boards and handrails should be in place in all loft areas.
 - Open only one file drawer at a time.
 - **DO NOT** open drawers past safety stops.
-

Cuts, Abrasions, Burns and Other Bodily Injuries

- Use proper carrying techniques for sharp objects.
 - Store sharp, pointed objects flat and pointed away from user.
 - Clean/store sharp utensils individually; do not mix with other materials in a sink or drawer.
 - Safety devices, such as finger guards and blade locking devices should be used on paper cutters.
 - Understand proper use techniques for each tool before using.
-

Cuts, Lacerations and Eye Injuries from Power Equipment

- **DO NOT** operate machines or equipment until instructed in proper use.
 - Follow manufacturer's recommendations for safe use of tool.
 - All electrical equipment should be turned off and unplugged when cleaning, repairing, or changing parts.
 - Wear eye protection if grinding or sawing materials.
-

Fire Injury

- Report all fires to fire and insurance officials.
 - Know fire extinguisher location and operation.
 - Know evacuation routes and alternatives.
 - Know bell or alarm system at work locations.
 - Know location of electrical and gas controls for work area.
 - Know contingency plans for various emergencies.
 - Practice specific role in emergency plan.
 - Store combustible materials away from heat source.
 - Make sure portable heaters have tip over switches and are U.L. approved.
 - Maintain good housekeeping practices.
 - **DO NOT** risk your life trying to extinguish a fire which could get out of control.
 - Storage of duplication/ditto fluids should be limited to 2 gallons, plus one in use, at a single location.
 - Unplug all electrical appliances (such as space heaters, coffee pots, etc.) at the end of each work day.
-

Electrical Shock Injuries

- Only trained personnel should work on or modify electrical systems.
- All electrical plugs should be pushed fully into receptacle.
- Make sure electrical equipment is not wet or damp.
- Always use grounded electrical cords.
- Multiple outlet extenders (power strip, etc.) must have a circuit breaker.

POTENTIAL HAZARD

GENERAL SAFE WORK PRACTICE

Electrical Shock Injuries Continued

- Unplug electrical equipment by pulling on the plug instead of the cord.
 - **DO NOT** hang objects from light fixtures.
 - Replace rather than repair electrical cords.
 - **DO NOT** remove ground prong on the make electrical plug.
 - Inspect electrical equipment, including cords, for defects before use.
 - All outlets near water/liquid sources should be Ground Fault Circuit Interrupter (GFCI) type outlets. Report any unprotected outlets.
 - Use non-metal ladders around electrical equipment.
-

Vehicle Accidents

- Wear seat belts.
 - Maintain a current and valid California Driver's License (CDL).
 - Obey traffic laws when driving on school business in private or district vehicles.
 - Make a pre-trip inspection of all lights, brakes, tire tread, seat belts, mirrors and signals.
 - Avoid backing where possible on school grounds.
 - Practice defensive driving.
 - Keep windows clean and free of visual obstructions.
 - Keep dash board free of clutter.
-

Misc. Injuries

- Horseplay is not appropriate in the work place and should be avoided.
 - Desks, furniture and work space should be arranged to minimize reaching, twisting, and bending.
 - Furniture, tables, work space area and equipment should be maintained in good repair to avoid breakage or other failure which might cause injury.
 - Store lunches and food where it is safe from contamination by chemicals or other hazardous substances.
 - Unusual conditions such as extra high or low steps, low ceilings, or unclear exiting should have special signs and/or be highlighted with paint to draw attention to the condition.
 - Keep file drawers closed except during immediate use.
 - Post signs warning persons with pacemakers when microwave ovens are used.
 - Maintain moderate noise levels (i.e., dance music, loud speakers, etc.).
 - Report all accidents/injuries at work.
 - Become familiar with emergency/disaster plan for your site and participate in practice drills.
 - Learn to recognize potential hazards from earthquakes and set up your classroom/work area to minimize those hazards.
 - See Appendix O for a list of additional health and safety resources.
-

Stress

- Prioritize the tasks that you are to accomplish.
- Mix tasks you like to do with those that are more difficult.
- Take breaks and relax muscles.
- Work on developing good conflict resolution skills and effective communication skills.
- Increase level of exercise.
- Add humor and relaxing activities to the work day.
- Take vacation time regularly.
- Make friends at work and develop a support system.
- Attend stress workshops and practice the stress reducing suggestions.
- When you feel overloaded with work, ask for help either administratively or from a co-worker.

**POTENTIAL
HAZARD**

GENERAL SAFE WORK PRACTICE

**Infectious Diseases
or Health
Conditions**

- Report infectious diseases and other health conditions to school nurse or appropriate supervisor.
- Practice good personal hygiene and wash hands as needed.
- Use latex rubber gloves when contact is likely with human body fluids (blood, vomit, feces, urine, etc.)
- Blood or other bodily fluids should be cleaned up with soap and water.
- Keep classrooms and work areas well ventilated.
- Dispose of contaminated materials properly.
- Learn First Aid and CPR.
- Contact local health professionals for additional health information.
- See Appendix F for information on universal precautions.

**Toxic Substance
Illnesses**

- Never use any chemical without knowing its hazards. Always review the Material Safety Data Sheets (MSDS) before using any new chemical.
- Review and follow district written Hazard Communication program.
- Know location of MSDS and follow recommendations for use. (See Appendix K).
- Use non-toxic materials where possible.
- Read container label and follow manufacturer's safe use directions
- Make sure that all primary and secondary containers are properly labelled.

**Repetitive Motion
Injuries
(Cumulative
Trauma)**

- **DO NOT** remain in one position for long periods without moving.
- Change activities as often as possible.
- Do light exercise of muscles to loosen them and reduce tension.
- Make sure your position is as comfortable as possible
- See that your furniture is adjusted to your particular needs.
- Wear special equipment if it can reduce strain (special eyeglasses, wrist braces, etc.)

SPECIFIC SAFE WORK PRACTICES

*General and specific safe work practices are integrated.
Review the general safe work practices in conjunction with
these specific safe work practices.*

JOB CATEGORY: **BUS DRIVER**

Type of Facility: Garage, School Bus, or Van Drivers

POTENTIAL HAZARD	SAFE WORK PRACTICE
-----------------------------	---------------------------

- | | |
|--|---|
| Slips and Falls
on Same Level | <ul style="list-style-type: none">• Keep bus steps and floor clean and dry.• Pay special attention to height and condition of bus steps when getting on and off the bus and to the condition of the ground or asphalt surface.• Watch for spilled fuels around fueling island.• When washing bus and windows, pay special attention to slippery conditions caused by water and soap.• Wear appropriate non-slip footwear. |
|--|---|

- | | |
|----------------------|--|
| Back Injuries | <ul style="list-style-type: none">• Adjust seat to proper position and height prior to starting the bus.• Pay particular attention to amount of air in an air-ride seat to prevent “bottoming out”.• Use lumbar support pillow to reduce strain on back. |
|----------------------|--|

- | | |
|--------------------|--|
| Fire Injury | <ul style="list-style-type: none">• Know fire extinguisher location and how to operate.• No open flames or smoking are allowed in fueling area.• Use proper procedures to operate fueling equipment.• Report any malfunction of fueling equipment.• <u>DO NOT</u> top off tanks.• Clean up any spills and properly dispose of cleaning material prior to starting the bus. |
|--------------------|--|

- | | |
|--------------------------------------|--|
| Electrical Shock
Injuries | <ul style="list-style-type: none">• Only trained personnel should work on or modify electrical systems.• All electrical plugs should be pushed fully into receptacle.• Make sure electrical equipment is not wet or damp.• Always use grounded electrical cords.• Multiple outlet extenders (power strip, etc.) must have a circuit breaker. |
|--------------------------------------|--|

**POTENTIAL
HAZARD**

SAFE WORK PRACTICE

Vehicle Accidents

- Follow all rules and regulations required by CHP for safe operation of bus.
 - **DO NOT** operate a bus that does not meet CHP requirements.
 - Conduct red light crossings only at approved CHP stops and follow proper procedures.
 - Be particularly attentive and cautious in inclement weather or changed road conditions.
 - Alcohol, drugs, and/or medications should never be consumed at any time that it may affect the ability to operate a bus.
 - Pay particular attention to hazardous locations on the route.
 - Alert other drivers to hazardous road conditions.
 - **DO NOT** eat, drink, or smoke when operating a bus.
-

Stress

- Establish and consistently enforce bus rules for student behavior.
 - Discuss disciplinary action and other problems with supervisor to identify possible solutions for student misbehavior, etc.
-

**Infectious Diseases
or Health
Conditions**

- Provide waste container for students to place used facial tissues, etc.
 - Use latex rubber gloves when contact is likely with human body fluids (blood, vomit, urine, feces, etc.)
 - Blood and other bodily fluids should be cleaned up with soap and water.
 - Refer to Appendix F for information on universal precautions against exposure to bloodborne pathogens.
-

**Repetitive Motion
Injuries
(Cumulative
Trauma)**

- Attend ergonomic safety training to reduce risk of repetitive motion injuries.

UNIVERSAL PRECAUTIONS

Universal Precautions is an approach to infection control to treat all human blood and certain human body fluids as if they were known to be infectious for HIV, Hepatitis B and C, and other bloodborne pathogens.

The Center for Disease Control recommends Standard Precautions in all potential exposures, regardless of a known or presumed infection status. Standard Precautions apply to:

- Blood;
- All body fluids, secretions, and excretions, except sweat, regardless of whether or not they contain visible blood;
- Non-intact skin; and
- Mucous membranes.

Standard Precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection.

Standard Precautions include:

- Hand washing.
- The use of appropriate personal protective equipment, such as gloves, gowns, and masks, whenever touching or exposure to a person's body fluids is anticipated.
- Cover coughs and sneezes with inside of elbow.

HANDWASHING

1. Thorough handwashing is the single most important factor in preventing the spread of infectious diseases and should be practiced routinely by all school personnel and taught to students as routine hygiene practice.

2. All staff should wash their hands in the following circumstances:

- Before handling food, drinking, eating, or smoking;
- After using the restroom;
- After contact with body fluids or items soiled with body fluids; and
- After touching or caring for students, especially those with nose, mouth, or other discharge.

3. How to wash hands: wet hands with running water and apply soap from a dispenser. Lather well and wash vigorously for 15 to 20 seconds. Soap suspends easily removable soil and microorganisms, allowing them to be washed off. Running water is necessary to carry away dirt and debris. Rinse well under running water with water draining from wrist to fingertips. Leave water running. Dry hands well with a paper towel and then turn off the faucet with paper towel. Discard the towel.

FIRST AID INVOLVING BODY FLUIDS AND CPR

1. Avoid direct skin contact with body fluids. If direct skin contact occurs, hands and other affected skin areas should be washed with soap and water immediately after contact has ended, to the extent practicable, using running water, liquid soap and disposable gauze, towels or tissues.
2. Disposable, single-use gloves should be used when contact with body fluids is anticipated (such as a bloody nose, etc.). Gloves should be standard components of first-aid supplies so that they are readily accessible for emergencies.
3. Use a face shield with one-way valve for CPR.

TRASH DISPOSAL

1. Place soiled tissues, pads, gauze bandages, towels, etc., into a plastic bag and tie or seal the bag. Place it in a second plastic bag and seal when full.
2. If needles, syringes, or lancets are used, arrange for a puncture-proof container. Place intact needles and syringes in the designated container. Do not bend or break needles. Do not recap needles.

USING DISINFECTANTS

1. Environmental surfaces contaminated with body fluids should be cleaned promptly with disposable towels and approved disinfectant. Disposable gloves should be worn. Disposable items should be discarded in plastic-lined wastebasket. Mop solution used to clean up body fluid spills should consist of the approved disinfectant. Used mops should be soaked in this solution for 30 minutes and rinsed thoroughly before reusing.
2. After clean up, remove and dispose of gloves, and wash hands.
3. If carpet is soiled, clean up immediately and sanitize with the district-approved disinfectant following the manufacturer's directions.

**RISK OF EXPOSURE WITH HIV AND HEPATITIS B VIRUS
WITH EXPOSURE TO VARIOUS VOLUMES OF INFECTED BLOOD**

Type of Exposures	Volume of Blood	Human Immuno-Deficiency Virus (HIV)	Hepatitis B Virus (HBV)
Receipt of infected blood by transfusion	500 cc (1 Unit or Pint)	95.0%	100.0%
Accidental needle stick contaminated with infected blood in a clinical setting	Minute (Less than 1 cc)	0.03%	12 – 35.0%
Infected blood on broken skin in a clinical setting	Minute to Small Volume	Some Risk (6 reported cases in USA)	Some Risk
Infected blood on healthy (unbroken) skin in clinical setting	Minute to Small Volume	No Reported Cases	No Reported Cases*
Case for infected persons within household	Minute to Small Volume	No reported cases among family members of thousands of persons with AIDS**	Some Risk***

- * Some health care workers have been infected with HBV in absence of needle stick. Presumably, those infections were acquired by blood transfers to oral or nasal mucous membranes via hands.
- ** No family members have contracted HIV infection unless they were themselves at risk because of sexual activity, inoculation with blood products and perinatal events.
- *** Hepatitis B Virus (HBV) transmission has occurred between babies and their family contacts, infected developmentally delayed children and their classmates and caregivers, and in other situations when chronic carriers are present for prolonged periods.

Spread of Hepatitis B may occasionally occur in special education settings and classrooms attended by developmentally delayed students who became Hepatitis B carriers while in hospital or residential facilities. The risk of Hepatitis transmission in these special education classroom settings can be almost eliminated by good environmental and personal hygiene (Universal Precautions). Hepatitis B vaccination of susceptible personnel and students can reduce the risk to virtually zero.

WHAT IS AIDS/HIV INFECTION?

AIDS (Acquired Immune Deficiency Syndrome) is the advanced stage of HIV (Human Immunodeficiency Virus) infection. The virus attacks the body's immune system, leaving it vulnerable to life-threatening opportunistic infections and malignancies. The virus also may directly attack the central nervous system. Person infected with HIV frequently have no apparent symptoms and usually appear to be in good health. More than half of the persons in the United States who have been diagnosed to have AIDS (the advanced stage of HIV infection), have died.

HOW IS HIV INFECTION SPREAD?

The possibility that AIDS/HIV will be transmitted in schools, the workplace, and other public gatherings is remote. AIDS/HIV infection is not transmitted from one person to another through everyday activities. You will not get AIDS by being around or working with a person who is infected or by having ordinary daily contact with an HIV infected person.

Everyone infected with HIV, even a person without apparent symptoms, is capable of transmitting the infection. HIV infection is transmitted by:

1. Any sexual activity involving direct contact with semen, blood, or vaginal secretions of someone who is infected,
2. Sharing intravenous (IV) needles and/or syringes with someone who is infected,
3. Penetrating the skin with needles that have been used to inject an infected person,
4. Direct contact on broken skin with infected blood,
5. Receiving blood transfusion or blood products from someone who is infected [a screening test has been used since 1985 that has reduced this risk to 1 in 68,000 in California (AIDS Update, December, 1988)], and
6. Being born to an infected mother.

WHAT IS HEPATITIS B?

Hepatitis B is an infection of the liver caused by a virus present in blood and other body fluids of infected persons. Less than 50 percent of persons who become infected show symptoms of illness. The symptoms are like those of Hepatitis A and include fatigue, mild fever, muscle or joint aches, nausea, vomiting, loss of appetite, and abdominal pain. In some patients, the urine turns dark and the skin becomes yellow. The onset of symptoms may appear 6 weeks to 6 months after becoming infected with the virus. Death is uncommon in Hepatitis B, but 5 to 10 percent of those infected become long term virus carriers. Up to 25 percent of carriers may develop serious chronic liver disease.

HOW IS HEPATITIS B SPREAD?

An infected person can transmit Hepatitis B as long as the virus remains in the blood. Transmission may occur as early as 4 weeks before any symptoms occur. A small number of people will carry the virus in their blood for years and are known as chronic carriers. Hepatitis B is transmitted by:

1. Sexual activity involving semen, blood, or vaginal secretions,
2. Sharing with someone who is infected, unsterile instruments used to penetrate the skin such as those used for tattooing, ear piercing, and razors,
3. Sharing intravenous (IV) needles and/or syringes with someone who is infected,
4. Direct contact of infected blood with mucous membranes of the eye or mouth,
5. Direct contact with infected blood with broken skin (e.g., cuts),
6. Accidental needle sticks with needles containing blood from a virus carrier,
7. Being born to an infected mother.

HOW TO READ AND INTERPRET A MATERIAL SAFETY DATA SHEET

SECTION ONE (1) – CHEMICAL IDENTIFICATION

This first section of the MSDS helps you identify the chemical. It lists the name of the chemical, any trade names, and the chemical manufacturer's name and address. This section may also list an emergency phone number.

SECTION TWO (2) – HAZARDOUS INGREDIENTS

This section lists what is in the chemical that can harm you. It also lists the concentration of the chemical to which you can safely be exposed, often listed is the permissible exposure limit (PEL) or the threshold limit value (TLV). These safe exposure limits are usually figured for average exposures over a typical work shift.

SECTION THREE (3) – PHYSICAL DATA

This section describes the chemical's appearance, odor, and other characteristics. Percent volatile, for instance, is how much of the chemical evaporates at room temperature. Sulfuric acid has a low percent volatile, but it can be harmful if inhaled. Respiratory protection or extra ventilation may be needed.

SECTION FOUR (4) – FIRE AND EXPLOSION DATA

Here you can find at what temperature the chemical ignites, called the flash point. If a chemical is flammable, it can ignite below 100 degrees Fahrenheit. This section also lists extinguishing media – what will put out the fire safely – such as water spray, foam or other type of fire extinguisher.

SECTION FIVE (5) – HEALTH HAZARDS

This section lists symptoms of overexposure such as skin rash, burn, headache, or dizziness. It also tells you first aid and emergency procedures in case of overexposure, such as flushing your exposed skin with running water for 15 minutes. It may also list any medical conditions that can be aggravated by exposure to the chemical.

SECTION SIX (6) – REACTIVITY DATA

Here you will find whether the chemical “reacts” with materials or conditions. Incompatibility lists the materials, such as water or other chemicals, which cause the chemical to burn, explode, or release dangerous gases. Instability lists the environmental conditions, such as heat or direct sunlight, which can cause a dangerous reaction.

SECTION SEVEN (7) – SPILL OR LEAK PROCEDURES

This section tells you what to use to clean up an accidental spill or leak. No matter what the chemical is, always notify your supervisor right away. Before cleaning up a chemical spill, you may need to wear respiratory protection, gloves, safety goggles, or protective clothing. This section may also include notes on how to dispose of the chemical safely.

SECTION EIGHT (8) – SPECIAL PROTECTION

Here you will find a listing of any personal protective equipment (PPE) (respiratory protection, gloves, eye protection) you need to work safely with the chemical. If protective equipment is needed, this section may list the specific types that are recommended, such as full-face mask respirator, rubber gloves, and chemical safety goggles.

SECTION NINE (9) – SPECIAL PRECAUTIONS

This section lists any other special precautions to follow when handling the chemical. This may include what to have nearby to clean up a spill or put out a fire, and what safety signs to post near the chemical. This section also lists any other health and safety information not covered in other parts of the MSDS.

REFERENCES

GENERAL SAFETY:

RESIG

5760 Skylane Blvd., #100
Windsor, CA 95492
(707) 836-0779

NATIONAL SAFETY COUNCIL

Website: www.nsc.org

OSHA PUBLICATIONS

200 Constitution Ave. NW
Washington, D.C. 20210
(800) 321-6742

CAL OSHA CONSULTATION SERVICES

Northern California
2424 Ardent Way, Ste. 410
Sacramento, CA 95825
(916) 263-0704

SONOMA COUNTY OFFICE OF EDUCATION

Environmental and Health Services Department
5340 Skylane Blvd.
Santa Rosa, CA 95403
(707) 524-2600

EARTHQUAKE SAFETY:

Bay Area Regional Earthquake Alliance

Website: www.bayquakealliance.org

BLOODBORNE PATHOGENS AND UNIVERSAL PRECAUTIONS:

SONOMA COUNTY PUBLIC HEALTH DEPT.

3313 Chanate Rd.
Santa Rosa, CA 95404
(707) 565-4700