



# **Orange Unified School District**

## **Injury and Illness Prevention Program**

**July 2013**

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## ***INJURY AND ILLNESS PREVENTION PROGRAM***

### **INTRODUCTION**

The Orange Unified School District, through its administration and management, is committed to the safety and health of all employees and recognized the need to comply with regulations governing injury and accident prevention and employer safety.

### **WHAT IS AN INJURY AND ILLNESS PREVENTION PROGRAM (IIPP)?**

An Injury and Illness Prevention Program (IIPP) is a basic written workplace safety program. Title 8 of the California Code of Regulations (T8CCR) section 3202 requires every employer to develop and implement an effective IIPP. An effective IIPP improves the safety and health in the workplace and reduces costs by good management and employee involvement. The eight elements required are:

- 1. Responsibility**
- 2. Compliance**
- 3. Communication**
- 4. Hazard Assessment**
- 5. Injury, Illness or Accident Investigation**
- 6. Hazard Communication**
- 7. Training and Instruction**
- 8. Recordkeeping**

### **RESPONSIBILITY**

In order for any program to be successful, there must be support from all levels in the district.

The Injury and Illness Prevention (IIP) Program Administrator for the Orange Unified School District is: Coordinator of Risk Management

**The Program Administrator** has the authority and the responsibility for implementing and maintaining this IIP Program for the Orange Unified School District.

**Site Administrators, Dept. Managers, and Supervisors are responsible for implementing the IIP Program** in their work areas and for answering worker questions about the IIP Program. A copy of this IIP Program is available at each department and school site within the Orange Unified School District.

## **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 one or more of the following practices:

- Informing workers of the provisions of our IIP Program
- Evaluating the safety performance of all workers
- Recognizing employees who perform safe and healthful work practices
- Providing training to workers whose safety performance is deficient
- 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 one or more of the following items:

- New worker orientation including a discussion of safety and health policies and procedures
- Review of our IIP Program
- Training programs
- Regularly scheduled safety meetings
- Posted or distributed safety information
- A system for workers to anonymously inform management about workplace hazards

## **HAZARD ASSESSMENT**

Periodic inspections to identify and evaluate workplace hazards shall be performed by a competent observer in the following areas of our workplace: School Campuses, District Office, and Satellite Offices.

Periodic inspections are performed according to the following schedule:

1. When we initially established our IIP Program
2. At various periodic intervals at school campus sites and the District and satellite offices
3. When new substances, processes, procedures or equipment which present new hazards are introduced into our workplace
4. When we are made aware of new or previously unrecognized hazards

## **INJURY AND ILLNESS INVESTIGATIONS**

The following actions will take place following a work related employee injury or illness:

1. The supervisor will question the employee regarding how the injury/illness occurred
2. The supervisor will determine through this investigation what corrective actions, if any, are required
3. The supervisor will record these findings on an accident investigation form and forward copy to the Risk Management office.
4. Risk Management will conduct a follow-up investigation if deemed appropriate, and document accordingly

## **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. Hazards observed or discovered by any means (site inspections, accident investigations, or casual observation) shall be reported to the site administrator.
2. The site administrator shall input a work order request to Maintenance for correction of hazardous conditions, identifying the work order as "safety priority".
3. Maintenance shall conduct the requested hazard abatement and notify the site administrator when completed, and records of these corrections are kept in the work order system.
4. With respects to hazardous practices or procedures, the site administrator shall communicate with the parties involved to bring about a resolution (elimination or alteration of the unsafe practice).
5. If the best method for correcting the hazardous condition or practice is not apparent or obvious, the site administrator should contact Risk Management for an appraisal and recommendation.
6. When an imminent hazard exists which 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 who are required to correct the hazardous condition shall be provided with the necessary protection.

## **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:

1. When the program is first established
2. To all new employees
3. To all employees given new job assignments for which training has not previously been received
4. Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard
5. Whenever the employer is made aware of a new or previously unrecognized hazard; and,
6. For supervisors to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed

## **RECORDKEEPING**

Regarding record keeping, the Orange Unified School District falls under:

**Exception No. 4:** Local governmental entities (any county, city, city and county, or district, or any public or quasi-public corporation or public agency therein, including any public entity, other than a state agency, that is a member of, or created by, a joint powers agreement) are not required to keep records concerning the steps taken to implement and maintain the Program.

However, records should generally be available as follows:

- Employee safety training should be found in each employee personnel file and/or the department providing the training
- Hazardous condition correction documentation should be available in the Maintenance Dept. work order system
- Hazardous process or procedure correction documentation should be available in the site administrator's office
- Accident investigation documentation should be available in the Risk Management Dept. or the site administrator's office
- Records regarding situations in which Risk Management was called upon for consultation should be available in Risk Management



# **Orange Unified School District**

## **Heat Illness Prevention Program**

**April 2016**

# HEAT ILLNESS PREVENTION PLAN

## Employer Procedures for Heat Illness Prevention Orange Unified School District

### I. Employer Policy

It is the policy of Orange Unified School District (OUSD) to provide a safe environment for employees, staff, students, and visitors at each of our schools and any other site occupied by its activities or services.

OUSD has a commitment to the prevention of on-the-job accidents; treatment, care and rehabilitation of an injured employee; and the employee's rights and responsibilities when an on-the-job injury occurs, while protecting the financial integrity of the school district.

### II. Purpose

The purpose of this program is to prevent illness resulting from exposure to warm working conditions. The program is intended to assist in complying with California Code of Regulations, Title 8 (CCR8), Section 3395, *Heat Illness Prevention*. The Heat Illness Prevention Plan establishes procedures and provides information necessary to educate employees in the recognition and prevention of heat-related illness and to ensure their own safety and the safety of others.

### III. Scope

This program will apply to all employees and volunteers whose primary job assignment involve outdoor work and may be exposed to environmental risk factors that could place the individual at risk of heat-related illness.

Employee job assignments identified:

- Grounds Workers
- Repair & Construction

### IV. Definitions

**Acclimatization:** Temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for about two hours per day in the heat.

**Environmental Risk Factors:** Conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing, and personal protective equipment worn by employees.

**Heat Illness:** A serious medical condition resulting from the body's inability to cope with a particular heat load.

**Heat Rash:** A condition that occurs in hot, humid environments where sweat cannot easily evaporate from the skin. Heat rash produces a rash which in some cases causes severe pain.

**Heat Cramps:** Painful muscle spasms that result from the loss of salt and electrolytes due to excessive sweating. Cramps will usually affect the stomach, arms, and legs.

**Heat Exhaustion:** A state brought on by the loss of fluids during excessive sweating. Heat exhaustion produces nausea, headaches, clammy and moist skin, weakness and fainting.

**Heat Stroke:** Severe medical emergency that can result in death. The body's core temperature gets too high and can no longer cool itself down. Heat Stroke produces hot and dry skin (usually no sweating).

**Personal Risk Factors:** Factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

**Recovery Period:** A period of time to rest and recover from the heat in order to prevent heat illness.

**Shade:** Blockage of direct sunlight. Canopies, umbrellas, and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow while in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

## V. Risk Factors

Each employee and work task has unique characteristics that affect the susceptibility to Heat Related Illness. The following factors should be considered when evaluating the risk of Heat Related Illness.



### Personal Factors:

- Age (very young and elderly are more affected)
- Personal Health/Fitness/Obesity and other Health Conditions
- Personal Stress
- Dehydration
- Alcohol Use
- Certain Drugs, Medications, or Supplements (Be particularly cautious if taking antihistamines, cold or cough medicines, blood pressure/heart medication, diet pills, seizure medication, laxatives, thyroid pills, diuretics, etc. Check with your health care provider to determine whether your medications will have any effects on your exposure to heat.)
- Lack of Acclimatization to Hot Weather or Hot Weather Work

### Environmental Risk Factors (job related):

- Duration of Activity
- Metabolic Load (how strenuous the work is)
- Wearing Heavy Attire or Protective Clothing (PPE)

### Environmental Risk Factors (environmentally related):

- Temperature
- Humidity
- Air Velocity
- Radiant Heat Sources (sunlight, reflection, etc.)

## VI. Prevention

The following steps should be taken to prevent Heat Related Illness:

**Acclimate yourself:** It takes several days of being exposed to hot weather work to become accustomed to it. Begin with short durations of hot weather work and gradually increase your exposure time to allow your body to become accustomed.

**Schedule activities:** Schedule vigorous outdoor activity for cooler times of the day, such as early morning, when possible. Work/rest schedules should be adjusted in correlation to increasing temperatures. Cycles of shorter work shifts and more frequent rest periods are preferable.

**Monitor the weather:** Check the forecast and review the Heat Index (see Appendix, Table 1). The Heat Index chart will indicate when combinations of heat and humidity can be dangerous for employees. Realize that direct sun can add as much as 15 degrees to the heat

index.

**Wear lightweight clothing:** Wear loose fitting, light-colored, and lightweight clothing that breathes, such as cotton.

**Protect yourself:** Wear a hat or use an umbrella to protect yourself from the sun when possible. Use sunscreen with a sun protection factor (SPF) of 15 or more. Relocate working areas to the shade if possible.

**Hydrate yourself:** Drink fresh water or other liquids every 15-20 minutes, even if you do not feel thirsty. Drink a minimum of 1 quart of fresh water every hour. Drink plenty of water before starting outdoor activities and drink water throughout the day. Avoid beverages containing caffeine (such as tea, coffee, or cola).

**Monitor coworkers:** Use a “buddy system” so that workers and supervisors can monitor each other when out in the field.

## VII. Acclimatization

Acclimatization refers to the physiological adaptation that occurs when an individual accustomed to working in a cool environment is exposed to a hot environment. Any individual may develop signs of significant strain with abnormally high body temperature, pounding heart, and other signs of heat stress when beginning to work in a hot environment.

On each succeeding day in the hot area, his or her ability to adjust to the hot environment improves and the signs of discomfort and strain diminish. After a period of a week, no difficulty should be expected.

An acclimatization period may also be necessary upon return from vacation or other extended periods away from the workplace.

## VIII. Heat Illness Types and Symptoms

### Heat Cramps

**Description:** Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. These occur when workers drink sufficient amounts of water but do not replace their body’s salt loss. They are usually caused by heavy sweating, especially when water is not replaced quickly enough.

**Prevention/First Aid:** Drink electrolyte solutions such as Gatorade or plenty of water during the day and try eating more fruits such as bananas to help keep the body hydrated. Increase

intake of non-diuretic fluids and rest. Common diuretic fluids that should be avoided include caffeine-containing products and alcoholic beverages, etc. A damp towel applied to the head or neck may speed cooling. **Call 911 and your supervisor immediately if the person becomes ill.**

## Heat Exhaustion

**Description:** This condition results from loss of fluid through sweating when a worker fails to drink enough fluids, replace mineral loss, or both. The worker still sweats but experiences extreme weakness/fatigue, intense thirst, dizziness, giddiness, nausea, and/or headache. The skin is clammy and moist, the complexion is pale/flushed, and the body temperature is normal or slightly higher.

**Prevention/First Aid:** Move the affected individual to a cool location such as a shaded area or air-conditioned building. Have them lie down with their feet slightly elevated. Loosen their clothing, apply cool wet cloths, or fan them. Remove as much clothing as possible. Have them drink water or electrolyte drinks. Try to cool them down and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day and continue to drink water to replace lost body fluids.

**Call 911 immediately if the person becomes non-responsive, refuses water, vomits, or loses consciousness. Contact your supervisor immediately.**

## Heat Syncope (Fainting)

**Description:** Heat syncope, or fainting, can occur if a worker is not acclimatized to heat and if the worker stands still rather than moving around.

**Prevention/First Aid:** Victims usually recover after a brief period of lying down. Moving around, rather than standing still in the heat, will reduce the possibility of fainting. **Call 911 and your supervisor immediately if the person becomes ill.**

## Heat Stroke

**Description:** Heat Stroke is a potentially life-threatening illness. It is caused by the failure of the body's internal mechanism to regulate its core temperature. A heat stroke victim may first suffer heat cramps and/or heat exhaustion before progressing into the heat stroke stage, but this is not always the case. Heat stroke is sometimes mistaken for a heart attack. It is therefore very important to be able to recognize the signs and symptoms of heat stroke and to check for them anytime someone collapses while working in a hot environment.

Symptoms include a high body temperature (106 degrees or higher), hot dry skin which may

be red, mottled, or bluish, mental confusion, delirium, loss of consciousness, convulsions, coma, and absence of sweating.

**Prevention/First Aid:** Victims of heat stroke can die unless treated promptly. It is vital to quickly lower a heat stroke victim's body temperature. Move victim to a shaded or cool area, pour water on them, fan them, or apply cold packs. **Call 911 immediately to get the person medical aid as soon as possible and contact your supervisor.**

## **IX. Notification Procedures**

Any person showing symptoms or signs of heat illness, either in themselves or in a co-worker, must report his or her condition to the Immediate Supervisor.

In the event an employee experiences signs or symptoms of heat illness, contact 911 by phone. Provide clear and precise directions to the location of the ill employee to work control/administrative personnel or emergency responders.

**Call 911 immediately if the person becomes non-responsive, refuses water, vomits, or loses consciousness. Contact your supervisor immediately.**

If the victim is at a site location that may be difficult for responding emergency personnel to locate, administrative personnel or personnel on the scene shall go to the site entrance to provide directions for responding emergency service providers. If the victim is at a location not readily accessible, if necessary and if possible without causing any further injury, the affected person may be relocated using an available vehicle to an accessible location.

Contact the M.O.T. office immediately upon notification of 911 emergency services.

## **X. Responsibilities**

### **Risk Management**

- A. Prepare and maintain a written program which complies with the requirements of applicable Cal/OSHA standards.
- B. Assist with providing training materials and training potentially impacted employees and their supervisors on the risks and prevention of heat illness, including how to recognize symptoms and respond when they appear.

### **Directors, Managers, and Supervisors**

- A. Develop procedures on how the requirements of the applicable standards will be met and ensure all requirements are followed.
- B. Identify all employees who are required to work outdoors where potential heat illness could occur.
- C. Assure that adequate water and shade are available at the job site when the environmental risk factors for heat illness are present.
- D. Ensure that emergency response procedures are in place to respond to employees who may be affected by heat-related illness.
- E. Ensure all affected employees have received proper training on heat illness prevention.

### **Affected Employees**

- A. Comply with the provisions of this Heat Illness Prevention Program, as described in this document, written procedures, and training received.
- B. Verify they have drinking water available at all times when the environmental risk factors for heat illness are present and report water supply deficiencies to their supervisor.
- C. Verify they have access to a shaded area to prevent or recover from heat-related symptoms and report to their supervisor any inadequate shade conditions.
- D. Reporting heat-related illness symptoms to their supervisor.

## **XI. Compliance**

The Title 8 requirements are met by providing access to potable drinking water to all organizational personnel by way of plumbed sources such as water fountains located at fixed sites and/or portable coolers carried on organizational vehicles.

Personnel working in heat-related occupations are also encouraged to take more frequent breaks in shaded areas or cooled vehicles when necessary.

Directors, managers, and supervisors shall provide refresher training to all affected personnel as needed through safety meetings and tailgate safety briefings.

All assigned supervisors of employees working in heat-related areas shall be trained and familiar with required employee training, procedures implementing applicable provisions of this program, and procedures to follow when an employee exhibits possible heat-related

symptoms due to heat illness.

When needed, supervisors shall provide additional supervision to new employees or employees returning from extended leave to ensure the workers are adequately acclimated.

## **XII. Program Components**

The following elements of OUSD program for heat illness prevention provide specific information for departments and supervisors complying with the program:

### **Provision of Water**

Whenever environmental risk factors for heat illness exist, supervisors are responsible to ensure that fresh, pure, and suitably cool potable water and located as close as practicable to where employees are working, with exceptions when employers can demonstrate infeasibility.

Where unlimited drinking water is not immediately available from a plumbed system, supervisors must provide enough water for every employee to be able to drink one quart of water per hour for the entire shift (at least 2 gallons per employee for an 8-hour shift). Smaller quantities of water may be provided at the beginning of the shift if there are effective procedures for replenishing the water supply during the shift as needed.

The Cal/OSHA standard requires not only that water be provided, but that supervisors encourage employees to drink frequently. Employees must understand that thirst is not an effective indicator of a persons need for water and it is recommended that individuals drink one quart of water, or four 8-ounce cups, per hour when working in hot environments.

School Sites and/or Departments shall take one or more of the following steps to ensure employees have access to drinking water:

- A. Provide access to drinking fountains
- B. Supply water cooler/dispenser and single service cups
- C. Supply sealed one time use water containers

Drinking water and water dispensers shall meet the following requirements:

- All sources of drinking water shall be maintained in a clean and sanitary condition
- Drinking water must always be kept cool. When temperatures exceed 90° F it is recommended that ice be provided to keep the water cool.
- Potable drinking water dispensers used to provide water to more than one person shall be equipped with a spigot or faucet

- Any container used to store or dispense drinking water shall be clearly marked as to the nature of its contents and shall not be used for any other purpose
- Dipping or pouring drinking water from containers, such as barrels, pails or tanks, is prohibited regardless of whether or not the containers are fitted with covers
- The use of shared cups, glasses or other vessels for drinking purposes is prohibited
- Non-potable water shall not be used for drinking
- Outlets for non-potable water shall be posted in a manner understandable to all employees that the water is unsafe for drinking

## Access to Shade

Supervisors are responsible to ensure that employees have access to a shaded area when the temperature reaches 80 degrees. Shaded areas shall accommodate all employees on recovery periods and meal periods and allow employees to sit in the shade without touching each other.

The nearest shaded area must be as close as practicable. Usually this will mean that shade must be reachable within a 2 1/2 minute walk, but in no case more than 1/4-mile or a five-minute walk away, whichever is shorter.

Canopies, umbrellas or other temporary structures may be used to provide shade, provided they block direct sunlight. Trees and dense vines can provide shade if the canopy of the trees is sufficiently dense to provide substantially complete blockage of direct sunlight. Areas shaded by artificial or mechanical means, such as by a pop-up canopy as opposed to a tree, must provide means for employees to avoid contact with bare soil.

The interior of a vehicle may be used to provide shade if the vehicle is air-conditioned and the air conditioner is operating.

If the National Weather Service, as of 5 pm the previous day, forecasts the temperature to be over 80° F, shade structures must be available at the beginning of the shift and present throughout the day. Regardless of predicted temperatures, supervisors must always have the capability to provide shade promptly if it is requested by an employee. If the temperature exceeds 90° F, shade must actually be present regardless of the previous day's predicted temperature high.

## Acclimatization

Supervisors are required to acclimatize employees and allow time to adapt when temperatures rise suddenly and employee risks for heat illness increase. Acclimatization may also be required for new employees, employees working at temperatures to which they haven't been exposed for several weeks or longer, or employees assigned to new jobs in hot environments.

Generally, about four to fourteen days of daily heat exposure is needed for acclimatization. Heat acclimatization requires a minimum daily heat exposure of about two hours of work. Gradually increase the length of work each day until an appropriate schedule adapted to the required activity level for the work environment is achieved. This will allow the employee to acclimate to conditions of heat while reducing the risk of heat illness.

It should be noted that new employees are among those most at risk of suffering the consequences of inadequate acclimatization and will be closely observed for their first two weeks on the job. Supervisors with new employees should be extra-vigilant during the acclimatization period, and respond immediately to signs and symptoms of possible heat illness.

### **Preventive Cool–Down Rest Periods**

The purpose of the cool-down rest period is prevention of heat illness. The supervisor is required to provide access to shade for employees who believe they need a preventive cool-down rest period from the effects of heat and for any who exhibit indications of heat illness. Employees taking a “preventative cool-down rest” must be monitored for symptoms of heat illness, encouraged to remain in the shade and not ordered back to work until symptoms are gone.

Access to shade must be allowed at all times, and employees must be allowed to remain in the shade for at least five minutes.

The purpose of the preventive cool-down rest period is to reduce heat stress on the employee. The preventive cool-down rest period is not a substitute for medical treatment.

### **Emergency Procedures**

If an employee has any symptoms of heat illness, first-aid procedures should be initiated without delay. Common early signs and symptoms of heat illness include headache, muscle cramps, and unusual fatigue. However, progression to more serious illness can be rapid, and can include loss of consciousness, seizures, mental confusion, unusual behavior, nausea or vomiting, hot dry skin, or unusually profuse sweating.

Any employee exhibiting any of the above mentioned symptoms requires immediate attention. Even the initial symptoms may indicate serious heat exposure. If medical personnel are not immediately available onsite and serious heat illness is suspected, emergency medical personnel should be immediately contacted and on-site first aid undertaken. No employee with symptoms of possible serious heat illness should be left unattended or sent home without medical assessment and authorization.



All Supervisors and employees must be trained to recognize and respond to symptoms of possible heat illness.

If any employee exhibits signs or symptoms of heat stroke emergency medical services must be contacted. Supervisors must be able to provide clear and precise directions to the worksite and should carry cell phones or other means of communication to ensure that emergency services can be called.

**Call 911 immediately if the person becomes non-responsive, refuses water, vomits, or loses consciousness. Contact your supervisor immediately.**

## High Heat Procedures

High heat procedures are additional preventative measures that the District will take when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures will include the following to the extent practicable:

- a) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site or area can contact a supervisor when necessary. An electronic device, such as a cell phone or radio may be used for this purpose only if reception in the area is reliable.
- b) Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:
  - Supervisor or designee observation of 20 or fewer employees, or
  - Mandatory buddy system, or
  - Regular communication with sole employee such as by radio or cellular phone, or
  - Other effective means of observation.
- c) Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- d) Reminding employees throughout the work shift to drink plenty of water.
- e) Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

## Reporting Requirements

Constant awareness of and respect for heat illness prevention procedures and compliance with all applicable OUSD safety rules is mandatory. Employees may report any safety concerns to their supervisor or Risk Management.

Supervisors may issue warnings to employees and implement disciplinary actions up to and including termination for failure to follow the guidelines of this program.

The Risk Management Department is authorized to issue safety warnings to departments/supervisors and stop unsafe work from continuing.

### **Training Requirements and Competency Assessment**

Risk Management shall provide training for all potentially impacted employees, and their supervisors, working where environmental risk factors for heat illness are present. Training information shall include, but not be limited to:

- Environmental and personal risk factors for heat illness
- Procedures for identifying, evaluating, and controlling exposure to environmental risk factors for heat illness.
- The importance of frequent consumption of hydrating fluids, up to 1 quart (4 cups of water) per hour, when environmental risk factors for heat illness are present, particularly when employee is excessively sweating during the exposure
- The importance of acclimatization
- Types of heat illness and the common signs and symptoms of heat illness
- The importance of immediately reporting symptoms or signs of heat illness, in themselves or in co-workers, to their supervisor
- Understanding the procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by emergency medical service
- Procedures for ensuring that, in the event of an emergency, clear and precise direction to the work site can and will be provided to emergency responders

Supervisors shall receive training on the following topics prior to being assigned to supervise outdoor employees.

- The training information required of the employees, detailed above
- Procedures supervisors are to follow to implement the provisions of this program
- Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures

Re-training will be required under any of the following conditions:

- Changes in the workplace render previous training obsolete
- Inadequacies in an employee's knowledge of heat illness prevention indicate that the employee has not retained the required training

Risk Management shall maintain training records for a minimum of 3 years.

### XIII. Appendix 1 - Heat Index

#### NOAA's National Weather Service

#### Heat Index

Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution

Extreme Caution

Danger

Extreme Danger



# **Orange Unified School District**

**Hazard Communication Program**

## INTRODUCTION AND POLICY

The Hazard Communication Standard (California Code of Regulations, Title 8, Section 5194) establishes uniform requirements to ensure that all chemicals used in California workplaces are evaluated to determine their hazards. This information must be provided to employers and to their affected employees. Chemical manufacturers must perform the evaluations and convey the hazard information obtained to users by means of labels on containers and Safety Data Sheets (SDS's). Employers must educate their employees to understand the hazards associated with the hazardous materials they work with, and ensure that resources such as SDS's and container labels for the materials are maintained and accessible.

The purpose of this written Hazard Communication Program is to establish guidelines and policies to ensure that all members of Orange Unified School District community are apprised of the chemical hazards to which they may be exposed and to provide a foundation of knowledge to permit employees to make informed decisions about these materials. The safe conduct of work with potentially hazardous chemicals is dependent upon the value the institution places on protecting health and the environment, and on the motivation and good judgment the individual chemical user exercises. Therefore, it is the responsibility of the Superintendent, Site Administrators, Supervisors, and staff to adhere to the specifics and the intent of the Hazard Communication Program in order to reduce the risk.

The provisions of the Hazard Communication Program (HCP) apply to any hazardous substance, which is known to be present in the workplace, with the exception of specific research and teaching activities within laboratories. The Chemical Hygiene Plan applies to most activities performed by research and teaching laboratory workers. The full scope of the CHP does apply to all non-research or teaching uses of chemicals conducted within laboratories.

Consumer products packaged for and used by the general public, and used in a manner that will not result in significantly greater exposure than that of the general consumer, are excluded from the program.

### Major change to the Hazard Communication Standard

**Hazard Classification:** Provides specific criteria for classification of health and physical hazards, as well as classification of mixtures.

**Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statement must be provided.

**Safety Data Sheets (SDS):** Once known as Materials Safety Data Sheets (MSDS), will now have 16-section uniform format

**Information and Training:** Employers are required to train workers by December 1, 2013 on the new labels and safety data sheets format to facilitate recognition and understanding of the regulations and hazard universal pictorial signs.

## **RESPONSIBILITY**

Orange Unified School District program establishes responsibility for the implementation of the Hazard Communication Program.

The Superintendent is responsible for ensuring that the applicable operations of the District are conducted in accordance with these provisions.

Director of Maintenance & Operations for Orange Unified School District is the Hazard Communication Program Coordinator and is responsible for overall program development, serves as a central repository for hard copy SDS's, provides general hazard communication training, and assists users of chemicals.

The Hazard Communication Coordinator will obtain assistance from each School Site Coordinator and or Shop Coordinator for program maintenance. This includes the development and maintenance of an inventory of hazardous materials as well as procurement and maintenance of an SDS file for these hazardous materials. The Coordinator will also ensure chemical containers are adequately labeled, and that employees are provided specific training for the materials they use. Training must also include details of their specific Hazard Communication Program (such as location of the SDS file and any in-house procedures). The written Hazard Communication Program and SDS file must be accessible to employees during their normal working hours.

Chemical users are responsible for maintaining familiarity with the materials they use, using them in a safe and responsible manner, and seeking supervisory support before using new materials or using materials in unusual situations.

## **SITE SPECIFIC HAZARD COMMUNICATION INFORMATION**

Orange Unified School District program applies to all faculty, staff, students, visitors, and volunteers.

SDS's are maintained and accessible at Maintenance and/or Custodian rooms at each school site.

An inventory of all hazardous chemicals used and stored by each school site and or shop will be maintained and updated as necessary.

The Hazard Communication Coordinator monitors and maintains records of employee training.

In general, each employee in the facility will be informed of the substance of the Hazard Communication Program, the hazardous properties of chemicals they work with, and measures to protect themselves from these chemicals.

## **LIST OF HAZARDOUS CHEMICALS**

The hazardous chemical list will be updated upon receipt or removal of hazardous chemicals from the site. Many materials such as cleaning agents, adhesives, copying supplies, art materials, paints, strippers, solders and welding supplies, fertilizers, pesticides, and compressed gases contain hazardous materials and must be included on the inventory. Materials used in a similar quantity and fashion as a household consumer is excluded from this Standard. A compiled list of materials stored in the District can be found in the District Office.

## **SAFETY DATA SHEETS (SDS)**

The objective of a Safety Data Sheet (SDS) is to concisely inform you of the hazards of the materials you work with or may be exposed to so you can protect yourself and respond to emergency situations. Each department or shop will maintain an SDS library on every substance on their list of hazardous chemicals. The Hazard Communication Coordinator will secure and maintain an SDS for each hazardous material used in their area.

SDS's must be readily accessible to employees working in remote or field locations. Appropriate SDS's will be maintained in a binder in each vehicle, on each job site or immediately accessible by phone and fax.

Alternatively, SDS's may be accessed electronically (i.e., via computer locally or via Internet). If electronic access is used, the procedure to access those sheets will be attached and employees will be trained in the access procedure.

SDS's must be readily available to all employees and Cal/OSHA upon request.

SDS's must be received at the facility either prior to, or at the time of receipt of the first shipment of any potentially hazardous chemical purchased from a vendor. If materials are received for which no SDS is available in the area of use, the Hazard Communication Coordinator shall secure the needed SDS by contacting the chemical manufacture.

## **LABELS AND OTHER FORMS OF WARNING**

The local Hazard Communication Coordinator provides oversight to ensure that hazardous chemicals in their area are properly labeled. However, if a label is falling off or deteriorating, it is everyone's responsibility to take action so that the identity of a material is not lost. Labels on incoming containers should not be defaced while they contain the indicated material. Labels on these primary containers should list the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer, or other responsible party.

Secondary containers (those containers into which material is transferred) must be labeled with the name of the material and the manufacturer as it appears on the SDS, and an appropriate hazard warning. Chemical users must be trained in the recognition and purpose of the placard if one is used in the area. Placards are frequently used in laboratories on small containers and

squeeze bottles. Common Immediate use containers (those in which the hazardous substance will be under the control and used only by the person who transfers it from a labeled container and within that work shift) do not require labeling.

The area supervisor will check frequently to ensure that containers in the facility are labeled and that the labels are up-to-date.

### **TRAINING AND INFORMATION**

Each employee who works with or is potentially exposed to hazardous chemicals will receive initial training on the Hazard Communication Standard and the safe use of those hazardous chemicals. The Program Coordinator or their designate conducts hazardous chemical training. Additional training will be provided for employees whenever a new hazard is introduced into their work areas.

The training will emphasize these elements:

A summary of the standard and this written program.

Hazardous chemical properties and methods that can be used to detect the presence or release of hazardous chemicals, including visual appearance and odor.

Physical and health hazards associated with potential exposure to workplace chemicals.

Procedures to protect against hazards; e.g., personal protective equipment, work practices, and emergency procedures.

Hazardous chemical spill and leak procedures.

Where SDS's are located, how to understand their content, and how employees may obtain and use appropriate hazard information.

The procedures for conducting non-routine tasks involving hazardous materials.

Accurate records on all safety training must be maintained by supervisory personnel. Records should include the employee name, date of training, topic covered, employee signature, and name of instructor. Records should also include a copy of any test or quiz (see Appendix B- Hazard Communication Initial Training Exam) used to evaluate level of knowledge and effectiveness of training.

### **CONTRACTOR EMPLOYERS**

The Hazard Communication Program Coordinator will advise outside contractors of any chemical hazards which may be encountered in the normal course of their work at the District facilities and will provide copies of Safety Data Sheets if necessary.



## **NON-ROUTINE TASKS AND WORK IN LABORATORIES**

Periodically, employees may be required to perform hazardous non-routine tasks. Any employee contemplating a non-routine task involving possible chemical hazards (e.g., acid washing bricks, chlorine line repair) will contact their supervisor or manager. The supervisor will ensure that employees are informed of:

- 1) The specific hazards associated with the performance of these tasks
- 2) Protective measures that must be used
- 3) Measures the department has taken to lessen these hazards such as ventilation, Personal Protective Equipment (PPE), or the presence of another employee.
- 4) Specific emergency procedures to be used in the event of an accident or injury.

All work in laboratories may involve potential hazards from chemicals used and stored. All work should be coordinated with the laboratory staff to identify and minimize potential hazards in the work area. No work should be conducted that requires entering the fume hood body or moving laboratory equipment or stored chemicals without the permission of the supervisor.

**APPENDIX A**  
**LIST OF HAZARDOUS MATERIALS**

## Approved Chemical List

City Sealer
Enzyme
Stinger Degreaser -- Betco Chisel
Tile Brite, Acid Base Cleaner - Clean N Bright
Waxie Gum Away II Aerosol
Stainless Steel Cleaner
Base Board Stripper
Enzyme
Kleene White
Van-Go Graffiti
Virex Disinfectant
Alpha HP Disinfectant
Spitfire General cleaner (RTU)
Stride Neutral floor cleaner
Glance Window Cleaner
Pink Foam Soap 1250mil
Purell Foam Hand Santizer
Oasis 299 Bathroom Cleaner
Facillipro Neutral Disinfectant (Floors)
Facillipro General Purpose Cleaner
Facillipro Glass Cleaner
Rug-Brite Upholstery/ Shampoo
Wiwax Cleaner (for Rubber Floors)
Fiber Care #2
Defoamer
Pure Annihilator Floor Stripper
Speedtrack cleaner, burnish

## Disallowed Classroom Chemicals

2-Acetylaminofluorene  
2-Acetylaminofluorine  
Acrylamide  
Acrylonitrile  
4-Aminodiphenyl  
Alpha Naphthylamine  
Aniline  
Arsenic Powder  
Arsenic Trioxide  
Asbestos (including chrysotile, amosite, crocidolite, tremolite, anthophyllite, & actinolite)  
Benzene  
Benzidene  
Benzidine (and its salts)  
Benzoyl Peroxide  
Beryllium  
Beryllium Compounds  
Beta Naphthylamine  
Beta Propiolactone  
Bis (chloromethyl) ether  
Cadmium Powder  
Cadmium Salts  
Camphor  
Carbon Disulfide  
Carbon Tetrachloride  
Chloroform  
Chromium (VI) Oxide & all hexavalent chromium compounds  
Cobalt  
Cobalt II Oxide  
Cobalt Chloride  
Cobalt Metal (powder)  
Cobalt Nitrate  
Coke oven emissions  
Cyclohexane  
Dichlorobenzene  
1, 2-dibromo -3 chloropropane (DBCP)  
p-Dichlorobenzene  
3, 3-Dichlorobenzidine & its salts  
Diisopropyl Ether  
4 Dimethylaminoazobenzene  
Ethylene Dibromide (EDB)  
Ethylene Dichloride (1, 2 Dichloroethane)

## Disallowed Classroom Chemicals-Continued

Ethylene Oxide  
Ethyl Ether/Diethyl Ether  
Ethyleneimine  
Formaldehyde  
Hexane  
Hydrazine (anhydrous)  
Hydrofluoric Acid  
Inorganic Arsenic  
Lead  
Lead Acetate  
Lead Arsenate  
Lead Carbonate  
Lead Chloride  
Lead Nitrate  
Lead Oxide  
Lead Peroxide (dioxide)  
Lead Sulfate  
Lead Sulfide  
Mercurous/Mercuric/Mercury II Nitrate  
Mercury Compounds  
Mercury Metal  
Methylchloromethyl Ether  
4-4 Methylene Bis (2-Chloroaniline)  
Methylene Chloride (Dichloromethane)  
Methyl chloromethyl ether  
Nickel Chloride  
Nickel Compounds  
Nickel Nitrate  
Nickel Powder  
Nicotine  
4-Nitrobiphenyl  
Nitrogen Triiodide  
N-nitrosodimethylamine  
Perchloric Acid  
Phenol  
Phosphorous (white/yellow)  
Picric Acid  
Potassium Chlorate  
Potassium Ferrocyanide  
Potassium Metal  
Potassium Nitrate  
Sodium Arsenate  
Sodium Arsenite

## Disallowed Classroom Chemicals-Continued

Sodium Azide  
Toluene  
Turpentine  
Vinyl Chloride

For additional information regarding Safety Chemical use in the classrooms please refer to NSTA (National Science Teachers Association resource).

<http://www.nsta.org/docs/SafetyInTheScienceClassroomLabAndField.pdf>

**APPENDIX B**

**HAZARD COMMUNICATION INITIAL TRAINING EXAM**

**Hazard Communication Training Date:**

Department: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

- 1) What does SDS stand for?
  
- 2) Where are SDS's located in your area?
  
- 3) Is there a written Hazard Communication program for your department?
  
- 4) Other than the paper copy SDS file, are SDS's available through other means?  
Describe:
  
- 5) What should you do when faced with a non-routine situation involving hazardous chemicals?
  
- 6) What information should appear on the label of hazardous materials?
  
- 7) Name 16 sections that appear on SDS sheets:





## *Hazardous Materials Section*

### **California Hazardous Material Spill/Release Notification Guidance**

#### **To Report**

all significant releases or threatened  
releases of hazardous materials,

#### **First Call 9-1-1**

(or the local emergency response agency)

#### **Then Call**

the California Emergency Management  
Agency, California State Warning Center

**1-800-852-7550**










or call the public number at (916) 845-8911

#### ***It's the Law!***

See pages 4 & 5 for more detailed  
reporting requirements.

# Global Harmonized System (GHS)

Effective 12/1/2013

<p>Oxidizers Organic Peroxides</p> 	<p>Flammables Self- Reactive Pyro phonics Self- Heating emits Flammable Gas</p> 	<p>Explosive Self-Reactive Organic Peroxides</p> 
<p>Acute toxicity (severe)</p> 	<p>Corrosives</p> 	<p>gases under pressure</p> 
<p>Carcinogen Respiratory Sensitizer Reproductive toxicity Mutagenicity Aspiration Hazard</p> 	<p>Environmental Toxicity</p> 	<p>Irritant Derma/Skin Sensitizers Acute Toxicity (harmful) Transient Target Organ Effects (Narcotic or Respiratory)</p> 



## Hazard Communication Safety Data Sheets

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

**Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

**Section 2, Hazard(s) identification** includes all hazards regarding the chemical; required label elements.

**Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.

**Section 4, First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.

**Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

**Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.

**Section 7, Handling and storage** lists precautions for safe handling and storage, including incompatibilities.

**Section 8, Exposure controls/personal protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

**Section 9, Physical and chemical properties** lists the chemical's characteristics.

**Section 10, Stability and reactivity** lists chemical stability and possibility of hazardous reactions.

**Section 11, Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information\*

Section 13, Disposal considerations\*

Section 14, Transport information\*

Section 15, Regulatory information\*

**Section 16, Other information**, includes the date of preparation or last revision.

\*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).

For more information: [www.osha.gov](http://www.osha.gov) Telephone: 800-321-OSHA (6742) TTY: 877-889-5627



# **Orange Unified School District**

Ergonomics Program

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## **PURPOSE**

The purpose of the Orange Unified School District (OUSD) Ergonomics Program is to apply ergonomic principles to the workplace in an effort to reduce the number and severity of musculoskeletal disorders (MSDs) by exposure to ergonomic risk factors, therefore decreasing workers' compensation claims and improving employee well-being. An ergonomically designed work environment maximizes employee comfort while minimizing the risk of undue physical stress that often leads to injuries.

A proactive ergonomics approach focuses on making changes when risks have already been identified, as well as incorporating ergonomics into the design phase of a new facility or process, into purchasing new equipment or tools, and into the contemplation of scheduling changes.

## **SCOPE**

This ergonomics program applies to all OUSD locations and covers program responsibilities, identification of workplace hazards, control of exposures, training, and employee information. This program applies to all employees of OUSD.

## **STATE AND FEDERAL REGULATIONS**

California – California Division of Occupational Safety and Health (Cal OSHA)

- [Title 8 – §5110. Repetitive Motion Injuries](#)

United States – Federal Occupational Safety and Health Administration (OSHA)

- [General Duty Clause](#)

## **DEFINITIONS**

Ergonomics:

The science that evaluates the interaction of an individual with the work task, including the mental demands (such as decision-making, memory, attention span, and information processing) and physical demands (such as lifting, reaching, repetitive motion, awkward postures, and static postures).

Repetitive Motion Injury (RMI):

A physical disorder that develops from, or is aggravated by, the cumulative application of stress to tissue and joints. Repetitive motion injuries include but are not limited to bursitis, ligament sprains, muscle strains (e.g. neck-tension syndrome), nerve entrapment (e.g. carpal tunnel syndrome), tenosynovitis (e.g. trigger finger), tendon-related disorders (e.g. de Quervain's), and hand-arm vibration syndrome.

Engineering controls:

- Devices such as adjustable fixtures (i.e. table, chairs, equipment and tools).
- A control measure which is technologically capable of being implemented, except where it would impose an undue hardship on the employer.

Administrative controls:

Re-design of work duties. A change in the work pattern or task sequence to reduce the number and intensity of repetitive motions. Actions include, but are not limited to:

- Adjustment of work place
- Performance of other tasks for 5 minutes to interrupt activities that increase the risk of repetitive motion injuries
- Job rotation

Training:

Training is an important element in the ergonomic process. Training should be conducted in a language and vocabulary that all OUSD employees understand and is best provided by professional ergonomists who have experience with ergonomic issues.

OUSD Risk Management will provide awareness-level ergonomic training to all employees as part of IIPP training. Advanced ergonomic training will be provided as preventative measure to high-risk level group or individuals.

## **RESPONSIBILITIES**

The responsibilities associated with this specification are as follows:

### **Risk Management**

The contents of this specification shall be periodically reviewed, updated if necessary, and maintained by the Risk Management Department.

### **Program Administrator**

The program administrator is responsible for the following:

- Administer the ergonomic program
- Develop and provide ergonomic awareness training to managers, supervisors, and employees
- Identify Repetitive Motion Injury (RMI) trends by reviewing past accident reports
- Identify ergonomic problems and potential solutions

### **Managers and Supervisor**

Managers and supervisors are responsible for the following:

- Address employee health and safety concerns, including ergonomic-related issues
- Recognize ergonomic hazards, and contact Ergonomics Program Administrator for assistance
- Ensure that workstation recommendations are implemented
- Support and encourage employees to perform self-care techniques

### **Employees**

Employees are responsible for the following:

- Adjust their workstation/job operation to fit their work needs in accordance with OUSD Office/Vehicle Ergonomic Self-Evaluation Form
- Vary work tasks and positions throughout the day whenever possible
- Perform self-care techniques throughout the day
- Maintain an awareness of risk factors, risk reduction strategies, and RMI symptoms
- Report symptoms of an RMI to their supervisor/manager

### **Ergonomic Evaluator**

The ergonomic evaluator will be an external or internal resource that provides professional ergonomic recommendations or schedules and conducts in-person ergonomic assessments in various levels for affected OUSD employees in accordance with the Risk Management Team's request. Ergonomic Evaluators are responsible for the following:

1. Preparing and submitting the ergonomic report to OUSD Risk Management Team
2. Investigating the work-related ergonomic risk hazard by conducting ergonomic assessments in various working environments, including office, vehicle, etc.
3. Providing recommendations to address the employee's reported concerns and/or symptoms
4. Providing recommendations to address environmental concerns such as lighting, noise, or temperature as applicable
5. Providing recommendations to improve the employee's work habits such as posture, body mechanics, and practicing good ergonomic principles
6. Providing recommendations on various matters, including engineering control, administrative control, and training plan to address the existed ergonomic risk hazards

### **ERGONOMIC SUPPORT AND REQUEST PROCEDURE**

The following procedure should be followed when an OUSD individual employee wants to request ergonomic support:

1. Employee will request Ergonomic Self-Evaluation Form from Risk Management Team in person or via email.



2. OUSD Risk Management Team will deliver the Ergonomic Self-Evaluation Form to requesting employee in the same manner it was requested.
3. Employee will conduct the ergonomic self-evaluation by utilizing the Form and adjust the workstation or working environment in accordance with the ergonomic principles.
4. Employee will be responsible to send the completed OUSD Ergonomic Self-Evaluation Form back to the Risk Management Team.
5. OUSD Risk Management Team will review the completed Ergonomic Self-Evaluation Form and provide feedback and necessary information to the employee and, if applicable, supervisor.
6. OUSD Risk Management Team will assess the ergonomic risk level in accordance with the employee's completed Ergonomic Self-Evaluation Form and decide if additional ergonomic support, such as in-person ergonomic evaluation, ergonomic case study and other necessary ergonomic services should be provided.
7. Please call 714-628-5390 to contact OUSD Risk Management Team for more information.

## Computer Workstation Self Evaluation

Assessment Date: \_\_\_\_\_

Employee Name: \_\_\_\_\_ Employee ID#: \_\_\_\_\_

Department: \_\_\_\_\_ Supervisor: \_\_\_\_\_

Reason for Assessment (circle any that apply):

New Employee    Transfer to new workstation    Equipment Request    Discomfort    Routine Check

	Yes	No	Correction (if applicable)	Date Completed
<b><u>Seated Position</u></b>				
Do you know how to adjust your chair?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Is your chair adjusted for support & comfort?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are your feet firmly supported by the floor or a footstool?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b><u>Arm Position when using the computer</u></b>				
Are shoulders relaxed?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are elbows next to your sides, not reaching forward?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Is the keyboard at your seated elbow height?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Is the mouse or trackball at the same height and next to the keyboard?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are wrists straight (not bent up/down/or side to side)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
When typing?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
When using the mouse or trackball?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b><u>Head Position</u></b>				
Is your head upright & straight-not severely bent or turned	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
When viewing the monitor?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
When looking at documents or copy?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are frequently used items close?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b><u>Work Habits</u></b>				
Do you reduce repetitive typing and mouse use through use of macros, shortcut keys, arrow keys?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Do you take short microbreaks away from the computer throughout the day?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Have you received, reviewed, and do you understand how each of the following documents applies to your workstation and work habits?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Adjusting Your Computer Workstation to Fit	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Common Workstation and Work Habit Recommendations	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

**Employee Signature:** \_\_\_\_\_ **Supervisor Signature:** \_\_\_\_\_

**Fax the completed form to Risk Management at 714.628.4186**

# ERGONOMICS PROGRAM

## Adjusting your Computer Workstation to Fit

Regardless of your computer workstation set up, workstation adjustments should be made so you can work in the position shown. Pay attention to



- Upright neck and back positions
- Elbows remaining close to sides with shoulders relaxed
- Forearms level
- Wrists straight

Adjust chair for best fit with attention to

- Lower back support
- Pressure evenly distributed along back of thighs
- Feet supported by floor or footstool
- If used, adjust chair arms to elbow height when seated with shoulders relaxed

How you achieve correct positioning depends on your workstation configuration, equipment, and available adjustments. The following show some common configurations and steps in adjusting yourself.

### Keyboard and mouse placed on a desktop:

- Adjust chair for best fit
- Raise or lower chair so with elbows in at sides and shoulders relaxed, you are at elbow height relative to the keyboard. This may mean the feet no longer remain on the floor.
- Provide foot support as needed to maintain even pressure across the back of the thighs.
- Raise or lower the monitor so the head and neck are upright when viewing the monitor. Bifocal and progressive lens users typically need the monitor in a lowered position.
- Position keyboard and mouse close to the front of the work surface so elbows can remain at sides when using either.
- Keep frequently used items (e.g. phone, documents) close.



### Keyboard and mouse on adjustable keyboard tray:

- Adjust chair for best fit
- Position chair height where comfortable.
- Adjust keyboard tray height to your seated elbow height.
- Raise or lower monitor so head and neck are upright when viewing the monitor. Bifocal and progressive lens users who cannot lower the monitor far enough may need to adjust chair height for upright head and neck positions then readjust keyboard tray height to seated elbow height.
- Stay close to the keyboard tray so elbows can remain at sides when using the keyboard and mouse.
- Keep frequently used items (e.g. phone, documents) close.



# ERGONOMICS PROGRAM

## Common Computer Workstation and Work Habit Recommendations

### Avoid Awkward Neck Positions

A. Avoid trapping the phone between your ear and shoulder. Doing so takes your neck out of an upright position and requires tension in the neck/shoulder muscles to shrug your shoulder.

Possible solutions:

1. Hold the phone with your hand
2. Use a headset

B. Assure you are not tipping your head up to see the monitor, a common problem for bifocal users.



Head Tipped Up – Incorrect



Upright head position-Correct

Possible solutions:

1. Lower the monitor
2. Raise your chair. Be sure to adjust keyboard and mouse height to maintain them at elbow height.
3. Lower contents on the computer screen so you no longer have to tip your head up to see them

C. Avoid sustained bending of your neck when viewing documents used for computer work or during deskwork.



Head Bent Down – Incorrect



Upright Head Position with Inclined Copy - Correct

Possible solutions:

1. Use a document holder for items needed when on the computer.
2. Incline items on your desk when writing. A 3-ring binder notebook can serve as a reading/writing board.

**D. Avoid extreme turning of the neck to see who is behind you**



Extreme Turn of Head - Incorrect



Turning chair - Correct

Possible solutions:

1. Get in the habit of turning your entire body instead of just your neck
2. Mount a mirror in front of you so you can view what is behind you without turning

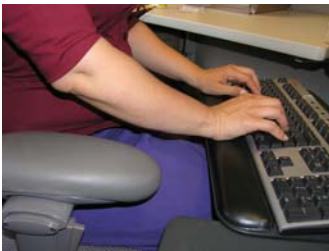
**Keep wrists straight**

A. Assure keyboard remains flat for straight (neutral) wrist positions. Lower flippers on back side of the keyboard.



Keyboard Legs Up, Wrists Bent–Incorrect      Keyboard flat, Wrists Straight - Correct

B. Work with keyboard and input device (mouse, trackball, touchpad) at your elbow height for straight (neutral) wrist positions.



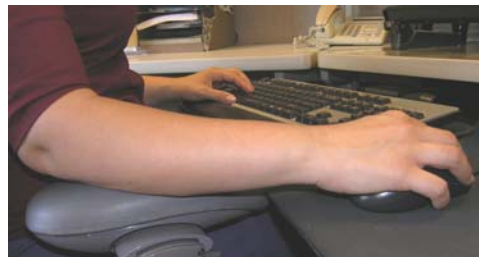
Keyboard Below Elbow Height – Incorrect



Keyboard at Elbow Height– Correct



Mouse Below Elbow Height – Incorrect



Mouse at Elbow Height - Correct

C. Use two hands when lifting large medical records, books, or binders. Use of two hands allows you to control your wrist position and requires less grip force.

- D. Avoid side to side wrist movement when using the keyboard and input device. Side movement of the wrist increases if you rest your wrist firmly on a wrist rest. Allow your arm to move to the location needed instead of keeping your arm in a fixed position and deviating your wrist to the side.



Excess Reaching/Wrist Deviation – Incorrect



Move Arm/Straight Wrist - Correct



Wrist Deviation with Mouse – Incorrect



Move Arm/Straight Wrist - Correct

### **Reduce input device (e.g. mouse) use**

- A. Use arrow keys when possible instead of the mouse
- B. Use enter key instead of clicking mouse when dialogue boxes are highlighted
- C. Learn and use short cut keys for commonly used functions. For a listing of short cut keys for a given program, open the program then search “help” for shortcut keys.
- D. Alternate mouse use between right and left hands.

## Reduce hand tension

- A. Avoid resting palms of hands on a wrist rest when typing. It is fine to rest the palms between typing movements, but not recommended when actively typing. Resting when typing results in excessive reaching with the fingers to reach the keys and this increases tension in the hands.



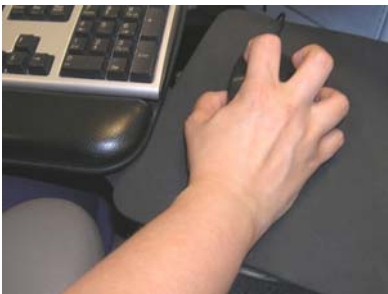
Resting Wrists Results in Excess Reaching with Fingers - Incorrect



Instead, allow the wrists to remain straight with hands curved. Reaching the keys is done through small movements at the shoulders to move the hand over the key to be struck.

Curved Hand Position - Correct

- B. Type quietly. Many individuals press the keyboard keys with more force than necessary. The louder your typing, the harder you are pressing. Try to type quietly and be soft on the keys.
- C. Slow typing speed slightly. Increased typing speed requires increased hand tension. By slowing your typing speed even 5-10%, you can greatly lessen hand tension.
- D. Lighten and release grip on mouse. Check your grip on the mouse and try to lighten. When not actively using the mouse, remove your hand from it to release tension in your hand.



Tight Grip on Mouse – Incorrect



Relaxed Hold on Mouse - Correct


- E. Lighten your grip on writing pens and pencils. Use of wider diameter pens and/or pencil grips tends to lighten grip. Use of RollerBall or very fine felt tip pens encourages use of lighter grip when writing.

- F. Microbreaks interrupt hand tension. Microbreaks are 30-60 second breaks that allow the body to rest from activity. Gentle stretching of the neck, shoulder or forearms can be done in conjunction to microbreaks. Taken on a regular basis (every 30-60 minutes), microbreaks can prevent build up of neck, shoulder, forearm and hand tension.
- G. Focus on normal breathing patterns to reduce muscle tension.

## **Prevent Eye Fatigue**

- A. Control glare on the computer monitor.
  - a. When possible, orient the computer monitor perpendicular to any outside room windows. If this is not possible, control window light through use of window coverings.
  - b. Avoid tipping the monitor excessively since this may cause glare from overhead lights. Instead, raise the monitor from the base.
  - c. Assure task lighting does not reflect into the monitor as a source of glare.
  - d. Use a glare screen if glare cannot be avoided
- B. Avoid having a bright light source behind or directly over the monitor
  - a. Avoid placing monitor in front of an outside window. If this is not possible, control window light through use of window coverings.
  - b. Avoid placing monitor directly over a bright light source. If this is not possible, control the amount of light through use of existing light switches and/or asking to have lighting diminished.
- C. Assure contents on monitor are easily seen
  - a. Adjust distance from monitor to avoid straining to see contents
  - b. Modify text size as needed
  - c. Modify screen contrast/color as needed
- D. Avoid extended periods of constant computer work. Include a change in eye focus distance with regular microbreaks
  - a. Focus on distant items to change eye muscle position
  - b. Shut or cover eyes to allow eye muscles to rest





# crit<sup>erion</sup>®

adjust the criterion chair to fit you

### Tilt tension

Turn knob toward left side of chair to increase tension.

### Height-width pivot-arms\*

Squeeze trigger to raise or lower armrest. Grasp arm caps to slide width in/out and to pivot.

### Seat angle

Lift paddle and shift your weight to tilt seat forward or back.

### Variable back stop

Hold switch forward while you lean back. Release to set maximum recline angle. To restore full tilt, release switch when fully reclined.

### Seat depth\*

Lift paddle and slide seat forward or back.

### Seat height

Lift paddle to raise or lower seat height.

### Back height

While seated, pull handle toward you and raise or lower. (You may need your other hand to help move backrest.)

### Foot ring height\* (stool only)

Lift ring and rotate counterclockwise, raise or lower, then turn clockwise to lock.

\*Optional features (may not be included on your chair).

For Français and Español versions visit [www.steelcase.com](http://www.steelcase.com).

# Consider These Ergonomic Principles

0150166

The distance and the angle between you and the VDT should be adjustable

The top of the screen should be at eye level

Personal task lights should be used to bring proper lighting to your paperwork

Your mousing elbow should be close to the body

Your forearms should be parallel to the floor and your wrist in a neutral posture

Your arms should be supported and a palm rest made available

The screen should be free of glare and reflection, and should tilt and pivot

The angle between your torso and legs should be greater than 90 degrees

Your chair should be adjustable in height and tilt

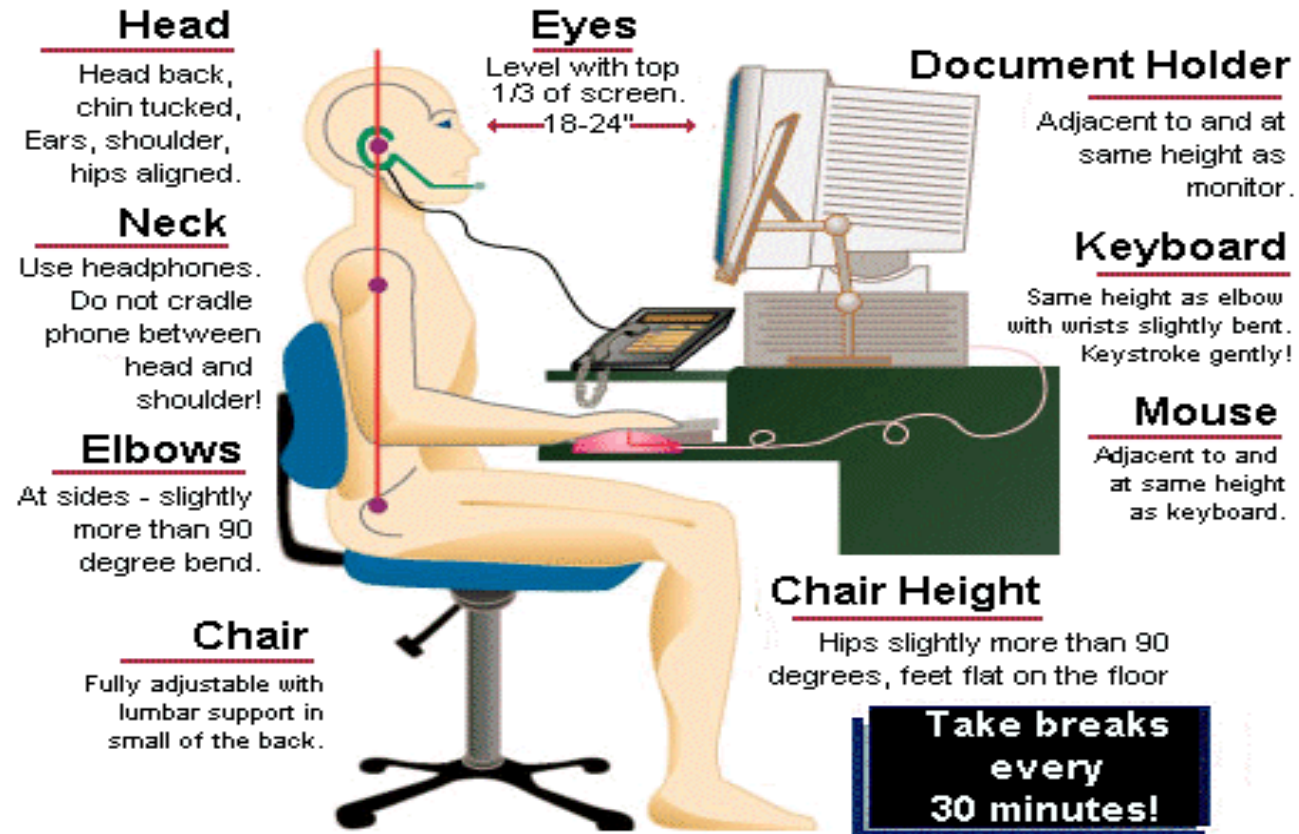
A CPU can be stored under the desk to clear the workspace

Your feet should be placed flat on the floor or on a footrest

*Note: keyboard and monitor position will vary depending on the size of the user.*

# Computer Workstation Checklist

To understand the best way to set up a computer workstation, it is helpful to understand the concept of **neutral body positioning**. This is a comfortable working posture in which your joints are naturally aligned. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system and reduces your risk of developing a **musculoskeletal disorder (MSD)**.



## OUSD – School Bus Driver Self Evaluation Checklist

Assessment Date: \_\_\_\_\_  
 Employee Name: \_\_\_\_\_ Employee ID#: \_\_\_\_\_  
 Department: \_\_\_\_\_ Supervisor: \_\_\_\_\_  
 Union Affiliation: \_\_\_\_\_ Date of Hire (if new hire): \_\_\_\_\_  
 Reason for Assessment (circle any that apply):  
 New Employee      Discomfort      Routine Check

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	Yes	No	Correction (If applicable)	Date Completed
<b><u>Seated position when driving:</u></b>				
Do you know how to adjust your driver’s seat?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Seat Height: (Are hips and thighs at 90-degree angle? Hips and knees should be level.)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Seat Length: (Is arm reach between 90- and 110-degree bend?)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Seat Back Angle: (Are hips and torso between 100- and 110-degree angle?)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Seat Bottom Angle: (Are thighs supported without pressure points or too firm a contact area? Is wallet causing a pressure point?)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Seat Depth: (Is there space between back of knee and seat? Tip: Use 2 to 4 fingers as guide.)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Is your driver seat adjusted for support & comfort? (Adjust lumbar support if available on seat back.)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are your feet firmly supported by the floor and pedal controls with back properly supported?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b><u>Arm position when driving:</u></b>				
Are shoulders relaxed?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b><u>Administrative controls</u></b>				
Do you take short stretch breaks away from the bus throughout the day? (Tip: Stand up when possible and at a minimum once an hour, walk around bus periodically, gently raise arms over head to stretch whole body, make minor posture adjustments to avoid prolonged, static posture.)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Are mirrors positioned correctly?	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

**Review with your supervisor, department safety coordinator, or trainer any items to which you answered “NO.”**  
 “NO” Answers Review: Date: \_\_\_\_\_ Employee Signature: \_\_\_\_\_ Supervisor Signature: \_\_\_\_\_

**Send a copy of the completed form to Risk Management**

*For further assistance contact the OUSD Transportation and Dispatch Department at (714)516-2742*