



Guidelines on Oxygen Use in Schools

These guidelines address the use of medically prescribed oxygen by students and issues regarding the safe handling, storage, and transportation of oxygen.

General Information

Students using oxygen may use one of several oxygen-supplying units available, including high-pressure gas cylinders and liquid oxygen concentrators.

The IEP team, with recommendations from the credentialed school nurse, will determine the appropriate school placement for the student. The site administrator must also consult with the Transportation Department for special requirements prior to the admission of an oxygen-dependent student.

The administration of oxygen for the medical needs of students requires special training. The credentialed school nurse will train and supervise the appropriate personnel who will accompany the student with oxygen during the school day, during school-sponsored activities, and during transportation.

Student Health Services

After establishing with the parent that the student will require the administration of oxygen at school, the school nurse shall initiate the required forms.

1. "Parent Authorization for Specialized Physical Health Care." This remains on file with the student's health records.
2. "Physician Authorization for Specialized Physical Health Care Services" submitted with a copy of the District Nurse's, "Oxygen Therapy Protocol" to the student's physician for orders including liter flow and any special instructions.
 - a. Consult with nurse and oxygen vendor to arrange in-service training with the oxygen vendor for the site administrator, teachers, health care assistants, and custodian. The parent or guardian and student must also attend with their equipment. This in-service will include replacing and handling additional oxygen cylinders or containers.
 - b. Based on physician orders, calculate, and determine the amount of oxygen needed in the oxygen tank or container for the student to attend school daily and communicate this information to the appropriately trained person who will accompany and provide services to the student.
 - c. Inform parent/guardian that all parent provided supplies indicated on District oxygen protocol are to accompany the student to school each day.
 - d. Notify the Transportation Department when the student has medical clearance for busing.

Transportation

Prior arrangements for the transportation of oxygen-dependent students must be made through the Transportation Department. An oxygen-dependent student, whether ambulatory or in a wheelchair, may be transported on the school bus, only when accompanied by appropriately trained district personnel or a private duty nurse. Only one oxygen container is allowed on the school bus during transportation. Appropriately trained personnel will determine if the oxygen container is adequately full upon receiving the student, as directed by the school nurse. The oxygen container shall be secured either to the bus seat, sidewall, or wheelchair. Prior to busing, the Transportation Department must inspect and approve the methods of securing the oxygen container to the wheelchair, and of securing the wheelchair to the bus. If the wheelchair cannot be properly secured on the bus, the parent or guardian is responsible for having the wheelchair modified. The cost of modification is the parent's responsibility. If modifications cannot be made, the parent will be reimbursed by the District for approved alternate transportation.

Safety

Oxygen can be handled and stored with little or no danger if proper safety precautions are followed. Generally, oxygen is nonflammable but can support combustion if a substantial leak occurs near a source of ignition. An ABC fire extinguisher must be located on the bus, in the classroom, health office or where the oxygen is stored. Smoking is strictly prohibited in the proximity of oxygen.

Handling and Storage of Oxygen

All Oxygen-Supplying Equipment

- Do not use within five feet of electrical appliances, such as stoves or heaters.
- Keep away from heat or open flame.
- Do not use near combustible materials such as oils, grease, aerosol sprays, lotions, solvents, or tincture (i.e., green soap). These substances, when combined with oxygen, can greatly increase the potential for fire hazard and personal injury.
- The oxygen container must be safely positioned during the school day. Students and staff should be aware of tripping hazards created when the tube extends from the unit to the user.

High Pressure Cylinders (approximately 22 liters):

- Cylinders must be secured (i.e., portable cart to table, or to the wheelchair) to prevent tipping or falling, which could result in the separation of the valve assembly from the cylinder, causing the cylinder to become a projectile.
- Valves should be kept free of oil, grease, or other readily combustible materials. Hands must be clean (i.e., no hand lotion) when replacing cylinders.

Liquid Oxygen

- If there is spillage, keep the liquid away from the skin, eyes, and clothing. Liquid oxygen can freeze skin.
- Never touch the frosted parts of the portable oxygen unit.

Oxygen Concentrators

- Where concentrators are used, the school must be supplied with an alternate source of oxygen, such as a spare oxygen cylinder.
- Filters must be in place and totally dry before operating the unit.
- Ventilation parts must be unobstructed by any items such as blankets or foam which may impede ventilation.

Oxygen Cylinder Storage

The number of oxygen cylinders to be stored at the school will be determined by the school nurse and the student's physician. The parent or vendor is responsible for supplying and transporting additional oxygen cylinders to be stored at the school. Cylinders must be stored in a well ventilated, protected, and dry area such as the health office. **Lockers and cupboards are not proper storage areas** since they are not ventilated. Cylinders must be stored in an upright position, securely fastened to the wall or in a storage rack. Consult the District Facilities Director to obtain fastenings for the cylinder to be secured to the wall. Cylinders must not be stored near combustible materials or any other ignition source likely to cause or accelerate fire.

Signs and Labeling

Post appropriate signs in areas where oxygen is used and stored. Signs may be obtained through your CSRM Risk Management Team. Examples are shown below:



Authority

These issues are regulated by the California Code of Regulation, Title 8, Motor Vehicles: Title 13, General Industry Safety Order, Group 2. Article 7 and applicable fire codes.

Related Resources

Guidelines and Procedures for Meeting the Specialized Physical Health Care Needs of Pupils, CDE, 1990.