

# Health and Safety Guide for K-12 Schools in Washington State – 2024 Update of the 2003 Edition

## References:

- [Chapter 246-366 WAC](#): State Board of Health School Rule
- [Chapter 296-807 WAC](#): Portable Power Tools
- [Chapter 296-800 WAC](#): Safety and Health Core Rules
- [Hand and Power Tools \(osha.gov\)](#)
- [Chapter 296-880 WAC](#): Unified Safety Standards for Fall Protection
- [Chapter 296-901 WAC](#): Globally Harmonized System for Hazard Communication
- [Chapter 70.100 RCW: EYE PROTECTION—PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS \(wa.gov\)](#)
- [Division of Occupational Safety & Health \(DOSH\) Directive \(WRD\) 13.00 Emergency Washing Facilities](#)
- [DOH School Chemical Safety Inspections - Hazardous Chemical Safety in Art Classrooms \(youtube.com\)](#)
- [Theatrical Fog Guidelines \(wa.gov\)](#)
- [The Arts \(ospi.k12.wa.us\)](#)
- [Art Hazards | Washington State Department of Health](#)
- [Art Hazard Videos | Washington State Department of Health](#)
- [methyl-chloroform.pdf \(epa.gov\)](#)
- [Ventilation Guidance for Spray Polyurethane Foam Application, June 2011 \(epa.gov\)](#)
- [ATSDR TDI and MDI \(Toluene Diisocyanate and Methylenediphenyl Diisocyanate\) ToxGuide \(cdc.gov\)](#)
- [Hydrogen Fluoride \(HF\) | Medical Management Guidelines | Toxic Substance Portal | ATSDR \(cdc.gov\)](#)
- [Art Adhesives | Washington State Department of Health](#)
- [Chapter 51-54A WAC](#): STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE
- [Digital Codes \(iccsafe.org\)](#) 2021 International Fire Code
- [Chapter 51-52 WAC](#): STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE 2021 EDITION OF THE INTERNATIONAL MECHANICAL CODE and the International Fuel Gas Code
- [Digital Codes \(iccsafe.org\)](#) 2021 International Fuel Gas Code
- [eCFR :: 29 CFR 1910.1450 -- Occupational exposure to hazardous chemicals in laboratories.](#)
- 2021 Washington State Fuel Gas Code [Digital Codes \(iccsafe.org\)](#)
- 2021 Washington State Mechanical Code [Digital Codes \(iccsafe.org\)](#)
- 2021 Washington State Building Code [Digital Codes \(iccsafe.org\)](#)
- 2021 Washington State Fire Code [Digital Codes \(iccsafe.org\)](#)
- [F413-012-000 Employer's Guide to the Hazard Communication Rule \(wa.gov\)](#)
- DOH [Safe Cleaning and Disinfecting Guidance for Schools \(wa.gov\)](#)
- [WAC 296-126-222](#): Sanitation and Safety (lifting restrictions)

R. Visual & Performing Arts		WAC or other Code Reference	Standard/Recommended Practice	Plan Review	Reason for Change
R 001	All visual arts classrooms need to be equipped with sinks <del>for hand washing and cleaning equipment, instruments, etc. Cleaning supplies should be third party certified safer products. See the DOH Safe Cleaning and Disinfecting Guidance for Schools (wa.gov) . and for cleaning</del> <u>Cleaning supplies should also be available, and bathrooms in close proximity and white boards (not chalk boards).</u>		OSPI	X	
R 002	<del>Vocal and instrumental music rooms, including Choir, and band, and orchestra rooms, shall have at least the required maximum</del> <u>at least the required</u> ventilation and outside <del>incoming</del> fresh air.	<del>51-5213-Table 3-4IMC 401, 403</del>	OSPI	X	
R 003	<del>Pianos and other h</del> Heavy instruments should be provided with wheels or rollers for safe moving. Students should not <del>be utilized to</del> move heavy objects, <del>such as e.g., pianos, large percussion, string bass and woodwind instruments or choral and band risers, or and shells. No one shall be required or permitted to lift or carry excessive weights.</del>	<del>WAC 296-126-222</del>	OSPI		

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R 004	Dance Education facilities (where participants "leave the floor" during physical activities) should be provided with resilient flooring. Rails for balance should also be provided in these areas.		OSPI	X	
R 005	Whenever glass mirrors are provided in dance instructional areas, the mirrors should be made of safety glass.	<a href="#">51-50/IBC 2406</a>	OSPI	X	
R 006	Microphones ("wireless" preferred) should be provided for instrumental and vocal specialists to provide clear direction to students and to avoid damage to teacher's vocal cords from having to strain their voices to talk over instruments, music and singing.		OSPI	X	
R 007	Sound levels in music rooms shall comply with <del>DOSH and SBOH WISHA</del> noise level requirements through the application of acoustical and architectural design. (See Sound <a href="#">Control Level Section H</a> ).	<a href="#">246-366-110</a> <del>296-81762-099</del>		X	
R 008	When "Black Boxes" are allowed in schools, Fire and Building codes must be complied with especially as relating to minimum exit route lighting, exit signs and required stair, seating, aisles widths and other specifications, etc. for the audience. <a href="#">Provide lighting at classroom levels if to be used for instruction. (See Section I Lighting)</a>	246-366-120  <del>51-50/IBC</del> <del>51-54A/IFC</del>	OSPI	X	
<a href="#">R 008a</a>	<a href="#">All chemicals, solvents, and hazardous substances shall be inventoried by the school a minimum of once per year. The inventory shall include the name of the compound, the amount, and the date it entered the school. A copy of the inventory shall be kept on file in a location away from the areas where the materials are stored. A current safety data sheet shall be maintained for all hazardous substances and shall be available for review upon request. All items shall be properly labeled and stored, and emergency washing stations shall be provided as required by L&amp;I core safety rules. See Section K Science Classrooms and Laboratories.</a>	<a href="#">296-901 RCW 28A.320.125(3)(b)296-800</a>			
<a href="#">R 008b</a>	<a href="#">Spot removers/cleaners for costumes are usually solvent based. They need to be used with adequate ventilation, proper skin protection, and thoroughly dried/off gassed prior to use of the clothing or storage. Look for the least toxic products and follow the label instructions. Methyl chloroform (1,1,1-trichloroethane) should be avoided.</a>		<a href="#">Employer's Guide to the Hazard Communication Rule</a>		
R 009	Costume, wardrobe and band <a href="#">instruments and uniforms</a> , etc. require adequate <a href="#">safe</a> storage to avoid fire and storage hazards as well as proper maintenance, <a href="#">cleaning</a> , and care <del>of uniforms</del> .		OSPI	X	

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R 010	Set design and construction require a safe working area, <a href="#">only OSHA school/district</a> -approved power tools, and compliance with all <a href="#">L&amp;I WISHA</a> construction regulations. All students using portable hand tools and powered equipment must be trained in safe operation procedures. <a href="#">Direct supervision by an adult who is trained in the safe operation of the equipment in use is required anytime powered machinery is being operated, and supervised by a certified CTE (vocational education) teacher.</a> See Section L Career & Technology Education for further guidance.	<a href="#">246-366-140(1)</a> <a href="#">296-80724-655</a> <a href="#">296-800-280</a>	OSPI	X	
<a href="#">R 010a</a>	<a href="#">Spray polyurethane foam should not be applied in school projects such as a theatrical set design. The protective requirements, such as professional application with substantial containment and ventilation, are typically beyond the capabilities and resources for school projects. Heating pre-sprayed foams should also be avoided.</a>		<a href="#">EPA ATSDR</a>		
R 011	<del>Adequate</del> Appropriate direct local exhaust ventilation <del>shall must be</del> used whenever the following are used indoors: <del>Pottery provided whenever kilns, lead soldering, 3D printers, laser printers, laser wood cutters, etc., or volatile chemical products (such as paints, glues, paint thinners, spray adhesives and fixatives, other solvents, and corrosive acids used in other vaporous materials are used etching).</del> <del>are</del> or for 3D printers, laser printers, etc... (See Section L CTE) and the new CTE Safety Manual at: <a href="http://www.k12.wa.us/CareerTechEd/techprep/default.asp">http://www.k12.wa.us/CareerTechEd/techprep/default.asp</a>	<a href="#">246-366-080</a> <a href="#">296-24-370</a>	OSPI	X	
<a href="#">R 011a</a>	<a href="#">Do not use/purchase spray adhesives and fixatives that contain toluene and/or hexane. Water-based products are preferable.</a>		<a href="#">DOH Art Adhesives Employer's Guide to the Hazard Communication Rule</a>		
<a href="#">R 011 b</a>	<a href="#">Avoid aromatic solvent paint thinners like lacquer thinner or turpentine; instead, use odorless paint thinners or odorless mineral spirits. Caution is still needed.</a>		<a href="#">DOH Employer's Guide to the Hazard Communication Rule</a>		
<a href="#">R 011c</a>	<del>All</del> Flammable liquids in excess of 10 gallons total shall be stored in approved flammable storage cabinets with self-closing doors. Cabinets shall be locked or located in a locked room when not in use. Flammables (red labels), <del>and</del> acids, and bases shall each be stored separately. Flammable wastes must be disposed of in approved flammable waste containers. Flammable waste containers must be emptied daily. Consult with your local fire marshal for specifics on storage of flammables. (K 036, L 028a)	<a href="#">296-24-33009</a> <a href="#">51-54A IFC 2403.4.3,</a> <a href="#">5704.3.4.4, Ch 57</a> <a href="#">173-303-630</a>			

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R 012	Eye, ear, hand, foot, and body protection <del>shall be used as are</del> required <u>by chemical labels, Safety Data Sheets, or practices requiring protection with certain chemicals and projects.</u> (Refer to WISHA Personal Protective Equipment (PPE) requirements.)	296-800-160 <a href="#">296-155</a> <a href="#">246-366-110, 140</a> <a href="#">RCW 70.100</a>	OSPI		
R 013	<u>Premixed pottery clay should be used instead of a pug-mill to reduce airborne particulates, including silica. Pugmills with vacuum seals to prevent dust are acceptable. In visual arts class areas, the use of premixed pottery clay is recommended rather than using a pug-mill. Damp mop frequently to reduce dust.</u> Only non-toxic art supplies should be used.		OSPI & DOH <a href="#">Employer's Guide to the Hazard Communication Rule</a>		
R 013a	<u>When looking for nontoxic art supplies, look for the AP symbol on labels of products that subscribe to the Art and Creative Materials Institute (ACMI) or look for the words "Non-toxic" on products manufactured by companies that don't subscribe to ACMI.</u>		<a href="#">OSPI &amp; DOH</a>		
R 013b	<u>Do not purchase/use glazes/colorants containing toxic or environmentally damaging substances such as lead, cadmium, copper, manganese, or chromates. Do not purchase or use powdered glazes – use premixed products.</u>		OSPI & DOH <a href="#">Employer's Guide to the Hazard Communication Rule</a>		
R 013c	<u>Use oil pastels instead of powdered paints or pigments to reduce the risk of inhaling toxic dusts.</u>		OSPI & DOH <a href="#">Employer's Guide to the Hazard Communication Rule</a>		
R 014	Personal protective equipment (PPE) and safety training for <del>staff and</del> students in visual arts class areas <del>should</del> be provided <u>to create curate good safety practices.</u>	<a href="#">246-366-140(1)</a>	OSPI & DOH		
R 014a	<u>Stained glass work requires eye protection and protective apparel, including gloves, to reduce risk from sharp glass. Soldering requires local mechanical exhaust ventilation. Lead free solder should be used.</u>	<a href="#">246-366-080, 140</a>			
R 014b	<u>Glass etching: Proper personal protective equipment must be worn to prevent skin contact with etching compounds like ammonium bifluoride. Hydrofluoric acid should not be prohibited from be used in K-12 schools.</u>	<a href="#">WAC 296-155-200</a>			
R 014c	<u>Hydrofluoric acid (used for glass etching) should not be used in K-12 schools. Hydrofluoric acid is a dangerous systemic poison. It is highly corrosive. Its severe and sometimes delayed health effects are due to deep tissue penetration by the fluoride ion. The surface area of the burn is not predictive of its effects. Treatment with calcium gluconate gel must begin immediately.</u>		ATSDR DOH <a href="#">Employer's Guide to the Hazard Communication Rule</a>		

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R 015	Additional information regarding the Visual and Performing Arts can be found on the <a href="http://www.k12.wa.us/curriculum/instruct/arts/default.asp">OSPI Arts website</a> . following website: <a href="http://www.k12.wa.us/curriculum/instruct/arts/default.asp">http://www.k12.wa.us/curriculum/instruct/arts/default.asp</a>		OSPI		
R 016	<a href="#">DOH 333-312-Guidelines for Use of Theatrical Fog.pdf</a> provides information on the health risks attributed to the chemicals commonly found in fogging products, and the aerosols they create, and parameters for use that may lessen risks.		<a href="#">OSPI and DOH</a>		
R 017	<a href="#">Whenever a stage or platform drop-off exceeds four feet, a safety warning strip is required. The abrasive safety strip, which can be felt in the dark and is of contrasting color, shall be placed two feet from the edge of stages or elevated platforms. A lighted LED strip is acceptable. (C 012)</a>	<a href="#">296-880</a>	<a href="#">OSPI and DOH</a>	X	
R 018	<a href="#">Theater and other performing arts areas must meet L &amp; I WISHA rules as well as Building and Fire Code requirements with regard to catwalks, rigging, pits, curtains, and storage areas. (C 013)</a>	<a href="#">296-800-260</a> <a href="#">U51/50 IBC</a> <a href="#">410</a>		X	
R 019	<a href="#">Plaster, or plaster of Paris is calcium sulfate. Inhalation, skin, or eye contact can cause irritation. It may contain traces of crystalline silica which is a carcinogen. Recommend that students do not handle plaster unless they wear proper protective equipment such as gloves and a dust mask. Use exhaust ventilation and damp mop to control dusts.</a>		<a href="#">OSPI and DOH</a>		
R 020	<a href="#">All chemicals, solvents, and hazardous substances shall be inventoried by the school a minimum of once a year. The inventory shall include the name of the compound, the amount, and the date it entered the school. A copy of the inventory shall be kept on file in a location away from the areas where the materials are stored. (K 001, L 037)</a>	<a href="#">296-901</a> <a href="#">RCW</a> <a href="#">28A.320.125(3)</a> <a href="#">)(b)</a>			
R 021	<a href="#">Spray booths must be provided to mitigate fire and explosions hazards of spray application processes that involve flammable or combustible materials. Spray booths must be maintained for effective operation. Noise levels of booth must not raise background noise in classrooms above 65 dBA.</a>	<a href="#">NFPA 33</a> <a href="#">WAC 296-62-11019</a> <a href="#">246-366-110</a> <a href="#">246-366-080</a>		X	
R 022	<a href="#">Spray paints, glues, and varnishes should only be used with mechanical exhaust ventilation. Always follow product label instructions and requirements.</a>	<a href="#">246-366-080</a>		X	

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<a href="#">R 023</a>	<p>Art rooms may use chemicals and generate dust that require emergency eye wash stations. Stations shall be within 50 feet or ten seconds of all student work stations and shall provide 0.4 gallons per minute for at least 15 minutes at 30 PSI. Bottled water eye wash stations do not meet requirements. (They may be supplementary to units meeting the above specifications.)</p> <p>See <a href="#">K 003-007a</a> and the <a href="#">L&amp;I DOSH Directive 13.00</a> for more requirements for emergency eye washes.</p>	<a href="#">296-800-150</a> <a href="#">DOSH Directive 13.00</a> <a href="#">Emergency Washing Facilities</a>		x	
<a href="#">R 023a</a>	<p>Emergency showers and eye wash units shall be inspected and tested for proper operation annually. Inspections should include examination of the piping, water temperature and quality, activation to check that the valves and other hardware work properly, and water flow rate. Plumbed emergency eye washes must be activated weekly. Written documentation of tests shall be maintained on-site.</p>	<a href="#">296-800-150</a>			
<a href="#">R 024</a>	<p>DOH has web pages and safety videos on Art Hazards with more information and guidance for health and safety in the arts. Webpages include <a href="#">Safer Supplies and Storage</a>, <a href="#">Adhesives</a>, <a href="#">Ceramics</a>, <a href="#">Encaustics</a>, <a href="#">Glassworking</a>, <a href="#">Jewelry and Metalsmithing</a>, <a href="#">painting and Pastels</a>, <a href="#">Photo Processing</a>, <a href="#">Textiles</a>, <a href="#">Woodworking</a>, and <a href="#">Waste Disposal</a>. The videos follow <a href="#">Dave Waddell</a> as he explores the hazards involved in making art and how you can protect yourself. They include <a href="#">Understanding Toxic Exposures</a>, <a href="#">Avoiding Toxic Products</a>, <a href="#">Toxic Metals in Art Materials</a>, <a href="#">Toxic Acids</a>, <a href="#">Toxic Solvents</a>, <a href="#">Other Chemical Hazards</a>, <a href="#">Ventilation</a>, <a href="#">Toxic Solvents in Painting and Pastels</a>, <a href="#">Art Gallery Chemicals and Hazards</a>, <a href="#">Toxic Compounds in Printmaking</a>, <a href="#">Chemical Hazards in Ceramics</a>, <a href="#">Jewelry Cleaner and Solvents</a>, <a href="#">Jewelry Making Hazards – Disposal</a>, <a href="#">Jewelry: Protection from Corrosives</a>, <a href="#">Jewelry: Protection from Etchants and Pickles</a>, <a href="#">Jewelry-making Hazards: Patinas</a>, <a href="#">Jewelry-making Hazards: Soldering and Brazing</a>, <a href="#">Jewelry-making Hazards: Storage</a>.</p>				