Washington State Department of HEALTH

Health and Safety Guide for K-12 Schools in Washington State

Washington State Department of Health and Washington State Office of Superintendent of Public Instruction

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Please direct questions about the Guide to the School Environmental Health and Safety Program in the Office of Environmental Health and Safety at the Washington State Department of Health. Please email SchoolEHS@doh.wa.gov.

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.

Acknowledgments

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We sincerely thank the School Nurse Corps, partners at the Washington State Department of Health (DOH), local health jurisdictions (LHJs), educational service districts (ESDs), schools and school districts, the Washington Interscholastic Activities Association (WIAA), and professionals that design, build, and operate our schools. These partners provided valuable review and feedback to improve the Guide. For a full list of contributors, see Appendix A.

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Abbreviations

ADA	Americans with Disabilities Act
AFT Washington	American Federation of Teachers, Washington
AHERA	Asbestos Hazard Emergency Response Act (federal)
ANSI	American National Standards Institute
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASTM	American Society for Testing Materials
AWSP	Association of Washington School Principles
BBP	Bloodborne Pathogen
BMP	Best Management Practices
CDC	U.S. Centers for Disease Control and Prevention
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CTE	Career and Technical Education
DCYF	Washington State Department of Children, Youth, and Families
DOC	Washington State Department of Commerce
DOH	Washington State Department of Health
DOSH	Division of Occupational Safety and Health (L&I)
ECEAP	Washington State Early Childhood Education and Assistance Program
ECP	Exposure Control Plan
ECY	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESD	Educational Service District
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
GFI	Ground Fault Interrupter
HVAC	Heating, Ventilation, and Air Conditioning
IAPMO	International Association of Plumbing and Mechanical Officials
IAQ	Indoor Air Quality
IAQBMPM	Indoor Air Quality Best Management Practices Manual (DOH)
IBC	International Building Code
IFC	International Fire Code
IMC	International Mechanical Code
K-12	Kindergarten through twelfth grade
K12HSG (Guide)	DOH/OSPI Health and Safety Guide for K-12 Schools in Washington State
LEA	Local Education Agency

LED	Light Emitting Diode
LHJ	Local Health Jurisdiction
L&I	Washington State Department of Labor and Industries
NAAQS	National Ambient Air Quality Standards
NASN	National Association of School Nurses
NASPHV	National Association of Public Health Veterinarians
NCAA	National Collegiate Athletic Association
NEC	National Electrical Code
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
OPIM	Other Potentially Infectious Material
OSPI	Washington State Office of Superintendent of Public Instruction
PDF	Portable Document Format
PEL	Permissible Exposure Limit
PM2.5	Particulate Matter with a diameter of 2.5 micrometers or less (also known as fine PM)
PP	Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards (The National Academies Press)
PPE	Personal Protective Equipment
PPM	parts per million
RCW	Revised Code of Washington
SBOH	Washington State Board of Health
SDS	Safety Data Sheet
SEHS	School Environmental Health & Safety
SNOW	School Nurse Association of Washington
TAC	OSPI School Facilities Technical Advisory Committee
TfS	EPA's Indoor Air Quality Tools for Schools
THJ	Tribal Health Jurisdiction
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
UPC	Uniform Plumbing Code
WA-ACTE	Washington Association for Career and Technical Education
WAC	Washington Administrative Code
WAMOA	Washington Association of Maintenance and Operations Administrators
WASA	Washington Association of School Administrators
WASBO	Washington Association of School Business Officials
WEA	Washington Education Association
WFIS	Washington Federation of Independent Schools
WIAA	Washington Interscholastic Activities Association
WISHA	Washington Industrial Safety & Health Act
WSDA	Washington State Department of Agriculture
WSDOT	Washington State Department of Transportation

WSEC	Washington State Energy Code
WSSDA	Washington State School Directors' Association
WSSP	Washington Sustainable School Protocol
WSTA	Washington Science Teachers' Association

Preface

The Third Edition of the Guide is an update of the 2003 Guide jointly promulgated by DOH and OSPI in accordance with WAC 246-366-140. This code states in part that DOH and OSPI, ". . .shall jointly prepare a guide for use by department personnel during routine school inspections in identifying violations of good safety practices." The Guide is intended to help prevent and reduce injuries and illnesses in public and private K-12 schools in Washington.

DOH and OSPI encourage users of the Guide to:

1. Examine its concepts, recommendations, citations, references, and procedures.
2. Evaluate their usefulness, effectiveness, and accuracy.
3. Report any benefits or problems identified.

The Guide aims to provide schools with up-to-date information. We encourage users to submit current best practices and suggestions to the DOH School Environmental Health and Safety Program (SchoolEHS@doh.wa.gov). Feedback will help update and improve the Guide and identify training and technical assistance needs related to school environmental health and safety. This is a working document, and we greatly appreciate the assistance and input of all users.

The Guide provides school districts with references and current laws and codes in the Revised Code of Washington (RCW) and Washington Administrative Codes (WACs). Each school district, private school, or other Guide user is responsible for complying with applicable RCW and WACs, including those related to safety, building, plumbing, electrical and mechanical systems, fire protection, safety, energy use, and environmental protection.

The recommendations in the Guide are based on established best practices and research. All Guide users, including schools, should review the recommendations and adopt or promote those that are relevant and practical for their situation, with the help of their risk management team. If any recommendations offered in the Guide conflict with any applicable laws or codes, the laws or codes take precedence.

Who Will Use the Guide?

The Guide is primarily intended for use by:

- School district and private school staff
- Local Health Jurisdictions (LHJs)
- Tribal health organizations
- School risk managers and safety officers
- School facilities and maintenance staff
- School directors, administrators, and business officials
- School nurses
- Local school boards
- School site councils
- Parents and students
- Building officials and fire marshals
- Architects and engineers
- State and federal agencies
- Other groups that have a significant interest in the Guide

The Washington Department of Labor and Industries (L&I) rules (WAC 296-800-130) requires each school to organize a safety committee. The Guide and related documents could assist these site-based safety committees in performing self-assessments of their facilities. It is important for school administrators and safety committees to alert other interested parties of their efforts to address health and safety issues at their school. The school's safety committee should work closely with the groups listed above to ensure good communication and cooperation.

Introduction to the Third Edition

This Third Edition is based on the review of a core committee, coupled with input from subject matter experts and consideration of public comments. This edition incorporates updated code and best practice references, and includes new applicable laws, clarified language, and other items frequently raised in the consideration of school environmental health and safety.

The new format eliminates the "Required" and "Recommended" columns. Sections may contain mandated items (shall/must) that are anchored in rules and state statutes, and recommended items (should/may) that are based on established, evidence-based best practices. The goal is to provide information as concisely and accurately as possible, while also providing references for review and additional details. This format aims to encourage discussion and collaboration among users.

The 2003 numbering system was maintained to the extent possible. Links to rules and best practice guidance are presented at the beginning of each section for reference and further information.

To sections of the 2003 document, Section P: Emergency and Disaster Preparedness and Appendix D: Science Laboratory Chemicals, have been removed and replaced as follows:

> Section P was removed due to the significant changes made to school emergency and disaster preparedness procedures since 2003. The website maintained by the Office of Superintendent of Public Instruction (OSPI) includes comprehensive information, checklists, and resources to help schools meet the requirements of RCW 28A.320.125: Safe school plans—Requirements—Duties of school districts and schools—Drills—Rules—First responder agencies, as well as other emergency and disaster preparedness responsibilities.
>
> Appendix D of the 2003 Guide is now replaced by the School Chemical List, which was originally developed by the King County Local Hazardous Waste Management Program and the WSTA and is now maintained by the DOH SEHS program (School Environmental Health & Safety (DOH)). It lists science laboratory chemicals, their physical, health, and environmental hazard, the lowest grade level appropriate for use, storage category, experiments where used, disposal method, and whether it should not be allowed at any grade level. "Ban candidate" chemicals should not be used in schools.

Regular Revision

The sections in the Guide are subjects that the original Health and Safety Advisory Committee determined needed to be addressed. The Guide will need to be revised periodically to ensure its accuracy and usefulness. Users are encouraged to submit information on rules, standards, guidelines, references, websites, and updated or useful source materials to the DOH SEHS Program at SchoolEHS@doh.wa.gov.

Summary of Sections

Section A: General Procedures

Addresses the importance of a cooperative, systematic approach while working with school districts. The need for proper communication channels, building and demographic data, and injury and health information is reviewed along with reports from health agencies and others. The need to discuss plans for minor or major remodeling is covered.

Section B: Building Operation and Maintenance

Areas include cleanliness, chemical storage, floors, walls, ceilings, vermin control, windows and shades, and storage areas – items addressed in WAC 246-366-050 Buildings.

Section C: General Safety

Addresses areas of injury prevention. Several hazards listed in this section have been observed frequently while others occur less often or rarely. Includes state codes for requirements with lead, asbestos, building and electrical safety and recommended standards for fall prevention, equipment safety, medication storage and first aid.

Section D: Plumbing, Water Supply and Fixtures

Includes applicable provisions of WAC 246-366-060, WAC 246-290: Group A Public Water Supplies, and the Washington state building codes.

Section E: Sewage Disposal

Outlines the school's responsibilities to local and state health authorities in addressing on-site sewage disposal systems.

Section F: Indoor Air Quality

Addresses Indoor Air Quality (IAQ) in schools and refers readers to useful reference materials. IAQ issues have become a major issue for schools. Mold, volatile compounds, dust, auto exhaust, and lack of sufficient outside air have contributed to IAQ problems in schools in Washington state. In some instances, these problems have resulted in evacuations and temporary school closures.

Section G: HVAC Preventative Maintenance

Provides readers with a maintenance and operation guidelines for school HVAC systems.

Section H: Sound Control

Describes acceptable noise levels in schools. The section addresses portables, new construction, building and mechanical codes, as well as industrial arts areas.

Section I: Lighting

Sets forth regulations governing minimum light intensities in general instruction areas, classrooms, libraries, laboratories, kitchens, corridors, auditoriums, gymnasiums, locker rooms, and other areas of the school. Other issues such as shadows, glare, task lighting, and excessive brightness are also covered.

Section J: Food Safety in Classrooms

Section J has been rewritten to focus on classroom food safety to address frequently asked questions and issues seen in schools. The 2003 section focused on permitted school kitchens and was determined unnecessary in the Guide.

Section K: Science Classrooms and Laboratories

Contains basic safety provisions that are consistent with DOH, OSPI, L&I, the Washington Science Teachers' Association (WSTA), and Prudent Practices in the Laboratory (PP).

Section L: Career & Technical Education

Includes safety and health items for Career and Technical Education (CTE) classes.

Section M: Bloodborne Pathogens & Exposure Control Plan

Includes guidance from L&I, OSPI, and DOH on prevention and response.

Section N: Playgrounds

Addresses safety issues in playground design and operation based on the U.S. Consumer Product Safety Commission (CPSC) *Handbook for Public Playgrounds* and the American Society for Testing and Materials (ASTM) voluntary standards for public playgrounds.

Section O: Animals in Classrooms

Addresses live animals and was written with input from the DOH Public Health Veterinarian. In addition to this section, Appendix E provides information on specific issues related to the proper handling of animals in classrooms.

Section Q: Pesticide Use in Schools

References the Washington State Department of Agriculture (WSDA) rules for schools and best practices to prevent exposure.

Section R: Visual and Performing Arts Education

Addresses health and safety issues in arts, music, and theater, including chemical exposures from various mediums and set construction.

Section S: Athletics

Addresses health and safety issues in athletics, including infection control, safety equipment, and rules to be aware of.

Plan Review

The "Plan Review" column indicates practices that are important during design, construction, and renovation.

Plan reviewers may use those portions of the Guide that apply to their specific responsibilities. For example, health jurisdiction plan reviewers are not expected to review plans for a fire alarm system. The health jurisdiction reviewer should see that other building officials have reviewed and approved items under their purview.

Appendices

The Guide contains appendices on inspection protocols, who's who in school environmental health and safety, questions and answers on school health and safety, and further guidance on animals in schools. The core update team and the many partners who provided input for the three editions are gratefully acknowledged.

Building Code References

References to building codes in the Guide are to the Washington state adoption (Chapter 51 WAC) of the 2021 editions of the model codes, effective March 15, 2024. Current building codes are for new construction and certain remodels. They are not retroactive. Each item is considered common sense environmental health and safety. If there is disagreement on the applicability of an item in an existing building, building officials can be consulted to determine when the requirement came into effect. For example, Washington state has required approximately 15 cfm/person outside air in classrooms since 1991.

Washington state building code adoptions referenced in the Guide:

- WAC 51-11C: 2021 International Energy Conservation Code, Commercial
- WAC 51-50: 2021 International Building Code
- WAC 51-52: 2021 International Mechanical Code (includes the 2021 International Fuel Gas Code)
- WAC 51-54A: 2021 International Fire Code
- WAC 51-56: 2021 Uniform Plumbing Code
- National Electrical Code (NFPA 70). See the Department of Labor and Industries (L&I) for information on the adoption and amendment of the National Electrical Code. Visit the National Fire Protection Association (NFPA) website for read-only access to the NFPA codes and standards adopted by L&I in Chapter 296-46B-010 WAC.

For ease of reference in the Guide, the Washington Building Codes - ICC Digital Codes, International Code Council free online code site is used where Washington state amendments are incorporated into the International Codes.

This site can be used for the 2021 Uniform Plumbing Code (IAPMO) in conjunction with Chapter 51-56 WAC.

Section A: General Procedures

References

2021 Washington State Building Code, International Code Council
2021 Washington State Fire Code International Code Council
Chapter 110-300 WAC: Foundational Quality Standards for Early Learning Programs
Chapter 110-301 WAC: Foundational Quality Standards for School Age Programs
Chapter 246-366-040 WAC: Plan review and inspection of schools
Early Childhood Education and Assistance Programs, Washington State Department of Children, Youth, and Families
Head Start Program Performance Standards, Early Childhood Learning & Knowledge Center, Health and Human Services

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
A 001	The Local Health officer shall make periodic inspections of each existing school within their jurisdiction, and forward to the local board of education and the administrator of the inspected school a copy of his findings together with any required changes and recommendations. A health and safety pre-inspection interview should be conducted with the school official for routine inspections. Procedures relating to health jurisdiction inspections of schools should be in compliance with the rule. See Appendix B for guidance.	246-366-2b	K12HSG Appendix B	
A 002	General School Data: Review building age, type, use of space, square footage; names of key personnel on site; building floor and site plans as appropriate (e.g.: fire exit routes and/or directional maps which are often given to parents at "open house" events).		OSPI and DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
A 003	Demographics: Review enrollment numbers, grade span, etc. (approximate numbers are sufficient).		OSPI and DOH	
A 004	Safety and Health Data: Review general and/or summarized health and safety information and/or injury reports which may be useful in assessing health or safety trends or problems within the school.		OSPI and DOH	
A 005	History: Review previous local health jurisdiction reports, safety committee reports, inspections, follow-ups, and complaints (if any) and their disposition or other actions taken by the school in response.		OSPI and DOH	
A 006	Planning: Information related to planned future site improvements, additions, remodels, classroom change of use or curriculum, playgrounds, sport fields, etc., should be shared with the health official prior to the inspection.		OSPI and DOH	
A 007	Recent inspection reports from other agencies may be reviewed by the health officer if provided by the school administrator.		K12HSG Appendix B	
A 008	When building code requirements are in question, the local Building Official should be consulted.	51-50/IBC 104.1		X
A 009	When fire code requirements are in question the local Fire Marshal or Fire Chief should be consulted. If no local fire official is available, then the district should consult the State Fire Marshal.	51-54A/IFC 104.1		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
A 010	When childcare, preschool, ECEAP, Head Start, or other similar programs are located in K-12 schools, applicable DCYF and OSPI regulations on safety and health should be consulted. DOH and some local health jurisdictions have staff available to consult on issues. When different standards are in conflict, the more protective of the standards should be followed.	110-300 110-301 ECEAP Performance Standards Head Start Performance Standards		X

Section B: Building Operation and Maintenance

References

2021 Washington State Building Code, International Code Council, Appendix F Rodentproofing
Chapter 246-366-080 WAC: State Board of Health Rule for Primary and Secondary Schools, Buildings
Chapter 296-800 WAC: Safety and Health Core Rules
Pest Prevention by Design Guidelines, San Francisco Environment Department, Buildings; Landscape
School Indoor Air Quality Best Management Practices Manual, DOH (PDF)

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
B 001	Buildings shall be kept clean and in good repair.	246-366-050(1) 296-800-220		
B 002	Ceilings in instructional areas shall have a minimum clear vertical distance of eight feet from finished floor to finished ceiling.	246-366-050(2)		X
B 003	Any projections from the finished ceiling shall be not less than seven feet vertical distance from the finished floor, i.e., beams, lighting fixtures, sprinklers, pipe work.	246-366-050(2)		X
B 004	Stairways and steps shall have handrails and non-slip treads. The Washington State adoption of the International Building Code and Labor & Industries Core Safety Rules also have rules in these areas.	246-366-050(3) 296-800-250 51-50/IBC Ch 10		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
B 005	Floors shall have an easily cleanable surface. Carpet is acceptable in appropriate locations. Refer to the DOH School Indoor Air Quality Best Management Practices Manual (IAQBMPM) for more information on flooring.	246-366-050(4)	DOH IAQBMPM	X
B 006	All buildings and premises shall be free of insects, rodents, and conditions which attract, provide harborage, and promote their propagation. (See Pesticide Use in Schools Section Q)	246-366-050(5) 296-800-22020		X
B 006a	Pest proofing resources: IBC Appendix F Rodentproofing Pest Prevention by Design Guidelines for designing pests out of structures. Pest Prevention by Design - Landscapes: Authoritative guidelines for designing out pests.			X
B 007	All hazardous substances and chemicals (e.g., cleaning and disinfecting products) shall be easily identified (e.g., labeled), and used with caution. They must be stored in such a manner as to prevent unauthorized use and possible contamination of food and drink.	246-366-050(6) 296-800-11040		X
B 008	There shall be sufficient, easily accessible, well-lighted, heated, and ventilated space provided for the storage of outdoor clothing, play equipment, and instructional equipment.	246-366-050(7)		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
B 009	School buildings shall be provided with windows sufficient in number, size, and location to permit students to see to the outside. No student shall occupy an instructional area without windows for more than 50 percent of the school day.	246-366-050(8)		X
B 010	Exterior sun control shall be provided to exclude direct sunlight from window areas and skylights in instructional areas, assembly, and meeting rooms during at least 80 percent of normal school hours. Sun control is not required for sun angles less than 42 degrees, nor if air conditioning is provided, nor if Low E glass is installed.	246-366-050(9)		X

Section C: General Safety

References

40 CFR §763.92, Subpart E, 2011 (PDF): Asbestos-Containing Materials in Schools
2021 Washington State Building Code, International Code Council
2021 Washington State Fire Code, International Code Council
Active Transportation Programs Design Guide, Washington State Department of Transportation (PDF)
Asbestos, DOH
Asbestos and School Buildings, U.S. EPA
Chapter 296-24 WAC: General Safety and Health Standards
Chapter 365-230 WAC: Accreditation of Lead-Based Paint Training Programs and the Certification of Firms and Individuals Conducting Lead-Based paint Activities and Renovation
Chapter 246-366 WAC: State Board of Health Rule for Primary and Secondary Schools
Chapter 296-62-077 WAC: Asbestos, Tremolite, Anthophyllite, and Actinolite
Chapter 296-800 WAC: Safety and Health Core Rules
Chapter 296-806 WAC: Machine Safety
Chapter 296-880 WAC: Unified Safety Standards for Fall Protection
Chapter 296-901 WAC: Globally Harmonized System for Hazard Communication
Chapter 392-151-025 WAC: Route Plans
Dangerous Waste Basics, Washington State Department of Ecology
Design Guidelines, Crime Prevention Through Environmental Design
Emergency Resources, Equipment and Supplies List for Schools, National Association of School Nurses, NASN (PDF)
Guidelines for Medication Administration in Schools, OSPI (PDF)
Health Suite Assessment Tool, Government of the District of Columbia (PDF)
Idle-Free Schools Toolkit for a Healthy School Environment, U.S. EPA
Improve Your School Arrival and Departure Procedures: Toolkit for School Safety Committees, Feet First (PDF)
Lead Abatement Program: Training and Certification Program for Lead-based Paint Activities (TSCA sections 402/404), U.S. EPA
Lead Renovation, Repair and Painting Program, U.S. EPA
Opioid Related Overdose Training in Schools, OSPI (PDF)
RCW 28A.210.370: Students with asthma
RCW 28A.210.383: Epinephrine autoinjectors (EPI pens)—School supply—Use
RCW 28A.210.395: Opioid overdose reversal medication—Policy guidelines and treatment requirements—Grant program
RCW 28A.320.125: Safe school plans—Requirements—Duties of school districts and schools—Drills—Rules—First responder agencies
Reducing the Risks of Nonstructural Earthquake Damage – A Practical Guide, E-74, Federal Emergency Management Agency (PDF)
Safe Routes to School Guide: Student Drop--off and Pick-up, National Center for Safe Routes to School (PDF)
Safe Routes to School Program, Washington State Department of Transportation
School Safety Center, OSPI

Standard Specification for Indoor Wall/Feature Padding (ASTM F2440-18)
U.S. CPSC Safety Alert: Teachers Should Not Let Children Move or Play Near TV or Audiovisual Carts (PDF)
Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 000a	All schools shall follow the Safe Schools requirements, including for emergency and disaster preparedness. Guidance and resources are on the OSPI School Safety Center website.	RCW 28A.320.125		
C 001	Safety glass shall be installed in all doors, display cases, and other large glass areas as required by the State adoption of the International Building Code (IBC). IBC 2406 Safety Glazing. IBC 2407 Glass in Handrails and Guards.	51-50/IBC Ch 24		**X**
C 002	Safe vehicle drop-off and pick-up locations are required for student arrival and departure.		OSPI & DOH	**X**
C 002a	Post No-idle Zone signs in the student pick-up/ drop-off areas.		EPA OSPI & DOH	
C 003	All custodial maintenance supplies shall be labeled as to specific contents and be stored in secure areas inaccessible to students. Safety Data Sheets (SDS) are required to be kept on site and readily available.	246-366-050(6) 296-901		**X**
C 004	Custodial closets, boiler rooms, and other areas where hazardous or poisonous compounds are stored must be inaccessible to students.	246-366-050		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 005	Flammable liquids in excess of ten gallons total shall be stored in approved flammable storage cabinets as required by state fire code (IFC). Consult with your local fire marshal for specifics on storage of flammables.	51-54A/IFC 5704.3.4.4 296-24-33009		X
C 006	First aid kits shall be provided and restocked as needed. The location should be easily identified to students and staff.	296-800-15020	NASN	X
C 006a	NOTE: The size and contents of first aid kits should be assessed at each individual school. The number of children should be considered as well as the number of staff, to determine how many kits are needed. School administrators and local health officials should jointly evaluate the first aid kits and the locations.		OSPI and DOH NASN	
C 007	First aid supplies other than those in first aid kits shall be properly stored and organized in cabinets or drawers and labeled as to their contents.		OSPI and DOH NASN	
C 008	Cots or sick beds, when provided, shall have non-absorbent surfaces that are easily sanitized. Pillow covers and bed sheets shall be laundered or replaced between uses. Disposable bed sheets and pillowcases are recommended. (See Section M – Bloodborne Pathogens & Exposure Control Plan)		OSPI and DOH NASN	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 009	Medication shall be stored in a locked storage area. Unauthorized access by students or other persons should be prevented. An exception will be made for emergency/rescue medications which must be readily accessible. School districts must require that backup medication, if provided by a student's parent or guardian, be kept at a student's school in a location to which the student has immediate access in the event of an emergency.	RCW 28A.210.370, 383, 395(2bii)	OSPI Guidelines for Medication Administration in Schools Opioid Related Overdose Training in Schools	X
C 009a	NOTE: Disposal of unused medication and vape pens – follow Local Hazardous Waste program and Ecology Dangerous Waste rules.		Department of Ecology (ECY)	
C 010	Radiators and steam and hot water pipes shall be protected or shielded in hallways, shower areas, auditoriums, and all other student traffic areas to prevent accidental burns.	296-800		X
C 011	Paper cutters shall have finger guards and lock down safety latches. Repair or replace all paper cutters that have been modified or broken. Blades shall be fastened down when not in use.	296-806-20030	ANSI	
C 012	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. (Arts-R 017)	296-880	OSPI and DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 013	Theater and other performing arts areas must meet L&I rules as well as Building and Fire Code requirements with regard to catwalks, rigging, pits, curtains, and storage areas. Make sure exits are not blocked, that mezzanines have appropriate safety rails, and that areas used for storage can support the weight of items. (Arts-R 018)	296-800 51-50/IBC 410		**X**
C 014	Coat hooks should be designed, located or protected so that they do not create a hazard to students.		OSPI and DOH	**X**
C 015	Scissors without sharp points (safety scissors) are recommended for student use in grades K-3.		OSPI and DOH	
C 016	Audiovisual equipment (especially TV's) and other movable heavy items which could fall from carts or high shelves should be secured in a way that prevents the equipment from coming loose from the cart or shelf if the equipment or cart tips over or there is an earthquake. Do not let children move or play near top-heavy carts.		FEMA CPSC	
C 017	Lockers and bookshelves over 4 feet high should be secured to prevent tipping. If bookcases are stacked vertically, they should be secured together and secured to the wall.		FEMA E-74 6.5	**X**
C 018	Walls, doors, and posts behind basketball backboards should be padded and free of obstruction where it is possible for players to collide with them. Pads should comply with ASTM F 2440 and be sufficient in size and depth to mitigate skull and spinal cord injuries. Volleyball posts and other obstacles should also be padded. (See Athletics S 006).		OSPI and DOH ASTM F 2440 NFHS	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 019	Protective padding in gyms should be installed no more than 4 inches from the floor and be 6 feet high. (See Athletics S 006).		OSPI and DOH NCAA	X
C 020	Patients in the school health or nurse's room should be visible to office staff (or another person) at all times.		OSPI and DOH NASN	X
C 021	Electrical receptacles shall be properly grounded. Ground fault interrupter (GFI) devices shall be provided on all electrical receptacles within six (6) feet of sinks and other grounding sources. There must be enough outlets to minimize the use of extension cords.	296-24-957 NEC 210-8(b)		X
C 022	All electrical panels, devices and connections shall be labeled and maintained in a safe condition. A clear and unobstructed means of access with a minimum width of 30 inches and a minimum height of 78 inches shall be maintained from the operating face of an electrical panel board. (L 013)	NEC 110.26 51-54A IFC 603.4 296-800-28027		X
C 023	Any renovation, repair, or painting (RRP) project in a pre-1978 building can easily create dangerous lead dust. EPA requires that RRP projects that disturb lead-based paint in childcare facilities, and classrooms with students under 6 years of age, built before 1978, be performed by lead-safe certified contractors. Even if not required, it is recommended that precautions be followed to reduce dust exposure.	40 CFR Part 745 TSCA 402/404 365-230		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C 024	All Local Education Agencies (LEA) (i.e., school district) owned facilities must comply with the federal Asbestos Hazard Emergency Response Act (AHERA.) The Asbestos-Containing Materials in Schools Rule requires local educational agencies to inspect their school buildings for asbestos-containing building material, prepare asbestos management plans and perform asbestos response actions to prevent or reduce asbestos hazards.	40 CFR 763 Subpart E		X
C 025	During all asbestos abatement projects, L&I regulations require "Good Faith" surveys, worker certification, communication of hazards to employees, personal protective equipment, housekeeping, medical surveillance, record keeping and exposure assessment.	296-62-077		X
C 026	The school district must complete "Walk-Route Plans" for each elementary school that has students who walk to and from school. The "Active Transportation Programs Design Guide" can be downloaded at the WSDOT website above.	392-151-025		X
C027	Sensory classrooms should be designed with consultation from the local health district. Playground equipment designed for outdoor use should not be used in indoor environments due to the inability to meet safety requirements.	246-366-040		X
C028	NOTE on Isolation rooms: Consult with OSPI and risk managers. Consider the need for safety and cleaning. Cleanable padding on all sides and a window is recommended. There needs to be lighting and ventilation.		OSPI & DOH	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
C029	There should be no tripping hazards in schools from items such as electrical cords, loose tile flooring or wrinkled carpet flooring.	296-800-11005		
C 030	All emergency exit routes must be kept clear and unobstructed by items or materials and allow unobstructed access to exit doors.	296-800-310 296-800-31025		
C 031	If extension cords are used in schools, the use must comply with L&I rules.	296-800-28030		
C 032	School design professionals should employ Crime Prevention Through Environmental Design (CPTED) principles when designing schools. (From former P 011.)		CPTED WSSP IEO1.8	**X**
C 033	Staff shall (and students should) follow L&I requirements for ladders, portable and fixed, to prevent injuries and death associated with the hazards of using ladders. Portable ladders shall be inspected, maintained, used, stored, and transported properly.	296-876-15005		

Section D: Plumbing, Water Supply, and Fixtures

References

2021 Washington State Building Code, International Code Counci)
Chapter 51-56 WAC: State Building Code Adoption and Amendment of the 2021 Edition of the Uniform Plumbing Code (use with 2021 Uniform Plumbing Code, UPC, International Association of Plumbing and Mechanical Officials)
Chapter 51-56-0600 WAC: Chapter 6—Water supply and distribution
Chapter 173-219 WAC: Reclaimed Water
Chapter 246-215-05210 WAC: Design, construction and installation—Handwashing facility, installation (FDA Food Code 5-202.12)
Chapter 246-290 WAC: Group A Public Water Supplies
Chapter 246-290-490 WAC: Cross-connection control
Chapter 246-366-060 WAC: Plumbing, water supply, and fixtures
Chapter 296-800 WAC: Department of Labor and Industries Safety and Health Core Rules
Cross-Connection Control Manual, February 2003, U.S. EPA
Drinking Water Systems, Washington DOH Office of Drinking Water (ODW)

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
D 001	Plumbing shall be sized, installed, and maintained in accordance with the state building (IBC) and plumbing (UPC) codes. Local code requirements shall prevail when requirements are more stringent or in excess of the state building codes.	246-366-060 (1)		**X**
D 002	The water supply system for a school shall be designed, constructed, maintained, and operated in accordance with WAC 246-290.	246-366-060 (2) 246-290		**X**
D 003	Water from drinking fountains shall clear the nozzle to allow safe and healthy drinking access.	UPC 415.0		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
D 004	Backflow Preventers: (i.e., anti-siphon devices, air-gap separations, reduced pressure devices, or double check valves) are required on water outlets with either threaded, serrated, or quick-coupling nozzles to prevent cross-contamination of the drinking water supply.	246-290-490 51-56/UPC 602, 603		**X**
D 005	Soap shall be provided for all hand washing facilities. Liquid or powdered soap in dispensers should be used.	246-366-060		**X**
D 006	Single-service towels shall be provided for all hand washing facilities. Common-use towels are prohibited. Warm air dryers may be used in place of single-service towels. Roller-type cloth towel dispensers are also acceptable. Although warm air dryers are allowed in WAC 246-366-060, they are not recommended. Warm air dryers can suspend and spread airborne infectious particles.	246-366-060		**X**
D 007	Toilet paper shall be available and located adjacent to each toilet fixture.	246-366-060		**X**
D 008	Toilet and hand washing facilities shall be accessible for use during school hours and scheduled events.	246-366-060		**X**
D 009	Hand washing facilities shall be provided with hot water at a maximum of 120 degrees Fahrenheit (F). If the hand washing water is delivered at only one temperature it should be 95-105°F for comfortable and thorough hand washing.	246-366-060		**X**
D 009a	Provide hand washing facilities in cafeterias and other appropriate areas to promote health and hygiene.		DOH	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
D 010	Hand operated, self-closing faucets, when installed, shall provide ten seconds of running water. Self-closing faucets are required by the plumbing code in new construction and when faucets are replaced. NOTE: The Food Code requires that kitchen handwashing sinks have hot water at least 100°F and that "a self-closing or metering faucet must provide a flow of water for at least fifteen seconds without the need to reactivate the faucet."	246-366-060(d) 51-56/UPC 0400 246-215-05210(3)		X
D 011	Showers with hot and cold water controls shall be provided for all physical education classes in grades 9-12. Hot water temperature shall be maintained above 100 degrees F (for sanitation) and below 120 degrees F (to prevent scalding.)	246-366-060(4)(a)		X
D 011a	Note: It is recommended that three to six student showers are provided in each student locker room, with at least one ADA compliant shower provided for each gender. For large gym classes or use by large athletic groups, increase the number of showers to provide one shower for every eight students.		DOH plan review guidance	X
D 012	Drying areas, when provided, shall be adjacent to showers and locker rooms and have impervious, non-skid (non-slip) floors. NOTE: Carpeting in wet areas retains moisture that can lead to mold formation and/or the spread of bacteria and fungus.	246-366-060		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
D 013	Walls in shower rooms shall be impervious up to the shower head height. Upper walls and ceilings in shower rooms shall have smooth and easily cleanable surfaces.	246-366-060		X
D 014	Locker rooms and dressing rooms shall have impervious, non-skid (non-slip) floors.	246-366-060		X
D 015	Walls in locker rooms and dressing rooms shall have smooth and easily cleanable surfaces.	246-366-060		X
D 016	School supplied towels shall be for individual use only and shall be laundered after each use.	246-366-060		X
D 017	Locker and dressing room floors should be equipped with drains to eliminate standing water.	246-366-060		X
D 018	NOTE: The DOH Office of Drinking Water website contains applicable rules on developing water supplies, cross-connections, approval of water systems and the State Drinking Water Revolving Fund (loans).		DOH ODW	X
D 018a	NOTE: Cross-connection guidance is available from DOH at the website above.		DOH ODW	X
D 019	The building code describes when separate plumbing facilities for each sex are required and specific exceptions, including for certain occupant loads and spaces, for all-gender facilities, and for rooms designed for use by both sexes (See WAC 51-50, Section 2902.2).	51-50/IBC 2902		X
D 020	Staff/adults should have separate restrooms from school children.		OSPI and DOH	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
D 021	Young children (preschool through kindergarten and/or 1st grade) should have restrooms attached to the classrooms, or close to their classes, for their exclusive use.		OSPI and DOH	**X**
D 022	No fountain/hand washing combination sinks should be available in restrooms.		OSPI and DOH	**X**
D 023	Emergency Showers and Emergency Eye Washes should have plumbed drains. Emergency showers should have a contained area sufficient to hold and direct the water when activated to the floor drain. Emergency Eye Wash basins should be directly connected to a drain pipe. This will facilitate the requirement for activating them weekly and prevent wet floors, flooding, slips, and falls.		OSPI and DOH 296-800-15030, 15035, 15040 296-800-22025, 22030	**X**
D 024	Acid neutralization tanks in science labs are not recommended. These tanks are prone to blockage and inadvertent disposal of acidic wastewater above discharge limits.		OSPI and DOH	**X**
D 025	Reclaimed water can be used for toilet flushing and landscape irrigation, but it must have separate purple pipes for distribution, they must be labeled, and must never be cross connected to drinking water pipes.	173-219-330 173-219-360		**X**

Section E: Sewage Disposal

References

Chapter 246-272A WAC: On-Site Sewage Systems
Chapter 246-272B WAC: Large On-Site Sewage Systems
Chapter 246-273 WAC: On-Site Sewage System Additives
Chapter 246-366-070 WAC: Sewage Disposal
Wastewater Management, Washington DOH

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
E 001	All sewage and wastewater from a school shall be drained to a sewage disposal system, which is approved by the jurisdictional agency having authority.	246-366-070		X
E 002	On-site sewage disposal systems shall be designed, constructed, and maintained in accordance with Washington State and local health jurisdiction on-site sewage system regulations. For assistance contact your local health jurisdiction, visit the DOH waste water website.	246-366-070 246-272A 246-272B 246-273		X
E 003	If a school is served by an on-site sewage disposal system, the school must maintain enrollment and staffing so as to not exceed the designed capacity of the system.	246-272A		
E 004	If sewage disposal system fails, school staff should prevent exposure to raw sewage by sectioning off any grounds with outdoor sewage spill, closing bathrooms with sewage backup, and following proper procedures for disinfection after indoor sewage spills. Contact the local health jurisdiction or sewer district (if applicable) for specific guidelines.		DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
E 005	Septic/sewage tanks that are no longer in use shall be abandoned in accordance with the Washington State on-site sewage system regulations.	246-272A-0300 246-272B-07500		X

Section F: Indoor Air Quality

References

2021 Washington State Energy Code – Commercial, Chapter 51-11C WAC, Washington State Building Code Council (PDF)
2021 Washington State Mechanical Code, International Code Council
Asthma and Schools, Washington DOH
Building Air Quality Guide: A Guide for Building Owners and Facility Managers, U.S. EPA
Chapter 246-366-080 WAC: Ventilation
DOSH Directive 10.10: Indoor Air Quality, Washington L&I DOSH (PDF)
Indoor Air Quality, Washington DOH
Indoor Air Quality Design Tools for Schools, U.S. EPA
Indoor Air Quality Tools for Schools Action Kit, U.S. EPA: EPA's *Tools for Schools* and *Design Tools for Schools* are user-friendly, problem-solving tools with concise action lists for school staff and others.
Managing Asthma at School, U.S. EPA
National Ambient Air Quality Standards (NAAQS), U.S. EPA
Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards, The National Academies Press
Reference Guide for Indoor Air Quality in Schools, U.S. EPA
School Indoor Air Quality Best Management Practices Manual (IAQBMPM); Washington DOH (PDF): Covers air quality issues related to new school siting, design, materials, construction scheduling, source control, air quality standards, dealing with specialty areas in shops and labs, and differences in ventilation systems.
School Environmental Health & Safety, Washington DOH: Air Quality
Taking Asthma Care to School, OSPI (PDF)
Ventilation Can Reduce Exposure to Respiratory Viruses in Indoor Spaces, CDC
Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI
WSU Energy Program
WSU Energy Program Publications and Tools: Public Facilities Support – Indoor Air Quality

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 001	Ventilation. (1) All rooms used by students or staff shall be kept reasonably free of all objectionable odor, excessive heat or condensation. (2) All sources producing air contaminants of public health importance shall be controlled by the provision and maintenance of local mechanical exhaust ventilation systems as approved by the health officer.	246-366-080		X
F 002	Incoming outside fresh-air levels meet zone outdoor airflow requirements and procedures listed in the state adoption of the IMC Chapter 4 Ventilation and Table 403.3.1.1 Required Outdoor Ventilation Air. NOTE: Since 1991 new construction/HVAC remodels have been required to meet ~15 cfm/person OA for classrooms, ~20 cfm/person OA for office, laboratories, shops, and art rooms.	51-52/IMC Chapter 4		X
F 002a	21 cfm/person outside air for classrooms is recommended for health and productivity.		World Health Organization DOH WSSP IEQ 3.0.2	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 003	NOTE: IMC Chapter 4 Ventilation and Table 403.3.1.1 Required Outdoor Ventilation Air Footnote g: Mechanical exhaust is required and recirculation from such spaces is prohibited. For occupancies other than science laboratories, where there is a wheel-type energy recovery ventilation (ERV) unit in the exhaust system design, the volume of air leaked from the exhaust airstream into the outdoor airstream within the ERV shall be less than 10 percent of the outdoor air volume. Recirculation of air that is contained completely within such spaces shall not be prohibited (see Section 403.2.1, Items 2 and 4). This applies to art classrooms, locker/dressing rooms, science laboratories, sports locker rooms, and wood/metal shops.	51-52/IMC 403.1.1		X
F 004	An on-demand mechanical exhaust system providing emergency air evacuation/purge is recommended for chemical areas such as photo darkrooms, storerooms, science labs (and other appropriate areas) with exhaust directly to the outside. "Locate room purge buttons at the exits in laboratories with chemical hoods. For most laboratory buildings, activating the room purge button shuts down or minimizes supply air while increasing exhaust ventilation. In the event of a chemical spill, activating the purge system will help ventilate the resulting chemical vapors more quickly."		Prudent Practices: 9.B.7 Safety Equipment and Utilities 9.C.6.4 Room Purge Systems	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 005	NOTE: Make-up air must be provided to science labs, art rooms, health rooms, restrooms, and career and technical areas at a rate slightly less than exhaust air flow to maintain negative pressure.			X
F 006	All building exhaust stacks shall be located to prevent the exhaust from reentering the building, i.e., away from occupied areas, openable doors and windows, and air intakes.	51-52/IMC 0501		X
F 007	Carbon dioxide levels in occupied areas should be monitored as needed. Levels above 800 parts per million (ppm) suggest the need to bring more fresh outdoor air into the space.		CDC EPA DOH	
F 008	The entire facility inhabited by students and employees shall be heated during school hours to maintain a minimum temperature of 65 degrees Fahrenheit except for gymnasiums which shall be maintained at a minimum temperature of 60 degrees Fahrenheit. Note: The code does not address maximum temperature in schools. Based on ASHRAE 55, 80 degrees F is the maximum recommended temperature for occupied instructional areas. Recommended winter temperatures of 68-72 deg F @ RH 40-60% Recommended summer temperatures of 75-78 deg F @ RH 40-60%	246-366-090 2021 WSEC 302.1	ASHRAE 55 WSSP IEQ 5.0	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 009	School buildings should have baseline profiles established for key IAQ indicators including temperature, humidity, carbon dioxide, carbon monoxide, air flow rate, radon, etc. This baseline data will assist in finding problems when IAQ complaints arise.		IAQBMPM EPA IAQ TfS	
F 010	Walk-off mats should be placed at all entrances to the building. They should be long and deep enough to thoroughly clean off moisture and debris from modern deep-tread footwear. Mats should be cleaned or replaced as needed.		IAQBMPM EPA IAQ TfS	**X**
F 011	It is recommended that all school vacuum cleaners include HEPA filtration to effectively capture dirt and dust particles (and other asthma triggers such as pollen) and avoid redistributing them into the air. Change HEPA filters as recommended by the manufacturer.		IAQBMPM EPA IAQ TfS	
F 012	All rooms used by students or staff shall be kept reasonably free of all objectionable odor, excessive heat, or condensation.	246-366-080 51-52/IMC-403.3.1.1		**X**
F 012a	Upholstered furniture such as couches and overstuffed chairs should be avoided in schools. They harbor dirt, dust, mites, and other common asthma triggers and are difficult to clean.		IAQBMPM EPA IAQ TfS	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 013	Ozone generators used for air cleaning may not be used in occupied areas. When used in emergency restoration, areas must be unoccupied and completely ventilated to remove the ozone and secondary contaminates prior to occupancy. Require monitoring to verify the ozone has dissipated below outside levels.		IAQBMPM EPA IAQ TfS EPA NAAQS	
F 014	NOTE: A building commissioning report on all newly constructed school buildings should document meeting minimum or higher outside air requirements where required and where elected to be included in the design. All schools should follow the minimum Commissioning and Operations recommendations in the WSSP.		2023 WSSP E 4.0 & 4.1 IEQ 3.0, 3.1, 3.2, 3.3, & 3.4	**X**
F 015	NOTE: The Environmental Protection Agency (EPA) Tools for Schools provides information to diagnose, mitigate and prevent IAQ problems.		EPA	**X**
F 016	NOTE: Schools should complete and follow a written IAQ management plan consistent with EPA Tools for Schools		EPA	**X**
F 017	NOTE: The Environmental Protection Agency first published the "IAQ, Tools for Schools, Action Kit" in September 1995. It is a guide for IAQ coordinators, health officers, teachers, administrators, and school support staff.		EPA	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
F 018	NOTE: DOH and OSPI published the "School IAQ Best Management Practices Manual" (IAQBMPM) in February 1995. The Guide should be consulted by school staff, designers, teachers, government agencies, and parents.		IAQBMPM	
F 019	NOTE: The EPA "IAQ Design Tools for Schools" guidance provides strategies for key school construction and renovation issues, including checklists and information on controlling pollutants and sources, HVAC, and moisture control.		EPA	
F 020	NOTE: The Department of Labor & Industries Division of Occupational Safety and Health (DOSH) Directive 10.10 establishes inspection procedures and compliance policies related to workplace IAQ hazards.		DOSH Directive 10.10	
F 021	NOTE: Washington State University's Energy Program has resources and publications on school Indoor Air Quality.		WSU Energy Program	
F 022	NOTE: EPA's website Managing Asthma at School provides valuable information relating to IAQ issues in schools.		EPA	**X**
F 022a	The DOH Asthma and Schools website has numerous resources, including state regulations and the AMES (Asthma Management in Educational Settings) manual *Taking Asthma Care to School*		DOH OSPI	

Section G: HVAC – Preventative Maintenance

References

2021 Washington State Energy Code – Commercial (WSEC), Washington State Building Code Council (PDF)

2021 Washington State Fire Code, International Code Council

2021 Washington State Fire Code: Section 9.15 Carbon Monoxide Detection, International Code Council

2021 Washington State Fire Code: Chapter 11 Construction Requirements for Existing Buildings, International Code Council

2021 Washington State Mechanical Code, International Code Council

ASHRAE Standards: Read-Only Versions

Chapter 246-366-080 WAC: Ventilation

Chapter 246-366-090 WAC: Heating

Chapter 246-366-100 WAC: Temperature Control

Clean Buildings Performance Standard: Operations and Maintenance Reporting Tool, Washington Department of Commerce (DOC)

Indoor Air Quality Tools for Schools: Preventive Maintenance Guidance Documents, U.S. EPA

Reference Guide for Indoor Air Quality in Schools, U.S. EPA

School Indoor Air Quality Best Management Practices Manual (IAQBMPM), Washington DOH (PDF), Chapter 8. Operating and Maintaining HVAC Systems

Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
G 001	All occupied areas of the facility shall be heated to maintain a minimum temperature of 65 degrees F except for gymnasiums which shall be a minimum of 60 degrees F. Note: The code does not address maximum temperature in schools. Based on ASHRAE 55 80 degrees F is the maximum recommended temperature for occupied instructional areas. Recommended winter temperatures of 68-72 deg F @ RH 40-60% Recommended summer temperatures of 75-78 deg F @ RH 40-60%	246-366-090 51-11C/WSEC C 302.1	ASHRAE 55 WSSP IEQ 5.0	X
G 002	Heating, ventilating, and/or air conditioning systems shall be equipped with automatic room temperature controls. Computerized systems that control each room from a remote location are acceptable.	246-366-100		X
G 003	Change all air intake filters on a regular basis as needed and more often during wildfire smoke events. Ensure tight fit around filters – no air bypasses. Date and initial the filters when changed.		IAQBMPM EPA	
G 004	Clean all heating and cooling coils using the method allowed by the equipment manufacturer.		IAQBMPM EPA	
G 005	Clean all condensate drain pans in all fan coils and large air handling units. Ensure pans are sloped to drain - avoid standing or stagnant pool of moisture.		IAQBMPM EPA	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
G 006	Clean all fan blades and fan housing. Check bearings. Check any excess vibration.		IAQBMPM EPA	
G 007	Inspect the damper linkage on all return and outside damper assemblies. Ensure that linkage and damper blades move freely, i.e., without restriction.		IAQBMPM EPA	
G 008	Clean all intake grilles, screens, and connecting ducts as needed. Be sure to wash these thoroughly. Ensure intake ducts are clean and do not allow water intrusion.		IAQBMPM EPA	
G 009	Adjust damper controls so that they always maintain minimum outside quantities--adjust as necessary.		IAQBMPM EPA	
G 010	Calibrate carbon dioxide sensors used for demand-controlled ventilation systems. Ensure these sensors are located correctly and controllers are functioning properly.		IAQBMPM EPA	
G 011	Ensure damper controls provide for proper building operating pressures (positive building pressure relative to outside is typical).		IAQBMPM EPA	**X**
G 012	Ensure those rooms and/or zones containing indoor air contaminants are maintained at lower pressure than surrounding room or zones and air exhausts to the outside to remove contaminants from restrooms, kitchens, science labs, art rooms, storerooms, custodial storerooms, etc. Ensure that exhaust fans are working effectively and are controlled for proper run times.	51-52/IMC 501, 502, 510		**X**
G 013	Ensure that HVAC exhaust is not re-entrained into building or incoming air handling systems.	51-52/IMC 501, 502		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
G 014	Check all flue vents for leakage. Ensure no re-entrainment of flue gases back into building or air handlers.	51-52/IMC		X
G 015	Ensure all outside air intakes are free of contaminates from sources such as garbage dumpsters, vehicle exhaust, shop and laboratory emissions, boiler, and generator exhaust, etc.	51-52/IMC		X
G 016	Air Handling Equipment a. Clean heating and cooling coils b. Clean condensate and emergency drain pans c. Test gas fired heat exchangers for any cracks. Use a smoke test or use an instrument that measures carbon monoxide.	51-52/IMC		X
G 017	Check combustion air and pressures in zones with atmospheric vented combustion equipment to ensure no spillage or back drafting. Clean combustion air intake screens.	51-52/IMC		X
G 018	Adjust economizer controls for proper operation. Make sure all dry bulb or enthalpy (thermodynamic) controls are operational. Check dampers and linkage for proper operation.		IAQBMPM EPA	X
G 019	Check boiler/furnace efficiency by measuring the carbon monoxide (CO) level in the exhaust stack emissions.		IAQBMPM EPA	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
G 020	Install and check carbon monoxide detectors/alarms in mechanical rooms and occupied zones for leakage/re-entrainment of carbon monoxide (CO) from operating equipment, e.g., boiler, furnace, water heater, generator, etc. Since the 2015 code adoption, carbon monoxide alarms are required in new classrooms unless there is no communicating opening between the fuel-burning appliance (or fireplace) or if there is a detector in an approved location between the fuel-burning appliance and the classroom or on the ceiling of the room containing the fuel-burning appliance.	51-54A/IFC-0915		**X**
G 021	HVAC system maintenance and operation should be managed using a checklist. See the Washington Department of Commerce Clean Buildings Performance Standard Operations and Maintenance Reporting Tool, the EPA IAQ TfS Preventative Maintenance guidance documents, and Washington DOH's IAQBMPM.		Washington DOC IAQBMPM EPA	**X**

Section H: Sound Control

References

Chapter 246-366-110 WAC: Sound Control
Chapter 246-366-030 WAC: Site Approval
Chapter 296-817 WAC: Hearing Loss Prevention (Noise)
Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
H 001	In new construction, the actual background noise at any student location within the classroom shall not exceed 45 decibels (dBA). The health officer shall determine compliance with this section when the ventilation system and the ventilation system's noise generating components, e.g., condenser, heat pump, etc. are in operation. Noise measurements shall be conducted for a duration of 30 seconds or more in an unoccupied room with mechanical ventilation systems operating.	246-366-110(2)		X
H 001a	Note: Per WAC 246-366-010, the definition of "new construction" includes new school buildings, additions to existing schools, renovation of existing schools, schools established in existing buildings previously used for other purposes, installation/alteration of any equipment or systems, and portables constructed after the regulation effective date.	246-366-010(4)		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
H 002	Existing portable classrooms built prior to 1/1/90 are exempt from noise level requirements when: (1) there have been no changes that would increase noise levels; (2) the portable was previously in use for general instruction; (3) the portable was previously owned by the district; and (4) the site is in compliance with WAC 246-366-030(3).	246-366-110(3)		**X**
H 003	The maximum ambient noise level in industrial arts, CTE (voc-ed) and trade classrooms constructed after 1/1/90 shall not exceed 65 dBA (Leq). Noise measurements shall be conducted for duration of 30 seconds or more in an unoccupied room with mechanical and ventilation systems operating, including fume hoods and dust collectors, at the highest expected output.	246-366-110(4)		**X**
H 004	The noise exposure for students in CTE (voc-ed) and music areas shall not exceed the noise levels in Table 1 of WAC 246-366-110. No person shall be exposed to sustained sound levels equal to or greater than 115 dBA for 1 second or longer.	246-366-110(5)		**X**
H 005	When noise exposure exceeds the levels in Table 1 of WAC 246-366-110, hearing protectors, e.g. ear plugs, muffs, etc., shall be provided to and used by the exposed students. Hearing protectors shall reduce student noise exposure to comply with the levels specified in Table 1.	246-366-110(5) Table 1 246-366-110 (6)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
H 006	The employer shall administer a continuing, effective hearing conservation program, as described in WAC 296-817 whenever employee noise exposure equals or exceeds an 8-hour Time-Weighted Average (TWA) sound level of 85 dBA measured on the A-scale weighting at slow-response, or a noise dose of fifty percent.	296-817		
H 007	The design of classrooms should take into account potential issues with speech interference levels when having more than one instructional class in any single area, e.g., open concept classrooms, connected classrooms with doors and operable partitions, multi-purpose areas, gymnasiums, music rooms, etc.		OSPI WSSP 2023 IEQ4.0 Acoustic Performance	X
H 007a	NOTE: Wireless microphone systems for classroom areas are available that provide teachers the ability to speak and be heard over large groups and avoid damage to their vocal cords. Wireless microphones do not negate the requirements for not exceeding 45 dBA background levels in classrooms.		OSPI WSSP 2023 IEQ4.2 Sound Amplification	X

Section I: Lighting

References

40 CFR 761.62: Disposal of PCB bulk product waste
40 CFR 761.125: Requirements for PCB spill cleanup
Chapter 173-303 WAC: Dangerous Waste Regulations
Chapter 246-366-120 WAC: Lighting
Cleaning Up a Broken CFL, U.S. EPA
Disposal of Fluorescent Light Ballasts, U.S. EPA
How to Dispose of Fluorescent Light Ballast Waste that Contains PCBs, ECY
Illuminating Engineering Society
Lights and Lamps, ECY
PCB-Containing Fluorescent Light Ballasts in School Buildings, U.S. EPA
PCB Light Replacement in Schools, ECY
PCB Program, Region 10, U.S. EPA
Practical Actions for Reducing Exposure to PCBs in Schools and Other Buildings, U.S. EPA
Seattle City Light
Ultraviolet Radiation Burns from High Intensity Metal Halide and Mercury Vapor Lighting Remain a Public Health Concern, FDA
Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI, Indoor Environmental Quality Daylighting and Views, Electric Lighting Quality

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 001	Minimum light intensity of 10 foot candles, from general, task, or natural lighting shall be provided in non-instructional areas including auditoriums, lunchrooms, assembly areas, toilet and store rooms, corridors, and stairs. Maintained light intensities shall be provided as measured 30 inches above the floor or on working or teaching surfaces. General, task, and/or natural lighting may be used to maintain the minimum lighting intensities.	246-366-120(1)		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 002	Minimum light intensity of 20 foot candles, from general, task, or natural lighting shall be provided in gymnasiums including main and auxiliary spaces, and shower and locker rooms. Maintained light intensities shall be provided as measured 30 inches above the floor or on working or teaching surfaces. General, task and/or natural lighting may be used to maintain the minimum lighting intensities.	246-366-120(1)		X
I 003	Minimum light intensity of 30 foot candles, from general, task, or natural lighting shall be provided in kitchen areas including food storage and preparation rooms. Maintained light intensities shall be provided as measured 30 inches above the floor or on working or teaching surfaces. General, task and/or natural lighting may be used to maintain the minimum lighting intensities. Note: The Food Code requires at least 50 foot candles (540 lux) at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor.	246-366-120(1) 246-215-06340(3)		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 004	Minimum light intensity of 30 foot candles, from general, task, or natural lighting shall be provided in instructional areas including study halls, lecture rooms, and libraries. In rooms with computers, or during audio-visual presentations, lighting may be reduced. Maintained light intensities shall be provided as measured 30 inches above the floor or on working or teaching surfaces. General, task and/or natural lighting may be used to maintain the minimum lighting intensities.	246-366-120(1)		**X**
I 004a	Use of light fixture covers to reduce classroom lighting below 30 foot candles is not allowed. Exceptions may be made for special needs classrooms except during reading time or when fine work is being done. Covers must meet fire code standards and be removable.	246-366-120(1)		
I 005	Minimum light intensity of 50 foot candles, from general, task or natural lighting shall be provided in special instructional areas where safety is of prime consideration or fine detail work is done including: sewing rooms, laboratories (including chemical storage areas), shops (Career and Technical Education), drafting rooms, and art and craft rooms. Maintained light intensities shall be provided as measured 30 inches above the floor or on working or teaching surfaces. General, task and/or natural lighting may be used to maintain the minimum lighting intensities.	246-366-120(1)		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 006	Any time a building is occupied, the path of egress shall be illuminated at an intensity of not less than 1 foot candle at the floor level. (Exception: 0.2 foot candle during a performance in a theater or auditorium if it will be automatically restored upon activation of the fire alarm system.) Emergency (exit) lighting may never be turned off.	51-50 IBC 1008.2.1		**X**
I 007	Excessive brightness and glare shall be controlled in instructional areas. Surface contrasts and glare shall not cause excessive eye accommodation or eye strain problems.	246-366-120(2)		**X**
I 008	Lighting shall be provided in a manner which minimizes shadows and other lighting deficiencies on work and teaching surfaces.	246-366-120(3)		**X**
I 008a	Task lighting should not pose a safety risk from cords being trip hazards or falling lamps.		OSPI and DOH	
I 009	NOTE: Resource: The Illuminating Engineering Society of America.			**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 010	Inspect all fluorescent light ballasts to identify those that may contain toxic polychlorinated biphenyls (PCBs). If lighting was installed prior to 1980, contains magnetic ballasts, and uses T12 (1.5 inch tubular) fluorescent lamps, it is highly likely to contain PCBs and should be removed and replaced even if still intact. Some PCB ballasts were left in fixtures and ceilings after lighting upgrades rewired around them and are still at risk of failing and leaking. Wear chemical resistant gloves and eye protection during inspection and stop work if leakage is noted (see I 011). For inspection guidance please see: PCB-Containing Fluorescent Light Ballasts in School Buildings (U.S. EPA).		EPA ECY	
I 011	If leaking magnetic ballasts are found that could contain PCBs, shut off power to the light, close the room off, and prevent occupancy. Call Region 10 EPA for guidance and next steps. To prevent exposure of school district staff, we recommend identifying a contractor with experience and certification in hazardous chemical management and abatement. If district staff who have hazardous waste training are available, they can follow guidance available at the EPA website for less complex clean ups.	40 CFR Part 761	EPA DOH ECY	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 012	Under the Federal Toxic Substances Control Act (TSCA), a leaking fluorescent light ballast containing PCB's must be packaged in a container approved for PCB disposal, marked "contains PCB's" and have an accompanying manifest. It must be shipped by an authorized PCB transporter to a licensed PCB disposal facility. We recommend managing ALL ballasts known or suspected to contain PCBs, whether intact or not, under TSCA labeling and manifesting regulations. This ensures the safe destruction of PCBs compared to a landfill. Management under TSCA will exclude the ballasts from your dangerous waste reporting to Washington Ecology.	TSCA - 40 CFR Part 761	ECY EPA	
I 013	Fluorescent lights, and some other types of lights and lamps, contain toxic chemicals that fall under the dangerous waste regulations. Follow guidance for cleanup and disposal from the Department of Ecology and EPA. For questions about designation of waste or compliance with the dangerous waste regulations, call your Department of Ecology regional office.	173-303-071	ECY EPA DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
I 014	Broken and unshielded high intensity metal halide and mercury vapor light bulbs cause eye and skin injuries, particularly in school gymnasiums. To prevent these incidents from recurring: replace open or wire grid fixtures with enclosed fixtures, or replace non-self-extinguishing “R” type high intensity metal halide and mercury vapor light bulbs used in open or wire grid fixtures with self-extinguishing “T” type light bulbs. Since 2005 the National Electrical Code requires high intensity metal halide and mercury vapor light bulbs installed in newly constructed or renovated indoor sports or all-purpose facilities be installed in fixtures that are fully enclosed by a lens of glass or plastic to protect the bulb from breakage.		FDA	**X**
I 014a	Note: Any facility that has interior metal halide or mercury vapor lighting should begin a plan to replace them with comparable LED lighting. Utility rebates are generally available statewide, the energy and maintenance savings are significant, and the light quality is much better.		Seattle City Light	
I 015	Note: 2023 Washington Sustainable Schools Protocol Indoor Environmental Quality Sections on Daylighting and Views and on Electric Lighting Quality offer more information on lighting for health and energy conservation.		2023 WSSP IEQ 1 and 2	

Section J: Food Safety in Classrooms

References

Chapter 246-215 WAC: Food Service
Chapter 246-217 WAC: Food Worker Cards
Chapter 246-366 WAC: Food Handling Section 130
Developing A School Food Safety Program Using HACCP, U.S. Department of Agriculture
Food Safety Resources, Institute of Child Nutrition
Food Safety Toolkits Washington DOH (more will be posted in the Fall 2024)
School Gardens and Farm-to-school Toolkits, Washington State Department of Agriculture, WSDA:
School Gardens and Farms, WSDA
Farm to School Toolkit, WSDA
Teen Worker Safety, L&I
Washington State Food Worker Manual

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
J 001	All school-sponsored food service activities, such as school cafeteria, concession stands, school stores, and similar food service activities shall be maintained and operated in accordance with Washington State Board of Health food regulations. Check with your local health jurisdiction for more information.	246-366-130 246-215 246-217		**X**
J 002	Milk coolers, food storage refrigerators, and ice machines shall be dedicated for food. Coolers and refrigerators shall be maintained at ≤ 41˚F. Thermometers are required for refrigerators used for food storage intended for student consumption.	246-215-04248		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
J 003	Career & Technical Education. Classes and groups such as FFA, FCCLA, FBLA, and DECA that prepare food using advanced processes (vacuum packaging, curing, acidification, sous vide, canning, meat processing, etc.) must be conducted under a specialized process approval from the local health jurisdiction. Groups preparing food for the public must operate under local health permitting and food worker card requirements. Follow all manufacturer's guidance and guarding requirements for using powered equipment such as mixers or slicers or other machines.	246-215-03535 296-125		
J 004	Classrooms. Food and meals served in classrooms must follow food safety guidelines such as temperature control, handwashing, cleaning of surfaces, and pest prevention practices. Classrooms with potential biological or chemical contaminants, such as laboratories, art rooms, and CTE, may not be used for food storage or as eating areas.	246-215-03375		
J 005	Food storage, preparation, and service in classrooms should follow food safety practices, such as health, hygiene, temperature control, cross-contamination prevention, and cleaning, as described in the Washington State Food Worker Manual. This includes the Vomit and Diarrhea Clean-up Plan.		Washington State Food Worker Manual DOH Food Safety Toolkits: Vomit and Diarrhea Clean-up Plan	
J 006	Staff and students may not handle food for others if they have symptoms of foodborne illness such as diarrhea or vomiting.	246-215-02200 – 02255	DOH Food Safety Toolkits: Employee Health	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
J 007	Always wash hands with soap and warm water for at least 20 seconds before serving food. Stocked handwashing sinks must be conveniently located for use. Handwashing facilities shall be provided with hot water at a maximum of 120°F. If the handwashing water is delivered at only one temperature, it should be 95-105°F for comfortable and thorough handwashing. Liquid or powdered soap in dispensers and disposable towels should be used. Common-use towels, except roller systems that provide each user with a clean towel, are prohibited. Although warm air dryers are allowed in WAC 246-366-060, they are not recommended. Warm air dryers can suspend and spread airborne infectious particles.	246-366-060 246-215-02305, 02310, 02315, 05210, 05255		
J 008	Avoid handling ready-to-eat foods with bare hands by using appropriate utensils or single-use gloves.	246-215-03300		
J 009	Allergen awareness. Staff, students, and volunteers preparing or serving food for others should be aware of food allergens.	246-215-02100 246-215-02115	DOH Food Safety Toolkits: Allergens	
J 010	Approved sources. Foods provided from non-school sources, such as for potlucks, cultural events, and holiday events should follow school-approved guidelines. Properly operated bake sale fundraisers may provide homemade baked goods. Contact your local health jurisdiction for guidance and applicable requirements.	246-215-03200		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
J 011	Ensure that outside food vendors (e.g., a local pizza supplier or any local restaurant) are permitted by and in good standing with the local health jurisdiction.	246-215-03200		
J 012	School gardens, local suppliers, and many traditional foods may provide wholesome food for use in schools.	246-215-03200	DOH Food Safety Toolkits: Local Food Sources WSDA School Garden & Farm-to-School Toolkits	
J 013	Fruits and vegetables must be properly washed under running water in a clean sink before use.	246-215-03318		
J 014	Undercooked or raw animal foods and unpasteurized juices may not be served. Packaged food items should be cooked according to package instructions if provided.	246-215-03400(4) 246-215-03800		
J 015	Student share tables or backpack brigades that re-serve unpackaged produce (such as whole oranges) or packaged TCS foods (such as cheese sticks) from one person to another must have an approved plan with the local health jurisdiction to ensure the produce is washed and the TCS food is refrigerated. Commercially packaged, shelf-stable foods or packaged TCS foods that haven't been served to another person do not need an additional approved plan for donation.	246-215-03372	DOH Food Safety Toolkits: Share Tables	
J 016	Toxic materials, including bleach, ammonia, pesticides, and cleaning supplies, shall not be stored with food items or where children have access. (See Pesticide Use in Schools Section Q).	246-366-050(6) 246-215-07200		

Section K: Science Classrooms and Laboratories

References

29 CFR 1910.1450: Occupational exposure to hazardous chemicals in laboratories
29 CFR 1910.1450 App A: National Research Council Recommendations Concerning Chemical Hygiene in Laboratories (Non-Mandatory), Occupational Safety and Health Administration, OSHA
29 CFR 1926.152: Flammable liquids, OSHA
2021 Washington State Building Code, International Code Council
2021 Washington State Fire Code, International Fire Code
2021 Washington State Fuel Gas Code, International Code Council
2021 Washington State Mechanical Code, International Code Council
Chapter 173-303 WAC: Dangerous Waste Regulations
Chapter 246-366 WAC: State Board of Health Rule for Primary and Secondary Schools
Chapter 296-24 WAC: General Safety and Health Standards
Part E: Hazardous Materials, Flammable Liquids, Spray Finishing
Part K: Compressed Gas and Compressed Gas Equipment
Chapter 296-800 WAC: L&I Safety and Health Core Rules
Chapter 296-824 WAC: Emergency Response
Chapter 296-828 WAC: Hazardous Chemicals in Laboratories
Chapter 296-856 WAC: Formaldehyde
Chapter 296-901 WAC: Globally Harmonized System for Hazard Communication
Employer's Guide to the Hazard Communication Rule, L&I, (PDF)
DOSH Directive 13.00 Emergency Washing Facilities, L&I DOSH (PDF)
Green Chemistry for K-12 Teaching, ECY
Prudent Practices (PP) in the Laboratory: Handling and Management of Chemical Hazards, The National Academies Press
RCW 28A.320.125: Safe school plans—Requirements—Duties of school districts and schools—Drills—Rules—First responder agencies
RCW 70.100: Eye Protection-Public and Private Educational Institutions
RCW 70A.230: Mercury
Reducing the Risks of Nonstructural Earthquake Damage – A Practical Guide, E-74, Federal Emergency Management Agency (FEMA) (PDF)
Safety and School Science Instruction, National Science Teaching Association
School Chemical Database (333-253), DOH, (XLSX)
School Chemistry Laboratory Safety Guide, CDC (PDF)
School Environmental Health & Safety, DOH, Career and Tech Ed, Arts, and Science
Toolkit for Safe Chemical Management in K-12 Schools, U.S. EPA

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 001	Science laboratories shall have an inventory list of all chemicals. This list must be updated periodically. (Recommendation is annually or more frequently.) The inventory shall include the name of the compound, the amount, and the date purchased, and date opened. A copy of the inventory shall be kept on file in a location away from the areas where the materials are stored. (L 037, R 020)	296-901-14010 RCW 28A.320.125 (3)(b) 51-54A/IFC 407	PP 2.D.4	
K 002	Science laboratories shall have a written Chemical Hygiene Plan (CHP) that is available to staff members. It shall be reviewed annually and updated when necessary. Also see K 024. (New science teachers shall review the CHP as part of their employee safety orientation; see K 052.)	296-828-20005 296-901-14010	PP 2.B	
K 003	Emergency eyewash and shower stations shall be provided as required by SBOH and L&I 's rules when the eyes or body may come in contact with corrosives, strong irritants, or (skin) toxic chemicals. Safety data sheets (SDSs) should be referenced to determine the hazards and requirements. Emergency fixtures shall be located within 50 feet or ten seconds walking distance from all lab science work stations, including in chemical preparation rooms. There shall be no obstacles in the pathway to the stations, including doors (unless there is panic hardware on the exposure side).	296-800-15030 246-366-140 ADA	ANSI Z 358.1 PP 7.F.2.5,	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 003a	NOTE: The L&I DOSH Directive (WRD) 13.00 Emergency Washing Facilities provides guidance on implementation of WAC 296-800-150 rules for emergency eye washes and showers and is a reference for K 003-K 007.			
K 004	Emergency showers must deliver water to cascade over the user's entire body at a minimum rate of 20 gallons (75 liters) at 30 psi per minute for 15 minutes or more with tepid water (60°F-100°F).	296-800-15030 ADA	ANSI Z 358.1 PP 7.F.2.5.1	**X**
K 005	Eye-wash stations and emergency showers shall be handicap accessible and operable "hands-free" so that the user can hold both eyes open. Hand-held squeeze bottles, some drench hoses, and many faucet-mounted devices (with 2 or more valves for activation) do not meet current L&I DOSH rules. Refer to DOSH Directive 13.00 for acceptable emergency washing equipment.	296-800-15030 ADA	ANSI Z 358.1 PP 7.F.2.5, 9.B.8	**X**
K 006	Eye wash stations shall provide 0.4 gallons (1.5 liters) per minute for 15 minutes or more at 30 psi with tepid water (60 °F-100 °F). In some areas with high water pressure, flow regulators may be required on the eye wash stations.	296-800-15030 ADA	ANSI Z 358.1 PP 7.F.2.5	**X**
K 007	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.	296-800-15035	PP 7.F.2.5	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 007a (D 023)	Emergency showers and emergency eye washes should have plumbed drains. Emergency showers should have a contained area sufficient to hold and direct the water when activated to the floor drain. Emergency eye wash basins should be directly connected to a drainpipe. This will facilitate the requirement for activating them weekly and prevent wet floors, flooding, slips, and falls. Shower curtains are recommended for privacy.		OSPI and DOH 296-800-15030, 15035, 15040 296-800-22025, 22030 PP 9.B.7	X
K 007b (D 024)	Acid neutralization tanks in science labs are not recommended. These tanks are prone to blockage and inadvertent disposal of acidic wastewater above discharge limits.		OSPI and DOH	X
K 008	In chemical laboratories, chemical storage rooms, photography darkrooms, and other spaces using chemical products or solvents, an increased rate of outdoor air ventilation is required by the IMC Chapter 4 Ventilation and Table 403.3.1.1 Required Outdoor Ventilation Air. See Indoor Air Quality Section F (~20 cfm/person). Air from science labs shall not be recirculated. See F 003.	51-52/IMC 403.3.1.1	PP 9.C	X
K 009	A building commissioning report on all newly constructed school buildings should document meeting minimum or higher outside air requirements where required and when elected to be included in the design. All schools should follow the minimum Commissioning and Operations recommendations in the WSSP. (See Indoor Air Quality Section F 014.)	51-52/IMC 403.3.1.1	PP 9.C WSSP	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 010	An on-demand mechanical exhaust system providing emergency air evacuation/purge is recommended for chemical areas such as photo darkrooms, storerooms, science labs (and other appropriate areas) with exhaust directly to the outside. Locate room purge buttons at the exits in laboratories with chemical hoods. For most laboratory buildings, activating the room purge button shuts down or minimizes supply air while increasing exhaust ventilation. In the event of a chemical spill, activating the purge system will help ventilate the resulting chemical vapors more quickly.		Prudent Practices 9.B.7 Safety Equipment and Utilities 9.C.6.4 Room Purge Systems NFPA 45	X
K 011	All chemical fumes and vapors shall vent directly to the outside without re-entrainment into the building or the building HVAC system. (See Indoor Air Quality Section F 003.)	51-52/IMC, Table 403.3.1.1 501, 502	PP 9.C NFPA 45	X
K 012	Make-up air must be provided to laboratories in amounts equal to exhaust air to maintain negative pressure. (See Indoor Air Quality Section F 005.)	51-52/IMC 501, 502	PP 9.C NFPA 45	X
K 013	Only Underwriters Laboratory (UL) approved heating devices are allowed in laboratories or storerooms.	51-54A/IFC 603	NFPA 70/NEC	X
K 014	Electrical receptacles shall be properly grounded. Ground fault interrupter (GFI) devices shall be provided on all electrical receptacles within six (6) feet of sinks and other grounding sources. This includes fume hoods with a cup sink and water supply.	296-800-280 51-54A/IFC 603	NFPA 70/NEC 200 NFPA 45 PP 7.C.1.2	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 015	All electrical equipment shall be properly grounded. Portable electrical equipment shall be double-insulated or provided with a UL-listed ground prong.	296-800-280	NFPA 70/NEC 200 NFPA 45 PP 7.C.1.1	**X**
K 016	Electrical extension cords shall be UL-listed, and the wire size shall be appropriate for the applied use. Use must comply with L&I rules. (C 031)	51-54A/IFC 603 296-800-28030	NFPA 70/NEC 200 NFPA 45 PP 7.C.1.1	
K 017	There shall be at least one fume hood for each laboratory where hazardous chemicals are used. If there is also a demonstration hood, it should be installed away from walls so students can view demonstrations from three sides.	296-366-080	NFPA 45 PP 9.C.2 29 CFR 1910.1450 App A	**X**
K 017a	If a demonstration hood is built into the wall between the chemical storage room and the classroom, the hood's sashes and cupboard doors must be lockable when not in use to prevent unauthorized access to the chemical stockroom or prep room.	246-366-140(1)	DOH & OSPI	**X**
K 018	Fume hoods in school buildings must comply with AHERA asbestos regulations.	AHERA		**X**
K 019	Chemicals should not be stored in fume hoods. Evaporation of dilute solutions containing non-volatile, non-hazardous waste such as metal salts in water in appropriately labeled open beakers provided with secondary containment is allowed.		PP 9.C.2 29 CFR 1910.1450 App A	
K 020	All fume hoods shall exhaust directly to the outside, away from all occupied areas and air intakes in order to prevent exhaust from reentering the building.	51-52/IMC 501, 502		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 021	Fume hood air velocity should be 80-125 linear feet per minute (lfm) and should be checked quarterly with a velocity meter. Written documentation of all tests should be maintained on site. The exhaust capture path should direct contaminants away from the user. With the sash raised to 12 inches, the air flow should measure at least 80 lfm. The maximum door sash height providing adequate ventilation and date last tested should be marked on the hood.		ANSI Z 9.5 PP 9.C.2 ASHRAE/ANSI 110 29 CFR 1910.1450 App A NFPA 45-7	**X**
K 022	Fume hood use is required when using known or suspected carcinogens, mutagens, teratogens, chemicals which are fast acting/highly toxic, listed as toxic via skin absorption or inhalation, or chemicals with a threshold limit value (TLV) or permissible exposure limit (PEL) of 50 ppm or less. This determination shall be based on information provided by safety data sheets.	296-828 296-07306	PP 9.C.1	**X**
K 023	All electrical devices used in the fume hood such as switches, lights, motors, etc., shall be explosion-proof.		PP 7.C.1.2 NEC 7	**X**
K 024	The chemical hygiene officer (e.g., science department chairperson or science teacher) shall develop and carry out a written chemical hygiene plan (CHP; see K 002). It should include an operation and maintenance program for laboratory fume hoods, emergency eye washes and showers, and other mechanical equipment in science laboratories. Consider setting up recurrent work requests with the maintenance department.	296-828-20005 296-901-14010	PP 7.C.1.2	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 025	Master gas shutoffs are required. Master electricity and water shutoffs are recommended. Directional signs should be provided to the shutoffs as well as other safety items in all laboratory areas. The dedicated shutoff valve shall be readily accessible, located within the laboratory space served, located adjacent to the egress door from the space, and shall be identified by approved signage stating, "Gas Shutoff."	51-52 / International Fuel Gas Code 409.6	PP 9.B.7	X
K 026	Invisible hazards (radiation, chemical, electrical, laser, and heat) should be posted with warning signs or symbols when present.		PP 29 CFR 1910.1450 App A ANSI Z136.1-2007	X
K 027	Food items (for human consumption) should not be permitted in chemical laboratories or storerooms (including lab refrigerators). No eating, drinking or gum chewing shall be allowed in labs to prevent poisoning through ingestion. All food items to be used for experiments and refrigerators used to store them shall be labeled "Not for human consumption."	29 CFR 1910.141(g)(2) & (4)	PP 6.C.2.3	
K 028	Chemical storerooms shall be lockable and inaccessible to unsupervised students and have self-closing doors. Doors shall have a one-hour fire rating per IFC (or greater if required by local fire code).	51-54/IFC Ch. 50 51-50/IBC 414.2.4	PP 5E,10, 2.D.2 29 CFR 1910.1450 App A	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 029	Chemical storerooms should be large enough for adequate and proper storage of chemicals. Storage areas should be maintained in a neat, organized, and clean manner with chemicals stored compatibly.		PP 5E, 2.D.2 29 CFR 1910.1450 App A	X
K 030	Chemical storerooms should have sturdy, well-supported shelves secured to the walls. All shelves should have "earthquake" (or "spill-prevention") lips on all shelf edges. Doors that close on cabinets do not replace the need for spill-containment "lips" on the front edge of shelves.		PP 5E, 2.D.2 FEMA E-74 6.5 29 CFR 1910.1450 App A	X
K 031	Chemical storerooms should have all hazardous chemicals stored at or below eye level (typically below 5' 0") with heavy objects stored on lower shelves below eye-level. Higher shelves may be used for other items, e.g., light-weight glassware, equipment, paper goods, etc.		PP 2.D.2, 5E 29 CFR 1910.1450 App A	X
K 032	Chemical storage areas should be kept cool (between 55 and 80 degrees F) and dry (relative humidity between 30 and 60%). Chemicals may degrade, expand, and/or become more reactive with high heat.		Consult SDSs	X
K 033	Chemicals shall be stored according to their properties, in separated compatible storage groups; not alphabetically (i.e., flammables, reactives, corrosives, and toxins).	NFPA 45 8.3.4 51/54A/IFC Chapter 50	PP 2.D.2, 5E 29 CFR 1910.1450 App A	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 034	Chemicals should be organized and stored according to a recognizable, safe system (e.g., Flinn, Baker, Sargent-Welch, etc.) to separate incompatibles. Labels shall clearly denote at least the identity of the container's chemical contents, warnings about its health and physical hazards, and the date received.	296-901	PP 2.D.2, 5E	**X**
K 035	Chemicals marked only with teacher lesson codes (e.g., A, B, C, D), for student testing/analysis, require a supplemental form of identification that meets the labeling requirements. These preparations should not be stored long-term. Mix only enough for required use and dispose of as required.	296-901	PP Chapter 5	
K 036	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), acids, and bases shall each be stored separately. Flammable waste 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. (L 028a, R 011c)	296-24-33009 NFPA 45 8.3.4 51-54A IFC 5704.3.4.4, Ch 57 173-303-630	PP 5.E.5	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 037	A school may not purchase for use in a primary or secondary classroom bulk elemental mercury or chemical mercury compounds. As of January 1, 2006, all primary and secondary schools in the state must have removed and properly disposed of all bulk elemental mercury, chemical mercury, and bulk mercury compounds used as teaching aids in science classrooms, not including barometers. (Barometers are not recommended; see K 068.)	RCW 70A.230.040		
K 038	Schools should only store and use chemicals appropriate for their level of science instruction. The School Chemical Database, originally developed by the King County Local Hazardous Waste Management Program and the WSTA, and now maintained by the DOH SEHS program, lists science laboratory chemicals, their physical, health, and environmental hazard, the lowest grade level it should be used in, storage category, experiments where used, disposal method, and whether it should not be allowed at any grade level. “Ban candidate” chemicals should not be used in schools.	246-366-140	OSPI and DOH	
K 039	Chemicals should be purchased in the smallest commercially available container or in a quantity that will meet the school's needs for approximately two years, basically the smallest amount and lowest concentration for the desired reaction. All chemicals should be dated upon receipt into the lab or storage area and when opened.		PP 2D, Ch 5 29 CFR 1910.1450 App A	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 040	Chemicals should be dispensed to students in the smallest amount and lowest concentration necessary for the desired reaction. Green chemistry curriculum is recommended to reduce chemical hazards in the classroom and waste disposal costs. Refer to Department of Ecology guidance.		PP 2D, Ch 5 29 CFR 1910.1450 App A	
K 041	Separately store water-reactive compounds, e.g., elemental lithium, sodium, potassium, magnesium, and calcium. If availability of separated shelf space is limited, store them with dry metal elements like copper, iron, and zinc. Organic peroxide reagents are not appropriate in K-12 schools.		PP 5E 29 CFR 1910.1450 App A	
K 042	All acids should be stored in approved acid cabinets. Separate inorganic acids (hydrochloric, sulfuric, phosphoric, etc.) from organic acids such as acetic acid. Nitric acid needs to be separated from all other acids - the use of a plastic insert cube into the acid cabinet is recommended. Store concentrated acids in separate groups. Glacial acidic acid is flammable and belongs in a flammable cabinet. Non-metal cabinets are recommended to prevent corrosion of the cabinet by acid vapors. Recommend purchasing and using prediluted acid solutions in smaller containers instead of diluting the gallon size of very concentrated, fuming acids – many accidents happen here, both burns and inhalation.		PP 5E 29 CFR 1910.1450 App A	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 043	Laboratory-grade, flammable-rated refrigerators and freezers should be used to store sealed chemical containers of flammable liquids that require cool storage. Do not store food or beverages in the laboratory refrigerator. Non-explosion proof refrigerators or other electrical devices shall not be located in areas with vaporous or flammable chemicals.		29 CFR 1910.1450 App A PP 5E	X
K 044	Instructors shall wear personal protective equipment (PPE) when using corrosive, toxic, flammable, reactive, or irritating chemicals and during hazardous activities as required by L&I rules.	296-800-160	PP 7.F.1.3	
K 045	Eye protection, safety glasses, goggles, and face shields shall meet the requirements of the American National Standards Institute (ANSI Z.87.1). Students shall wear personal protective equipment (PPE) when using corrosive, toxic, flammable, reactive, or irritating chemicals and during hazardous activities.	RCW 70.100 296-800-160	PP Ch 6, 7.F.1.3 29 CFR 1910.1450 App A	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 046	A non-asbestos fire blanket should be provided, identified, readily available, and visible to students and staff. Fire blankets can be used to wrap a burn victim to douse flames as well as to cover a shock victim and to provide a privacy shield when treating a victim under a safety shower in the event of a chemical spill. NOTE: Laboratory personnel should be taught that fire blankets can be dangerous if used incorrectly. Wrapping a fire blanket around a person on fire can result in a chimney-like effect that intensifies, rather than extinguishes, the fire. Fire blankets should never be used on a person when they are standing.		PP 2.F.2	
K 047	Safety shields on the demonstration table should be used for demonstrations wherever the possibility of explosion exists.		PP 7.F.2.2	
K 048	Jewelry should not be worn if personal safety would be jeopardized.		DOH & OSPI	
K 049	Loose hair should be restrained so that personal safety is not jeopardized.		DOH & OSPI	
K 050	All laboratories shall have a written chemical spill prevention and cleanup plan. It can become part of the Chemical Hygiene Plan (CHP) or be separate. All laboratories shall have appropriately sized spill cleanup kits visibly marked and readily available. Store appropriate personal protective equipment (PPE) next to the spill kit. Select staff members shall be trained for spill cleanup and their names and contact information shall be visibly posted next to the spill kits.	296-824-200/300	29 CFR 1910.1450 App A PP 2.F.3,4, 6.C.10	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 051	Waste disposal shall be in accordance with Department of Ecology (ECY) regulations. No waste or old chemicals shall be poured down the drain or put in the solid waste without written approval from local sewer or solid waste authorities.	173-303	PP Ch 8	**X**
K 052	All staff working with hazardous laboratory chemicals shall receive in-depth training based on the requirements of WAC 296-828, section 20015, including information on the Chemical Hygiene Plan. Students should have safety training and knowledge checks appropriate to the hazards present.	296-901 296-828-20015	PP 1.D.1, 2.B, Ch 4 29 CFR 1910.1450 App A	
K 053	A telephone for reporting emergencies shall be located in or near the laboratory. Emergency telephone numbers shall be readily accessible. Staff shall be trained in emergency procedures.	RCW 28A.335.320 296-800-110	29 CFR 1910.1450 App A PP 3.D.2.1	**X**
K 054	Lab floor plans shall be kept in the school office. A listing of exits, chemicals, and storage places of chemicals shall be included for use by emergency responders. Exits shall be clearly marked and free of obstruction.	RCW 28A.320.125	29 CFR 1910.1450 App A	**X**
K 055	Fire extinguishers shall be provided (ABC type). Fire extinguishers shall be identified and readily accessible to staff and students. The instructor shall be trained in fire extinguisher use. Demonstration or hands-on training shall be provided during the lab safety orientation.	296-800-300	PP 2.F.2	**X**
K 056	A fire alarm system shall be provided. Alarm pull stations shall be identified and readily accessible to staff and students.	296-800-31070	PP 2.F.2	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 057	Fire retardant lab coats shall be used as required by L&I PPE rules when appropriate for a specific project or demonstration.	296-800-160	PP 6.C.2.6.2 29 CFR 1910.1450 App A	
K 058	Formaldehyde should not be in K-12 schools. Laboratories using formaldehyde solutions must comply with the OSHA Occupational Standard for Formaldehyde. Biology specimens stored in formaldehyde should be decanted and preserved in a formaldehyde-free alternative, e.g., Flinnsafe, Carosafe, propylene glycol, or alcohol solution. Formaldehyde disposal shall adhere to ECY Dangerous Waste regulations.	296-856 173-303	PP 11.C.1	
K 058a	Note: Specimens may contain up to 3.5% formaldehyde, even though they are stored in formaldehyde-free holding solutions. Formaldehyde is a gas; formalin is the diluted liquid form of it that's used in schools, typically at a 3.7% concentration. Dispose of specimens that lack information identifying the preservative and holding solutions. Schools should purchase formalin-free specimens if possible, or specimens stored in formalin-free holding solutions. Also see K 075.			
K 059	Biology specimens should be stored in sealed containers to prevent evaporation of liquid contents and resulting IAQ issues. Specimens preserved in hazardous or dangerous chemicals, e.g., alcohol, should be stored in locked cabinets.	OSHA 1926.152 NFPA 30	PP 5.E.1	
K 060	Glassware should be free of all cracks, chips, sharp edges, and other defects.		PP 4.E.9	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 061	Safety Data Sheets (SDSs) are maintained and readily available for all chemicals in the lab.	296-901 29 CFR 1910.1200	PP 4.B.2 29 CFR 1910.1450 App A	
K 062	A first aid kit shall be provided and adequately stocked in the lab area.	296-800-15020	PP 2.F.2	**X**
K 063	Containers of non-hazardous substances (e.g., distilled water) must be labeled to avoid confusion. (ALL CONTAINERS MUST BE LABELED REGARDLESS OF THE CONTENTS.)	296-901	PP 5D, 5E 29 CFR 1910.1450 App A	
K 064	Appropriate gloves, matched to the hazard, shall be provided, and worn when the potential for hand contact with chemicals exists.	296-800-16065	PP 6.C.2.6 29 CFR 1910.1450 App A	
K 065	Closed toe shoes shall be worn at all times in the laboratory. (No sandals or perforated shoes.)	296-800-16060	PP 6.C.2.6.2 29 CFR 1910.1450 App A	
K 066	A sink with soap and paper towels must be available in the lab for hand washing.	296-800-23025	PP 9.B.5.2, AppA.C.1.c	**X**
K 067	Electrical panel circuit breaker switches for the lab shall be accessible and the breakers labeled. A clear and unobstructed means of access with a minimum width of 30 inches and a minimum height of 78 inches shall be maintained from the operating face of an electrical panel board.	296-800-28051-54/IFC 604.3, NFPA 70 110.26		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 068	Mercury liquid, compounds, and apparatuses are banned from schools. The lone exception is one functional mercury barometer is allowed per school, though not recommended. All mercury, mercury compounds, and mercury containing apparatuses shall be disposed of in compliance with ECY regulations. The "Eco-Celli" barometer is a mercury-free barometer that will visually communicate the chemistry lesson of barometric pressure.	RCW 70A.230.040 173.303		
K 069	Ethidium Bromide is hazardous via skin contact or ingestion. Gloves and eye protection shall be worn when handling it. Only purchase in kits and when finished using it, dispose as toxic hazardous waste. Alternative chemicals should be used whenever possible.	173-303	DOH School Chemical Database	
K 070	Resource: CPSC/CDC/NIOSH School Chemistry Laboratory Safety Guide			
K 071	Resource: Toolkit for Safe Chemical Management in K-12 Schools (U.S. EPA)			
K 072	The DOH School Environmental Health and Safety Program has numerous resources on Science Lab safety and inspection training videos.			
K 073	Resource: The National Science Teachers Association			
K 074	Owl Pellets. Always obtain owl pellets for dissection from reliable supply sources that sterilize them. After dissection, children need to thoroughly wash their hands with warm water and soap, and surfaces used for dissection must be thoroughly cleaned and disinfected.		DOH & OSPI K12HSG Appendix E	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
K 075	Animal Dissection. Always obtain animals and animal parts for dissection from reliable supply sources. Specimens should not be preserved in formaldehyde. Animals found dead are not appropriate for classroom display or dissection. If a dead animal is brought to school, report it to your local health jurisdiction immediately and do not allow anyone else to touch it. Also see K 058-K 059.		DOH & OSPI K12HSG Appendix E	
K 076	Taxidermy. Preserved/stuffed animals are not to be handled by students. They are preserved with toxics, including arsenic and mercury. They are also potential allergens.		DOH & OSPI K12HSG Appendix E	

Section L: Career and Technology Education

References

29 CFR 1910.1450 -- Occupational exposure to hazardous chemicals in laboratories
29 CFR 1926.152: Flammable liquids, OSHA
2021 Washington State Fuel Gas Code, International Code Council
2021 Washington State Mechanical Code, International Code Council
2021 Washington State Building Code, International Code Council
2021 Washington State Fire Code, International Code Council
2021 Washington State Fire Code: Chapter 50 Hazardous Materials, International Code Council
Career & Technical Education (CTE), OSPI
Chapter 173-303 WAC: Dangerous Waste Regulations
Chapter 246-366 WAC: State Board of Health Rule for Primary and Secondary Schools
Chapter 296-24 WAC: General Safety and Health Standards
Part E: Hazardous Materials, Flammable Liquids, Flammable Liquids, Spray Finishing
Part K: Compressed Gas and Compressed Gas Equipment
Chapter 296-62 WAC: General Occupational Health Standards
Chapter 296-800 WAC: Safety and Health Core Rules
Chapter 296-803 WAC: LOCKOUT/TAGOUT (CONTROL OF HAZARDOUS ENERGY)
Chapter 296-806 WAC: Machine Safety
Chapter 296-807 WAC: Portable Power Tools
Chapter 296-856 WAC: Formaldehyde
Chapter 296-901 WAC: Globally Harmonized System for Hazard Communication
DOSH Directive 13.00 Emergency Washing Facilities (Washington L&I DOSH, PDF)
RCW 28A.320.125: Safe school plans—Requirements—Duties of school districts and schools—Drills—Rules—First responder agencies
RCW 70.100: Eye Protection – Public and Private Educational Institutions
Reducing the Risks of Nonstructural Earthquake Damage – A Practical Guide, E-74, Federal Emergency Management Agency (FEMA) (PDF)
Safety Guide for Career and Technical Education, 2002, CDC (PDF)
Employer's Guide to the Hazard Communication Rule, L&I (PDF)
Safer Metalworking Fluids, ECY (PDF)
Safety and Health Best Practices Manual: Metalworking Fluids, OSHA
School Environmental Health & Safety, DOH, Career and Tech Ed, Arts, and Science

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 001	Reference the most current edition of the "Safety Guide for Career and Technology Education" (CTE) published by OSPI in 2002. This manual provides instruction and checklists for vocational education curriculum areas. DOH's School Environmental Health & Safety Program website has shop safety videos.		OSPI and DOH	
L 002	Based on OSPI's Safety Guide for CTE and good safety practice, school shop teachers should pay close attention to students' personal protective equipment (PPE) needs. Student-oriented safety training in vocational and visual arts hazards should be given, tested, and documented.	296-800-140, 160	OSPI and DOH	
L 003	Floors shall be clean and kept free of oil and other slippery substances. Non-skid (non-slip) surfacing shall be used within the operator use zone of all stationary equipment. See OSPI's "Safety Guide for CTE."	296-800-220 296-806		X
L 004	Floors shall be free of obstacles so there are no slip, trip, or fall hazards. Hazard areas shall be plainly marked. In metal and wood shops, there should be at least two feet (or larger if required/recommended by the manufacturer) of clear work area around each piece of equipment. The safety zone should be marked. Projections shall be plainly marked.	296-800-220 296-806		X
L 005	All power tools shall be safe, properly labeled, and protected with belts, guards, and electrical connections following L&I requirements and manufacturer recommendations. All hand tools must be UL listed.	296-800-280 296-806 206-807		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 006	Machine guarding shall meet WAC 296-806 and 296-807. Safety guards must be properly adjusted and functional for safe machine operation.	296-806 296-807		X
L 007	Hand tools shall be properly maintained and kept in a safe condition.	296-800-110 296-807		
L 008	Safety stands (jack stands) shall be available and used correctly by students and staff.	296-800-110 296-807-170		
L 009	Shop safety rules should be displayed in plain view of room occupants.	296-800-110		
L 010	General operating instructions and safety reminder signs shall be posted on or near moving machinery and shop equipment.	296-800 296-806 296-807		
L 011	Unstable equipment (e.g., drill presses, band saws, etc.) shall be secured to the floor or a table/stand to prevent tipping or moving. Stand mounted equipment shall be fastened to the floor to prevent tipping.	296-806		
L 012	Materials (e.g., lumber, metal, etc.) shall be stored in a manner that will prevent personal injury. Proper storage shall be provided for metal stock as required by WISHA.	296-800-220		X
L 013	All electrical panels, devices and connections shall be labeled and maintained in a safe condition. A clear and unobstructed means of access with a minimum width of 30 inches and a minimum height of 78 inches shall be maintained from the operating face of an electrical panel board. (C 022)	296-800-28027 NEC 110.26 51-54A IFC 603.4		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 014	Hazardous and/or combustible waste shall not be allowed to accumulate. Such waste shall be removed from the shop area and properly disposed of as required by Department of Ecology regulations.	296-800-220 173-303		X
L 015	Waste oil storage and disposal shall comply with Dept. of Ecology regulations. Oil spilled around storage barrels shall be cleaned up immediately. Containers should be closed when not in use. Secondary containment, spill pads on barrels, and closing funnels are recommended for waste oil barrels.	296-800-220 173-303-515		
L 016	A non-asbestos fire blanket should be provided, identified, readily available, and visible to students and staff. Fire blankets can be used to wrap a burn victim to douse flames as well as to cover a shock victim and to provide a privacy shield when treating a victim under a safety shower in the event of a chemical spill. NOTE: Shop personnel should be taught that fire blankets can be dangerous if used incorrectly. Wrapping a fire blanket around a person on fire can result in a chimney-like effect that intensifies, rather than extinguishes, the fire. Fire blankets should never be used on a person when they are standing. (K 046)		OSPI and DOH	
L 017	Project storage shall be adequate and safe.	246-366-050(7)	OSPI and DOH	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 018	Emergency eye wash 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.) See K 003-007a and the L&I DOSH Directive 13.00 for more requirements for emergency eye washes. Emergency Eye washes should be in shops where dust and metals can get in eyes, regardless of chemical requirements. Chemicals used may also require an emergency shower.	296-800-150		**X**
L018a	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.	296-800-150		
L 019	All bench grinders shall have proper tool rests, no more than a 1/8th inch on the tool rest, 1/16th inch for the sparker rest, and eye safety shields. (L 005, L 006)	296-800-160 296-806		**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 020	Eye protection, safety glasses, goggles, and face shields shall meet the requirements of the American National Standards Institute (ANSI Z.87.1). Students shall wear personal protective equipment (PPE) when using corrosive, toxic, reactive, or irritating chemicals and during hazardous activities. (K 045)	296-800-160 RCW 70.100 296-24-70003 ANSI Z.87.1		
L 021	Mechanical ventilation shall be provided for all arc and gas welding/cutting tables to prevent welding vapors from traveling through the breathing zone.	246-366-080 296-24-700, 71503, 71505		X
L 022	Welding curtains or shields shall be provided, and kept in good condition, at booths and other welding areas.	296-24-Part I		X
L 023	Safety signs should be posted where needed, e.g., "turn on ventilation," “wear eye protection." L&I does not require signs, but schools should use them. Signs should be of uniform design, including wording, shape, and color.		OSPI and DOH	
L 024	Master gas shutoffs are required. Master electricity and water shutoffs are recommended. Directional signs should be provided to the shutoffs as well as other safety items in all shop areas. The dedicated shutoff valve shall be readily accessible, located within the laboratory space served, located adjacent to the egress door from the space and shall be identified by approved signage stating, "Gas Shutoff." See 296-800-280 for basic electrical rules. Teachers need to be able to shut down electrical equipment quickly in an emergency.	296-800-280 51-52 / IFGC 409.6	OSPI & DOH	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 025	Compressed gas cylinders shall be properly labeled, maintained, stored, and secured, with caps in place, to prevent damage to the cylinder valve. Cylinder restraining devices must be adequate to prevent tipping and/or 'rocketing'. In-use cylinders must be secured either to a hand-truck or permanent structure.	296-24-295		X
L 026	The gas welding/cutting area shall comply with Washington State Fire Code and L&I requirements. Eye protection shields shall be provided. Consult with your local Fire Department for required permits.	296-24 Part I Welding, Cutting, & Brazing 51-54A/IFC Ch 35		X
L 027	Approved protective equipment shall be installed in fuel-gas piping to prevent backflow of oxygen into the fuel-gas supply system, passage of a flash back into the fuel-gas supply system and/or excessive back pressure of oxygen in the fuel-gas supply system. The three functions of the protective equipment may (or may not) be combined in one device.	296-24-68201		
L028	All flammable liquids shall be stored in IFC and NFPA approved flammable storage cabinets with self-closing doors. Flammable waste must be disposed of in approved flammable waste containers. Cabinets shall be locked or located in a locked room when not in use. Flammable waste containers must be emptied daily. Flammables (red labels), acids, and bases (white labels), shall be stored separately. (K 036)	296-24-33009 51-54A/IFC 2403.4.3, 5704.3.4.4, Ch 57 173-303-630		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 028a	Flammable liquids in excess of ten gallons total shall be stored in approved flammable storage cabinets as required by the state fire code. Consult with your local fire marshal for specifics on storage of flammables. (C 005)	51-54A/IFC 5704.3.4.4 296-24-33009		X
L 029	All solvents for parts cleaning shall be stored in approved containers. Class 1A flammable liquids shall not be used. Fusible links on solvent tank lids shall be in place and shall operate as designed.	51-54A/IFC 5705.3.6.1 296-24-33009		X
L 030	Wood burning stoves should not be used in school buildings.	246-366-140		X
L 031	Flammable finish areas and paint spray rooms shall have approved ventilation, filters, lighting, storage cabinets, and separation from other rooms. Consult with your local Fire Department for required permits.	296-24-370 296-62-11019 51-54A/IFC Ch 24		X
L 032	Filters in the paint spray booth/room shall be changed or cleaned as required. NOTE: Spray booth construction requirements are in the IFC Chapter 24.	296-24-37003 51-54A/IFC 2404.3		
L 033	Only Class 1 electrical, explosion-proof lights, fan or other electrical devices shall be allowed in flammable finish areas.	296-24-370 51-54A/IFC 2404.3		X
L 034	Ventilation and exhaust systems shall be installed in all shop areas in compliance with DOH and L&I rules.	246-366-080 296-800 296-62-Part L 51-52/IMC Ch 4 & 5		X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 035	Sawdust collection systems shall be installed in wood shops as required by code. Signs are required to reinforce restriction of hot work in areas where dust can accumulate. Combustible dusts must not be allowed to accumulate, and combustible dusts must NOT be cleaned using compressed air.	296-800 296-62-13610 51-54A/IFC Ch 22/2203.4 NFPA 654, 664		X
L 036	The maximum ambient noise level in industrial arts, CTE (voc-ed), and trade classrooms constructed after 1/1/90 shall not exceed 65 dBA when all fume hoods and dust exhaust systems are operating. Testing shall be done when the room is unoccupied. (See Sound Control Section H).	246-366-110(4)		X
L 037	All chemicals, solvents, and hazardous substances shall be inventoried by the school. This list must be updated periodically. (Recommendation is annually or more frequently.) The inventory shall include the name of the compound, the amount, and the date purchased and the date opened. A copy of the inventory shall be kept on file in a location away from the areas where the materials are stored. (K 001, R 020)	296-901 RCW 28A.320.125 (3)(b) 51-54A/IFC 407		
L 038	A current safety data sheet (SDS) shall be maintained for all hazardous substances used in CTE programs and shall be available for review upon request.	296-901		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
L 039	In machine shops, no halogenated cutting fluids, adhesives or tapping oils should be used. Examples include perchloroethylene, trichloroethane and methylene chloride; all of which are suspected carcinogens. Halogenated organic compounds are designated as toxic persistent wastes. Metalworking fluids should be as non-irritating and non-sensitizing as possible. Avoid potentially carcinogenic components such as oils containing polycyclic aromatic hydrocarbons (PAHs), chlorinated paraffins, alkanolamines, nitrites, and formaldehyde release biocides.	173-303-100(6)	Employer's Guide to the Hazard Comm. Rule OSHA Metalworking Fluids: Safety and Health Best Practices Manual ECY Safer Metalworking Fluids	
L 040	Among the CTE clusters that may also fall under the Laboratory Safety Standard are 1) Plant Pathology, 2) Agronomy, 3) ARS scientists, 4) Biochemists, 5) Horticulture Specialists, 6) Forest Geneticists and 7) Veterinarians. Any laboratory work done within these programs must either be done in CTE labs that conform with section K or be done in a science lab if hazardous chemicals are being used.	29 CFR 1910.1450		
L 041	Automotive program shops should implement best practices to mitigate potential asbestos fiber exposure during brake or clutch component replacement tasks.	296-62-07747		
L 042	Energy control procedures shall be implemented to protect staff (and students) from the operation of out-of-service machines and equipment, and to protect employees servicing or maintaining machines and equipment from potentially hazardous energy.	296-803		

Section M: Bloodborne Pathogens and Exposure Control Plan

References

Chapter 296-823 WAC: Occupational Exposure to Bloodborne Pathogens
General Guidelines for Sports Hygiene, Skin Infections, and Communicable Diseases, National Federation of State High School Associations (NFHS)
Infectious Disease Control Guide for School Staff, DOH
Safe Cleaning and Disinfecting Guidance for Schools, DOH
School Environmental Health & Safety, DOH, Infection Prevention, Cleaning, and Disinfection

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
M 001	The school's written Exposure Control Plan (ECP) and the WISHA Bloodborne Pathogen (BBP) standard apply to employees, including student employees and students acting in the capacity of employees.	296-823-11010		
M 002	Many ECP and BBP provisions also apply to all students. WIAA follows the General Guidelines for Sports Hygiene, Skin Infections, and Communicable Disease for interscholastic activities. This applies school-wide with particular emphasis in the athletic department.	National Federation of High Schools WIAA		
M 003	The ECP shall include precautions to prevent injuries in handling needles and other sharps. Reporting procedures for needle stick and other sharps injuries and other potential exposures shall also be included.	296-823-14060 (sharps) 296-823-160 (Post-exposure)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
M 004	The ECP shall address proper precautions to be taken while cleaning blood and other body fluid spills as well as laundry practices involving risk of direct exposure to body fluids.	296-823-150 (PPE) 296-823-14065 (laundry)		
M 005	The ECP shall address disposal and/or decontamination of potentially contaminated items.	296-823-14055		
M 006	The ECP shall address training, responsibility, and record-keeping requirements and shall be accessible to employees. The ECP shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure.	296-823-12015 296-823-11010		
M 007	Hand washing facilities shall be readily accessible. Alcohol hand sanitizer shall be available when hand washing facilities are not available. Hands shall be washed with soap and water following glove removal and prior to intake of food or drink.	296-823-14030		
M 008	Protective gloves (e.g. nitrile or vinyl) and appropriate Personal Protective Equipment (PPE) shall be readily available and shall be used during exposure to potentially infectious materials. Disposable gloves shall not be reused.	296-823-150 (PPE) 296-823-15010 (gloves)		
M 009	Reusable utility gloves shall be inspected for defects and decontaminated after every potential exposure to body fluids. Gloves shall be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.	296-823-15010		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
M 010	A policy to assure prompt disinfection of contaminated surfaces and receptacles with a recommended disinfectant shall be in effect.	296-823-14055		
M 011	Wrestling, weightlifting, gymnastic equipment, and health room cots shall have an unbroken, non-absorbent surface that is easily cleanable. Small tears may be repaired but must result in a surface that can be cleaned and disinfected. All tears shall be repaired as soon as possible.	296-823-14055		
M 012	Containers for contaminated sharps shall be closable, puncture resistant, and leak proof on sides and bottom. Containers shall be labeled as a biohazard, easily accessible to users, and maintained upright for use.	296-823-14060		
M 013	The school or district shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharp's injury log shall be recorded and maintained in such a manner as to protect the confidentiality of the injured employee.	296-823-170		
M 014	Other regulated waste containers shall be closable, able to contain contents, leak proof, labeled as biohazard, closed prior to removal, and disposed of in accordance with regulations.	296-823-14060		
M 015	Gloves and other appropriate PPE shall be worn when handling contaminated laundry. Contaminated materials shall be bagged/contained at the location where used, in leak proof laundry bags or containers, and labeled appropriately.	296-823-14065		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
M 016	Laundry contaminated with blood or other potentially infectious material (OPIM) shall be handled as little as possible and with a minimum of agitation. Follow the guidance in the DOH Safe Cleaning and Disinfecting Guidance for Schools.	296-823-14065		
M 017	BBP training shall be provided to all potentially exposed employees before they complete a task with potential exposure and at least annually thereafter. Training shall also be provided when an employee moves into a position or assumes a role where their activities may pose a risk of exposure.	296-823-12005		
M 018	BBP training shall include an explanation of the employer's Exposure Control Plan and shall include an opportunity for interactive questions with a person knowledgeable in the field of bloodborne pathogens.	296-823-12005		
M 019	BBP training shall include modes of transmission, recognition of tasks and procedures which involve potential exposures, information on HBV vaccinations, details of emergency response for exposure incidents, post-exposure evaluations, and explanations of all signs, labels and/or color coding.	296-823-12005		
M 020	BBP training records shall include training dates, a summary of training contents, and names and qualifications of all trainers along with the names and job titles of all persons trained. Records shall be maintained for three (3) years from the date of training.	296-823-12015		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
M 021	Medical records shall be kept for each exposed employee, including name and social security number, and shall include a copy of the employee's Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.	296-823-17005		
M 022	The employer shall make available the Hepatitis B vaccine and vaccination series to all employees who have potential occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.	296-823-13005 296-823-16005		
M 023	The school or district will require employees who have potential occupational exposure to blood or other potentially infectious materials that may be at risk of acquiring Hepatitis B virus (HBV) infection and have declined to be vaccinated with Hepatitis B vaccine, sign the "Hepatitis B vaccine declination – Mandatory".	296-823-13005		
M 024	The school or district shall make a confidential medical evaluation and follow-up available to employees who experience an exposure incident.	296-823-16005		

Section N: Playgrounds

References

2010 ADA Standards for Accessible Design, Chapters 1, 2, 240, & 1008
WAC 246-366-030: Site Approval
WAC 246-366-040: Plan Review and Inspection of Schools
WAC 246-366-140: Safety
A Summary of Accessibility Guidelines for Play Areas, U.S. Access Boards
    Chapter 10: Play Areas, U.S. Access Board
    Chapter 10: Play Surfaces, U.S. Access Board
ASTM F1487 Standard Consumer Safety Performance Specification for Playground
Certified Playground Safety Inspector (CPSI) Certification Program, National Recreation and Park Association (NRPA)
Equipment for Public Use
Guidelines for Movable Soccer Goals, CPSC
Natural Play Areas, DOH
National Program for Playground Safety, NPPS
Playground Safety Is No Accident, International Playground Safety Institute (IPSI)
Public Playground Safety Handbook, CPSC (PDF)
The-Daily Dozen: A 12-Point Playground Safety Checklist, NRPA (PDF)
School Environmental Health & Safety, DOH, Playgrounds and Playfields
Washington Air Quality Guide for Particle Pollution, DOH (PDF)

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
N 001	All new playground equipment meets specifications in the most current versions of the U.S. Consumer Product Safety Commission *Handbook for Public Playground Safety* and ASTM F 1487, *Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use*.		CPSC Public Playground Safety Handbook ASTM F1487	X
N 001a	NOTE: While these ASTM standards and CPSC guidelines will not specifically address all older playground equipment (e.g., pre-1981 equipment), the general concepts and guidance are applicable to all playground equipment.		CPSC Public Playground Safety Handbook	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
N 001b	NOTE: Natural Play Areas need to be designed and installed in accordance with the equipment, surfacing, use zones, and hazard prevention standards in the applicable CPSC and ASTM standards.		DOH Guidance for Natural Play Areas	**X**
N 001c	Consider heat and shade issues. Slides should face away from the afternoon sun. Bare metal slides, platforms, and steps should be shaded or located out of direct sun. Provide warnings that equipment and surfacing exposed to intense sun can burn. Consider shading the playground or providing shaded areas nearby. Consider not using the playground if surfaces are too hot.		CPSC Public Playground Safety Handbook	**X**
N 002	New playgrounds are accessible. Schools must meet "Americans with Disabilities Act of 1990" requirements. After March 15,2012 newly constructed and altered play areas must meet the *2010 Americans with Disability Act Standards for Accessible Design.*	2010 ADA Standards for Accessible Design (Chapters 1, 2, 240 &1008)	ASTM F1487 Section 10	**X**
N 003	Plans for new playgrounds are reviewed by the school district's local health jurisdiction.	246-366-030 246-366-040		**X**
N 004	The school has a written policy/procedure on playground supervision that ensures adequate supervision of the playground whenever it is occupied during the school day.		CPSC Public Playground Safety Handbook 2.2.7	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
N 005	Playground supervisors are selected, trained, and equipped according to written guidelines. NOTE: The Playground Supervision Kit — School-Age Edition from the National Program for Playground Safety is a helpful resource.		CPSC Public Playground Safety Handbook 2.2.7	
N 006	There are written plans for, and employees have been trained in, how to handle emergencies on the playground.		Washington State School Directors' Association, model policy 3432	
N 007	The school has written playground rules that are taught to students and posted at school, sent to the parents, and reviewed yearly and when new equipment is installed.		Playground Safety Is No Accident	
N 007a	Signage: Playgrounds will have posted signs in accordance with ASTM 1487.14.		ASTM 1487.14	
N 008	The school/district has written procedures and a process for selecting and placing playground equipment appropriately.		CPSC Public Playground Safety Handbook Chapter 2	
N 009	All playground equipment has required fall use zones and protective surfacing. Functionally linked equipment will be evaluated during plan review for reasonable transitions that do not increase hazards.		CPSC *Public Playground Safety Handbook* Sections 2.4, Section 5, Table 2 ASTM F1487, F1292, F1951, F2223, F2075, F3012	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
N 009a	NOTE: A "triaxial accelerometer" can measure HIC and G-max. Field tests provide documented test data of surface impact conditions at the time of testing. Surface conditions will vary greatly due to temperature and other weather conditions as well as from day-to-day changes due to local activities.		DOH	
N 009b	When temperatures are below freezing surfacing may no longer have adequate impact attenuation and surfaces may be slippery. Consider not using the playground equipment. Districts should develop policies and procedures for dealing with extreme weather.		DOH	
N 010	The school/district has a comprehensive inspection and maintenance program for playgrounds which specifies the frequency of inspection.		CPSC Public Playground Safety Handbook Section 4, Appendix A	
N 011	Periodic maintenance and repair are performed on playground equipment according to the manufacturer's specifications.		CPSC Public Playground Safety Handbook Section 4	
N 012	Periodic playground inspections are documented. Inspections include identifying hazards specified in the most current versions of the CPSC *Handbook for Public Playground Safety* and ASTM F1487. Playground inspections should be done by or under the supervision of a Certified Playground Safety Inspector.		CPSC Public Playground Safety Handbook Section 4 ASTM F1487	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
N 013	There is a procedure and process for adequately addressing hazards on the playground.		CPSC Public Playground Safety Handbook Section 3	
N 014	Soccer goals are anchored to prevent tipping as per CPSC guidelines. NOTE: See the U.S. Consumer Product Safety Commission's "Guidelines for Movable Soccer Goal Safety."		CPSC	**X**
N 015	Information on "best practices" of many aspects of school playground safety listed in this section can be found in *Playground Safety is No Accident.*			
N 016	NOTE: The National Program for Playground Safety provides information for parents, school administrators and other public officials relating to improvement of playground safety.			
N 017	NOTE: The National Recreation & Park Association's The Daily Dozen: A 12-Point Playground Safety Checklist is a useful tool.			
N 018	The Washington Children and Youth Activities Guide for Air Quality provides public health recommendations to protect children and youth (18 years and younger) from fine particle air pollution ($PM_{2.5}$). Use the Guide for school, childcare, athletic practices and games, before and after school programs, camps, field trips, and other outdoor programming and activities.		DOH	

Section O: Animals in Schools

References

Animal Contact Compendium and Resources, National Association of State Public Health Veterinarians (NASPHV)

Appendix 4 Guidelines for Exhibition of Animals in School and Childcare Settings

Animals in Schools and Daycares, CDC

Animal Venue Operator Requirements, DOH

Chapter 246-366-080 WAC: Ventilation

Chapter 246-366-140 WAC: Safety

Chapter 246-100-191 WAC: Animals—General measures to prevent human disease

Chapter 246-100-192 WAC: Animals in public settings—Measures to prevent human disease

Chapter 246-100-197 WAC: Rabies—Measures to prevent human disease

Chapter 246-100-201 WAC: Psittacosis—Measures to prevent human disease

Chapter 246-101-420 WAC: Notifiable Conditions: Duties – Schools

Compendium of Measures to Control Chlamydia psittaci Infection Among Humans (Psittacosis) and Pet Birds (Avian Chlamydiosis), NASPHV (PDF)

Compendium of Measures to Prevent Zoonotic Diseases Associated with Non-Traditional Pets Such as Rodents and Other Small Mammals, Reptiles, Amphibians, Backyard Poultry, and Other Selected Animals, NASPHV (PDF)

Appendix E Guidelines for animals in schools, childcare settings, and long-term care and assisted living facilities

Guidance for cleaning animal areas, Iowa State University, Center for Food Security & Public Health Disinfection (PDF)

Handwashing to Prevent Illness at School, DOH

Rabies, DOH

Safe Cleaning and Disinfecting Guidance for Schools, DOH

School Environmental Health & Safety, DOH: Animals, Pest Management, and Pesticides

School Indoor Air Quality Best Practices Manual (IAQBMPM), DOH (PDF)

Zoonotic and Vector-borne Disease Program, DOH

Guide to Service Animals and the Washington Law Against Discrimination, Washington State Human Rights Commission (PDF)

Prohibiting Discrimination in Washington Public Schools: Guidelines for School Districts to Implement, OSPI (PDF): Students and Service Animals

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 001	Whenever animals are being brought into a school, or when students are being brought to a place where animals are present, a person designated by the school (e.g. the principal, nurse, risk manager, etc.) shall be notified so that planning and preparation can take place prior to student-animal interaction. Animals that are inappropriate for schools (venomous, stray, primates, etc.) or for the intended age group (<5 years old) or health status (immune compromised) should be excluded. Refer to NASPHV Animal Contact Compendium Appendix 4 for animals not recommended.		WSSDA Model Policy 2029 and Model Procedures 2029P NASPHV Animal Contact Compendium	
O 001a	NOTE: Animals in the classroom are a cause of indoor air quality concerns. If adverse IAQ is a concern, remove all animals from the school until the issue is adequately addressed. Animals are also a source of Salmonella, E. coli, and other enteric pathogens.		DOH School IAQ Best Management Practices Manual 10 B, F NASPHV Compendium K12HSG Appendix E: Animals in the Classroom	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 002	Parents should be notified if any animal is to be kept in their child's classroom, if there will be animals brought to the school (e.g. petting zoos) or if children will be taking field trips involving animals (e.g. to the fair). Children who have allergies or asthma may react unfavorably to exposure. Feces, urine, fur, feathers, dust, and feed may adversely affect indoor air quality (IAQ) if allowed into a classroom. See Section K for guidelines on dead animals and specimens.		DOH School IAQ Best Management Practices Manual 10 B, F NASPHV Compendium K12HSG Appendix E: Animals in the Classroom	
O 003	The keeping and handling of live animals in classrooms should be in designated areas only. Animals should be in appropriate cages or properly always restrained and not allowed to roam or fly free (birds are not recommended). Designated areas shall include impervious cleanable surfaces and adequate ventilation. Use proper cleaning and disinfection procedures (see guidance in resources section).	246-366-080	NASPHV Compendium CFSPH Disinfection Guidance for Animal Settings	**X**
O 004	Cages should be lockable and should be cleaned daily by staff or supervised and trained secondary students.		NASPHV Compendium Appendix 4	
O 005	Handling of live animals should only be allowed under adult supervision. Sturdy, bite-resistant gloves are recommended whenever live animals are handled. Where animals are present, it is recommended that a "hand-wash" sign be posted.		NASPHV Compendium	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 006	Hand washing facilities should be provided and readily accessible. Hands should always be washed with soap and warm running water after handling animals, cages, bedding, or anything in the animal's environment.		NASPHV Compendium	
O 007	Animals that are kept in the classroom should be fed appropriate food on a regular basis and be provided with fresh water at all times to help prevent animal illness, disease, or death. School should have veterinary contact information and seek veterinary care for ill animals.		NASPHV Compendium	
O 008	Heat lamps shall be secured in such a way as to prevent contact with flammable bedding materials. Electrical connections shall meet the National Electrical Code (NEC). Extension cords are not allowed for heat lamps.	51-54/IFC 305.1, 603.9 NFPA 70/NEC		
O 009	Only animals (including all mammals, birds, fish, reptiles and amphibians) bred in captivity should be allowed in schools due to diseases that can be carried by "wild-caught" animals. Animals must have current vaccinations appropriate to the species. Consult the DOH Public Health Veterinarian for vaccination requirements.	246-100-197	NASPHV Compendium K12HSG Appendix E: Animals in the Classroom	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 010	Fish aquariums and animal cages or terrariums should be cleaned regularly. Used water from aquariums or cleaning cages/terrariums should be disposed of in sinks that are not used for food preparation, for obtaining water for human consumption, or student handwashing. Always wash hands with soap and water afterward. Aquarium systems cannot result in background noise levels in the classroom exceeding 45 dBA. Ensure the stand/table can safely support the weight of the aquarium.		NASPHV Compendium Appendix 4 246-366-110	
O 011	Schools shall report all notifiable conditions to the local health jurisdictions. Any bite, scratch, or other injury to a student from an animal should be assessed and basic first aid provided by school nurse / school staff person. The student should be referred to their health care provider for follow-up care.	246-101-420		
O 012	Ensure that all classroom animals are properly cared for on weekends, holidays, and breaks. Parent consent should be obtained to take cages or aquariums home for holiday care. Dead, sick, or diseased animals or filthy (mold, dirt, feces, etc.) cages/aquariums negatively impact indoor air quality and are not conducive to a healthy classroom environment.		DOH School IAQ Best Management Practices Manual 10 B, F NASPHV Compendium K12HSG Appendix E: Animals in the Classroom	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 013	Due to sanitation concerns and the risk of psittacosis, schools are strongly encouraged to have policies prohibiting parrots, love birds, parakeets and other 'hook billed' birds.		246-100-201 Compendium of Measures to Control Chlamydia psittaci Infection Among Humans (Psittacosis) and Pet Birds (Avian Chlamydiosis), 2017	
O 014	There should always be contact between a teacher/coordinator and the operator of a petting zoo or animal exhibit before the visit occurs to ensure safe and healthy conditions for the students. If the school is hosting a petting zoo, exhibit, or providing animals to be handled by students and/or the public, they are considered an Animal Venue Operator and must provide signage, hand washing facilities, and other prevention measures as per WAC 246-100-192. They should also follow Petting Zoo guidelines in Appendixes 2 & 3 of the NASPHV Compendium.	246-100-192	NASPHV Compendium, Appendices 2 & 3	
O 014a	NOTE: Refer to Appendix E Animals in the Classroom, DOH, and CDC for additional recommendations concerning safety and health issues with animals.		K12HSG Appendix E: Animals in the Classroom DOH CDC	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 015	Reptiles (turtles, lizards & snakes), amphibians, small mammals (hedgehogs, guinea pigs, other rodents), and poultry (chickens, ducks, turkeys, geese) can carry salmonella and appear healthy. Whenever animals are handled, soap and warm running water must be available for students and staff to promptly and thoroughly wash their hands.		NASPHV Compendium, Appendix 3 DOH	
O 016	Petting zoos, classroom exhibits, and other animal contacts, both inside and outside of the classroom, must include hand washing signage, hand washing facilities with soap and warm running water, restrict consumption of all food and drinks in areas where animals are present. Do not allow animals in areas where food and drink are stored or prepared. Always require adult supervision when children are in animal areas.	46-100-192	DOH CDC NASPHV Compendium, Appendix 3	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
O 017	Service Animals that comply with state law are allowed in schools. Note: Washington state law currently defines service animal more broadly than federal law under the Americans with Disabilities Act (ADA). Titles II and III of the ADA, as of March 2011, only recognize dogs and, in some circumstances, miniature horses as service animals (28 C.F.R. §35.136). In Washington, however, public schools must allow any type of service animal that has been individually trained to perform a specific task related to a person's disability. The only exception is in "food establishments," which limit service animals to dogs, and in some instances, miniature horses (see RCW 49.60.215 and 40.60.218). See *Prohibiting Discrimination in Washington Public Schools* (ospi.k12.wa.us) Students and Service Animals for details on accommodating service animals.	RCW 49.60.215, 218		
O 018	Therapy Animals. Schools are not required to accommodate therapy animals. If schools choose to use or accommodate therapy animals, they should have board adopted policies and procedures to address what type of training is required and the health and safety concerns in this section and Appendix E: Animals in the Classroom, including preventing injuries, allergy/asthma issues, disease transmission, and exposure to animal wastes, and require proper care of the animals, and handwashing after touching.		DOH & OSPI	

Section Q: Pesticide Use in Schools

References

Chapter 16.228.1220 WAC: Restrictions for Holding, Handling, Using, or Disposing of Pesticides and their Containers.
Chapter 246-366-050 WAC: Buildings Section 5 and 6
Compliance Guide for the Use of Pesticides at Public Schools (K-12) And Licensed Day-Care Centers, WSDA
Pesticide License Types, WSDA
RCW 17.21.415: Schools—Policies and methods—Notification—Records—Liability
Schools and Child Care Centers, WSDA
Schools and Licensed Day Cares Pesticide Notification & Records Inspection, WSDA
Waste Pesticide Program, WSDA
Schools and Pesticides, DOH
School Integrated Pest Management, Washington State University
Integrated Pest Management, DOH
Washington Sustainable Schools Protocol 2023 (WSSP), High-Performance School Buildings Program, OSPI, IEO3.4.6- IPM Plan

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 001	K-12 public schools and licensed day care centers must provide notification of their pest control policies and methods upon request and, establish a system to notify parents and guardians and employees of planned pesticide use and post signs where pesticides have been applied.	RCW 17.21.415		
Q 001a	Note: The WSDA *Compliance Guide for the Use of Pesticides at Public Schools (K-12) and Licensed Day Care Centers* is available at Washington State Department of Agriculture's website. The manual provides detailed instructions, diagrams, sample signs and forms for school use.	RCW 17.21.415		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 002	A school shall provide written notification, upon request, to parents or guardians of students and employees describing the school's pest control policies and methods, including the posting and notification requirements of the law.	RCW 17.21.415(2)		
Q 003	A system must be in place that notifies interested parents or guardians and school employees at least 48 hours before a pesticide application. Notification must name the pesticide to be applied, the location, intended date and time of the application, the pest to be controlled and the name and telephone number of a contact person at the school.	RCW 17.21.415(4&5)		
Q 004	All pesticide applications at a school must be posted at a prominent place in the main office. The sign must be at least 8.5 inches by 11 inches in size and must state the name of the pesticide applied, the date, time and location of the application, the pest to be controlled and a contact name and phone number of a contact at the school.	RCW 17.21.415(3)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 005	Notification signs for applications made to school facilities other than school grounds shall be posted at the location of the application. The signs shall be a minimum of eight and one-half by eleven inches and shall include the heading "Notice: Pesticide Application" and, at a minimum, shall state: (i) The product name of the pesticide applied; (ii) The date and time of application; (iii) The location to which the pesticide was applied; (iv) The pest to be controlled; and (v) The name and phone number of a contact person at the school.	RCW 17.21.415(6)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 006	A certified applicator making landscape applications to a school, nursery school, or licensed day care shall at the time of the application place a marker at each primary point of entry to the school grounds. The marker shall be a minimum of four inches by five inches. It shall have the words: "THIS LANDSCAPE HAS BEEN TREATED BY" as the headline and "FOR MORE INFORMATION PLEASE CALL" as the footer. Larger size requirements for markers may be established in rule for specific applications. The company name and service mark shall be included between the headline and the footer on a marker placed by a commercial applicator. The applicator's telephone number where information can be obtained about the application shall be included in the footer of the marker. Markers shall be printed in colors contrasting to the background. Notification signs for applications made to school grounds by school employees shall be placed at the location of the application and at each primary point of entry to the school grounds. The signs shall be a minimum of four inches by five inches and shall include the words: "THIS LANDSCAPE HAS BEEN RECENTLY SPRAYED OR TREATED WITH PESTICIDES BY YOUR SCHOOL" as the headline and "FOR MORE INFORMATION PLEASE CALL" as the footer. The footer shall provide the name and telephone number of a contact person at the school.	RCW 17.21.410(1)(d), (3) RCW 17.21.415(6)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 007	Public schools and day care centers must keep an annual summary of all pesticide applications and make that summary readily available to interested persons. Private schools are encouraged to do so also.	RCW 17.21.415(10)		
Q 008	Pesticide storage requirements are in WAC 16-228. State and local fire codes regarding storage requirements may be more restrictive than WSDA requirements specified in WAC 16-228. School administrators must check with their local Fire Department for specific requirements.	16-228-1220(6)(7)		X
Q 009	NOTE: Free pesticide disposal is available to public schools through the Washington State Department of Agriculture. Phone: (360) 902-2056 or, 1-877-301-4555. Fax (360) 902-2093, Email: wastepesticide@agr.wa.gov, website above.			
Q 010	Schools are encouraged to use Integrated Pest Management (IPM). IPM is recommended by DOH and EPA as the Best Management Practice for schools to employ when addressing pest concerns.		EPA DOH OSPI	X
Q 011	Information on pesticide applicator license including: Do I need a pesticide applicator license? What type of license? What categories/endorsements do I need? Can be found at the WSDA Pesticide License website.	RCW 15.58 RCW 17.21 16-228-1500-1590		
Q 012	The premises and all buildings shall be free of insects and rodents of public health significance and conditions which attract, provide harborage and promote propagation of vermin.	246-366-050(5)		

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
Q 013	All poisonous compounds shall be easily identified, used with extreme caution and stored in such a manner as to prevent unauthorized use or possible contamination of food and drink.	246-366-050(6)		

Section R: Visual and Performing Arts

References

29 CFR 1910.1450: Occupational exposure to hazardous chemicals in laboratories
2021 Washington State Building Code, International Code Council
2021 Washington State Fire Code, International Code Council
2021 Washington State Fuel Gas Code, International Code Council
2021 Washington State Mechanical Code, International Code Council
Art Adhesives, DOH
Art Hazard Videos, DOH
Art Hazards, DOH
Chapter 246-366 WAC: State Board of Health Rule for Primary and Secondary Schools
Chapter 296-126-222 WAC: Sanitation and Safety (lifting restrictions)
Chapter 296-800 WAC: Safety and Health Core Rules
Chapter 296-807 WAC: Portable Power Tools
Chapter 296-880 WAC: Unified Safety Standards for Fall Protection
Chapter 296-901 WAC: Globally Harmonized System for Hazard Communication
DOSH Directive 13.00 Emergency Washing Facilities, L&I DOSH (PDF)
Employer's Guide to the Hazard Communication Rule, L&I (PDF)
Hand and Power Tools, OSHA (PDF)
Hydrogen Fluoride (HF) - Medical Management Guidelines, CDC ATSDR
Methyl Chloroform, U.S. EPA (PDF)
RCW 70.100: Eye Protection – Public and Private Educational Institutions
Safe Cleaning and Disinfecting Guidance for Schools, DOH (PDF)
School Chemical Safety Inspections - Hazardous Chemical Safety in Art Classrooms, DOH (video)
The Arts, OSPI
Theatrical Fog Guidelines, DOH (PDF)
Toluene Diisocyanate and Methylenediphenyl Diisocyanate – ToxGuide, CDC ATSDR (PDF)
Ventilation Guidance for Spray Polyurethane Foam Application, U.S. EPA (PDF)

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 001	All visual arts classrooms need to be equipped with sinks 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.		OSPI	X
R 002	Vocal and instrumental music rooms, including choir, band, and orchestra rooms, shall have at least the required ventilation and outside fresh air.	51-52/IMC 401, 403	OSPI	X
R 003	Heavy instruments should be provided with wheels or rollers for safe moving. Students should not move heavy objects, such as pianos risers, or shells. No one shall be required or permitted to lift or carry excessive weights.	296-126-222	OSPI	
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 shall be made of safety glass.	51-50/IBC 2406	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

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 007	Sound levels in music rooms shall comply with DOSH and SBOH noise level requirements through the application of acoustical and architectural design. (See Sound Control Section H).	246-366-110 296-817		X
R 008	When "Black Box Theaters" 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 for the audience. Provide lighting at classroom levels if the theater will be used for instruction. (See Section I Lighting)	246-366-120 51-50/IBC 51-54A/IFC	OSPI	X
R 009	Costume, wardrobe and band instruments and uniforms, etc. require adequate safe storage to avoid fire and storage hazards as well as proper maintenance, cleaning, and care.		OSPI	X
R 010	Set design and construction require a safe working area, only school/district -approved power tools, and compliance with all L&I construction regulations. All students using portable hand tools and powered equipment must be trained in safe operation procedures. 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. See Section L Career & Technology Education for further guidance.	246-366-140(1) 296-807 296-800-280	OSPI	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 010a	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.		EPA ATSDR	
R 011	Appropriate direct local exhaust ventilation shall be used whenever the following are used indoors: Pottery 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 etching). (See Section L CTE)	246-366-080	OSPI	**X**
R 011a	Do not use/purchase spray adhesives and fixatives that contain toluene or hexane. Water-based products are preferable.		DOH Art Adhesives Employer's Guide to the Hazard Comm. Rule	
R 011 b	Avoid aromatic solvent paint thinners like lacquer thinner or turpentine; instead, use odorless paint thinners or odorless mineral spirits. Caution is still needed.		DOH Art Guidance Employer's Guide to the Hazard Comm. Rule	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 011c	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), acids, and bases shall each be stored separately. Flammable waste 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)	296-24-33009 51-54A/IFC 2403.4.3, 5704.3.4.4, Ch 57 173-303-630		
R 012	Eye, ear, hand, foot, and body protection shall be used as required by chemical labels, Safety Data Sheets, or practices requiring protection. (Refer to WISHA Personal Protective Equipment (PPE) requirements.)	296-800-160 296-155 246-366-110, 140 RCW 70.100	OSPI	
R 013	Premixed pottery clay should be used instead of a pugmill to reduce airborne particles, including silica. Pugmills with vacuum seals to prevent dust are acceptable. Damp mop frequently to reduce dust. Only non-toxic art supplies should be used.		OSPI & DOH Employer's Guide to the Hazard Comm. Rule	
R 013a	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.		OSPI & DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 013b	Do not purchase/use glazes/colorants that contain toxic or environmentally damaging substances such as lead, cadmium, copper, manganese, or chromates. Do not purchase or use powdered glazes – use premixed products.		OSPI & DOH Employer's Guide to the Hazard Comm. Rule	
R 013c	Use oil pastels instead of powdered paints or pigments to reduce the risk of inhaling toxic dusts.		OSPI & DOH Employer's Guide to the Hazard Comm. Rule	
R 014	Personal protective equipment (PPE) and safety training for staff and students in visual arts class areas shall be provided as required for mediums being used.	246-366-140(1) 296-800-16005	OSPI & DOH	
R 014a	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.	246-366-080, 140		
R 014b	Glass etching: Proper personal protective equipment must be worn to prevent skin contact with etching compounds like ammonium bifluoride.	WAC 296-155-200		
R 014c	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.		ATSDR DOH Employer's Guide to the Hazard Comm. Rule	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
R 015	Additional information regarding the Visual and Performing Arts can be found on the OSPI Arts website.		OSPI	
R 016	DOH 333-312-*Guidelines for Use of Theatrical Fog*.pdf provides information on the health risks attributed to the chemicals commonly found in fogging products, the aerosols they create, and parameters for use that may lessen risks.		OSPI and DOH	

Section S: Athletics

References

ASTM F1081-23 Standard Specification for Competition Wrestling Mats, ASTM
ASTM F2440-24 Standard Specification for Impact Attenuation of Wall Padding Used in Indoor Competitive and Recreational Sports Venues, ASTM
Automatic External Defibrillator Manual, 2016, Washington Association of School Business Officials (WASBO) (PDF)
Chapter 296-823 WAC: Occupational Exposure to Bloodborne Pathogens
Climbing Wall Association (CWA)
Concussion Management for Schools, DOH
Concussion Management - Health & Wellness, Washington Interscholastic Activities Association (WIAA)
CPSC Releases Study of Protective Equipment for Baseball, CPSC
General Guidelines for Sports Hygiene, Skin Infections, and Communicable Diseases. NRHS (PDF)
National Federation of State High School Associations, NFHS: individual sports under "Activities & Sports"
Guidelines for Movable Soccer Goals, CPSC
Heat Index Calculator, WIAA
Infectious Disease Control Guide for School Staff, DOH (PDF)
Injury Center: Heads Up, CDC
RCW 4.24.660: Liability of school districts under contracts with youth programs
RCW 28A.600.190: Youth sports—Concussion and head injury guidelines—Injured athlete restrictions
RCW 28A.600.195: Sudden cardiac arrest in youth athletes—Online pamphlet—Online prevention program for coaches
RCW 43.70.435: Diagnosed concussions of students—Report
Recreational foam, ECY
Safe Cleaning and Disinfecting Guidance for Schools, DOH (PDF)
Student Head Injury Information Reporting, DOH
Sudden Cardiac Arrest Requirement (SB 5083) – Health & Wellness, WIAA
Washington Air Quality Guide for Particle Pollution, DOH (PDF)
WIAA Handbook – Coaches, WIAA (PDF)

Section Items

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 001	Many Exposure Control Plans and Blood Borne Pathogen provisions also apply to all students. WIAA has adopted rules for interscholastic activities based on the BBP standard. This applies school-wide with particular emphasis in the athletic department. (See Section M, Bloodborne Pathogens and Exposure Control Plans.) For Cleaning and Disinfection guidance in athletics see the Safe Cleaning and Disinfecting Guidance for Schools (wa.gov).	296-823	WIAA OSPI and DOH	
S 002	All athletic facilities, equipment, apparatus, and fixtures should comply with manufacturer's instructions and with the rules and recommendations of the WIAA and the school district's insurance carrier.		OSPI and DOH	X
S 003	All baseball/softball bases should be break-aways to reduce injuries. Safety release bases that leave no holes in the ground or parts of the base sticking up from the ground when the base is released may prevent, reduce, or lessen the severity of injuries.	246-366-140(1)	CPSC	X
S 004	Movable soccer goals can fall over and kill children who climb on them or hang from the crossbar. Securely anchor or counter-weight movable goals at all times. Remove nets when goals are not in use.	246-366-140(1)	CPSC	X

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 005	Equipment Maintenance Inspect equipment regularly in accordance with manufacturer specifications for wear and tear and to ensure it is still in good condition. Cables, belts, and pulleys must be inspected regularly and taken out of service if frayed or damaged.		OSPI & DOH	
S 005a	Athletic equipment and mats should conform with applicable ASTM standards at time of purchase.		OSPI and DOH	**X**
S 006	Gym Protective Mats Walls, doors, and posts behind basketball backboards should be padded and free of obstruction where it is possible for players to collide with them. Pads should comply with ASTM F2440 and be sufficient in size and depth to mitigate skull and spinal cord injuries (typically 2 inches thick). Pad gym walls completely around, 4 inches off the floor to six feet high. There are many gym activities that can, and have, resulted in serious injury and death from children hitting the wall. Volleyball posts and other obstacles should also be padded.		ASTM F2440-24 National Federation of State High School Associations	**X**
S 006a	Traversing wall must have sufficient floor padding when in use and that can be used to restrict access to the wall when not in use. Hand holds should be checked as needed, at least semi-annually, for tightness and gaps.		OSPI & DOH	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 006b	Climbing walls should meet ASTM F1159. This standard addresses the design and manufacturing of indoor climbing walls and components and specifications of materials, climbing holds, impact forces and structural integrity. Climbing Wall Association Best Practice Standards		ASTM F 1159	**X**
S 006c	Wrestling, weightlifting, gymnastic equipment, and health room cots shall have an unbroken, non-absorbent surface that is easily cleanable. Small tears may be repaired but must result in a surface that can be cleaned and disinfected. All tears shall be repaired as soon as possible.		296-823-14055 ASTM F 1081	
S 006d	Foam Pits: Ensure foam meets Department of Ecology guidance on reducing toxic exposures.		ECY	**X**
S 007	Student-athletes should have proper instruction and documented safety training prior to participating in any new activity. Follow safety standards of NFHS Guidelines. Post appropriate signs in gyms and athletic areas for required supervision and practices – including when helmets, mouthguards, etc. are required.		OSPI and DOH NFHS	
S 008	Student-athletes should have proper physical conditioning prior to participation in athletic activities.		OSPI and DOH WIAA	
S 009	Student-athletes should have supervision during all athletic activities.		OSPI and DOH WIAA	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 010	First aid, by a first aid trained person with immediate access to first aid supplies, must be readily accessible to injured participants at all physical education classes and all athletic practices and events. A means to summon additional medical care and transport for injured persons must be available.	296-800-150	WIAA OSPI and DOH	
S 011	School districts and private schools shall adopt policies for the management of concussion and head injury in youth sports.	RCW 4.24.660 RCW 28A.600.190 28A.335.155	WIAA DOH	
S 011a	Beginning with the 2020-21 school year, public schools must annually report information about each diagnosed concussion sustained by a student during athletic and other activities using a procedure developed by the department of health under RCW 43.70.435.	RCW 28A.600.192 RCW 43.70.435	WIAA DOH	
S 012	Every three years, prior to coaching an interscholastic athletic activity coaches shall complete the online sudden cardiac arrest prevention program described in this section. Coaches shall provide a certificate showing completion of the online sudden cardiac arrest prevention program to the school.	RCW 28A.600.196	WIAA	
S 013	AED placement and maintenance. The Washington Association of School Business Officials (WASBO) Automatic External Defibrillator Guidance for Washington Schools, May 2016, provides guidance for AED programs, placement, and maintenance.	RCW 70.54.310 RCW 28A.300.471; 28A.230.179	WASBO	**X**

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 014	All new playing surface systems should meet the standards of the latest version of ASTM F 355 for surface impact attenuation.		ASTM F 355	**X**
S 015	All new artificial turf should be below standard for lead in synthetic turf fibers required by ASTM F 2765.		ASTM F 2765	**X**
S 016	Appropriate bathrooms must be available and accessible for all school and after school activities.	246-366-060		**X**
S 017	Bleacher Safety – ensure compliance with ANSI: ICC 300-2017: Standard for Bleachers, Folding and Telescopic Seating, and Grandstands and NFPA 102-2021, NFPA 102, Standard For Grandstands, Folding And Telescopic Seating, Tents, And Membrane Structures NFPA 102 provides requirements extracted from NFPA 5000 and NFPA 101 for life safety in relation to fire, storm, collapse, and crowd behavior in tents, membrane structures, and assembly seating.		ANSI: ICC 300-2017 NFPA 102-2021	**X**
S 018	Sports whirlpool/cold soak tubs should be for single use only. Tubs should be drained and cleaned between users. Disinfect equipment surfaces and components by using an EPA registered product in accordance with the manufacturer's instructions. Students should be supervised at all times during use.		WIAA	**X**
S 019	The Washington Children and Youth Activities Guide for Air Quality provides public health recommendations to protect children and youth (18 years and younger) from fine particle air pollution ($PM_{2.5}$). Use the Guide for school, childcare, athletic practices and games, before and after school programs, camps, field trips, and other outdoor programming and activities.		DOH	

Item Number	Item	WAC or other Code Reference	Standard/ Recommended Practice	Plan Review
S 020	The WIAA heat index guidelines should be followed when temperatures are high.		WIAA	

Appendix A: Acknowledgements

The Third Edition of the Guide (2024)

The Third Edition of the Guide was prepared in accordance with Washington State Board of Health (SBOH) rules (WAC 246-366-140) by:

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Appendix B: Recommended School Inspection Protocol

School and DOH officials agreed on a need for standardization in the way schools were approached and inspected by LHJs. The following inspection protocol provides recommended steps for new and existing LHJ programs and was originally drafted by the School Facilities Health and Safety Advisory Committee for the first edition of the Guide in 2000. It was an attempt to resolve the issues of 1) being inspected by LHJs without established protocols; 2) lack of cooperation between schools and LHJs; and 3) improving the communication of inspection findings. It is now lightly edited for the 2024 edition.

Some established LHJ school inspection programs have further developed procedures suited for their regions, including school self-inspections by schools as part of the inspection cycle. Communication between LHJ programs is encouraged.

1. First Meeting with School District

After contacting the school administration (superintendent, head of school, etc.), it is essential to communicate with, or meet with, the school district or private school designee(s) and establish an initial point of contact (person) for future meetings, communications, and correspondence, including for inspection reports. At this meeting, the LHJ representative should share the forms, rules, and guidelines, as well as any administrative procedures that will impact the schools. Sample letters and reports may be shared to let the schools know what to expect. LHJs are encouraged to have these available on their websites and might facilitate sharing through webinars and online meetings for multiple schools. Schools may share facility plans, current and long-range plans, budget constraints, local priorities, and examples of inspection reports performed by other agencies/entities, including self-inspection reports.

2. Schedule Inspections

To accommodate the various needs and situations that exist in different school districts and private schools, it is important that LHJs work cooperatively through the school district or private school contact person to establish an appropriate inspection schedule. The schedule should establish dates, times, and approximate duration that may be needed for each visit. LHJs initiating inspection programs may work with their schools to prioritize areas for emphasis based on risk.

3. Establish Site Contacts

Once contact with the school district or private school is established, it is important to similarly establish contacts at each school facility or building. The school contacts may include a principal, safety representative, custodian, or other staff representative as directed by the school administrator. It is helpful to know the school site person who will go along during the site visit, although this may vary: each school will have different circumstances that will govern access to various areas of the buildings at different times

of the day, and there can be schedule conflicts, illnesses, or other circumstances.

4. Perform the Inspection/Assessment

Confirm details with your contact person before the day of the visit, including documents or information the school will be asked to provide. Agree upon and share a form or checklist and supporting documentation with the school in advance. The health agency representative should perform a routine, comprehensive, targeted, or follow-up inspection/assessment as needed. The school district and school contacts should be notified in advance regarding the type of inspection they are receiving to know what to expect in the report.

5. Have a Closing Conference

A closing conference allows the health official and school representative to review the results of the visit together and agree upon what actions are immediately needed. The health official may also be able to assist the school with resolving issues, providing resources, and prioritization of health and safety items.

6. Draft Report

Reports should distinguish between requirements and recommendations based on best practices. Items that do not conform should be listed as findings or deficiencies. Reports should identify the item in question and explain how it does not conform to the requirement or recommendation. Requirements should be provided with a WAC or other code reference; recommendations should be provided with a standard or recommended practice. Be aware that schools are sensitive to terminology, and the word “violation” is sometimes misused to apply to non-conformance with a “recommendation” that may not be expressly incorporated into the SBOH rules.

Once the school facility has been inspected, a report labeled “DRAFT” should be written. This will identify it as being different from the subsequent “FINAL” report. In accordance with the procedure that has been agreed upon in advance with the school district or private school, provide a copy of the draft report to the school district or private school contact person(s). Draft copies of reports should only be sent to the school districts or private schools and not be forwarded to others. The school representative(s) will prepare responses to each of the items that have been noted.

7. Review the School’s Comments

The health official and the school district or private school should agree to a time frame for review of the draft reports. Working with the school district is critical to maintain communication in a positive and open fashion.

The health official and the school district or private school may wish to meet in person or by video conference call to review the draft reports and discuss areas of agreement as well as disagreement or misunderstanding. This meeting should also allow both parties to explain their intentions and priorities. It is of considerable value to the health official to allow the school district or private school to propose reasonable timelines to correct problems that are found during the inspection. Immediate action may be

required if there is a risk of serious injury, loss of life, or disability. This allows schools to work within the available public funding budgets at their disposal and identify any budget line items that may be required in the future.

8. Issue the Final Report

The final report should be addressed to the school district board of directors and district superintendent, or private school board of directors and principal, in accordance with the board of health rules {WAC 246-366-040(2)(b)}. Private school reports should be sent to the top administrator (usually the principal). In addition, it is highly recommended the report be copied to the school district or private school contact person, since this will be the person who will be responsible for working with the health official and addressing the items noted in the report. These details should be worked out at the first meeting between the school district or private school and the health official so there are no "surprises" to the school district or private school.

9. Follow-Up Reports

At a subsequent inspection, previous items identified as needing correction should be reviewed. A follow-up report should recognize the school's progress on each issue they have corrected or addressed as well as noting areas which still do not conform to established regulations or recommendations. Timelines may need to be revised by the school with input from the LHJ on priority items for matters that have not been corrected. In this way, the health official's reports may be of assistance to school staff in presenting funding needs to school decision-makers and others.

10. Continue Collaboration

It is important to develop trust, increase the level of communication between the LHJ and school personnel, share technical expertise, and prioritize areas for correction and improvement. In addition to performing regular inspections, establishing School Advisory Committees to work through issues and establish collaboration and finding opportunities for collaboration is recommended.

Establish a process to collect updated contacts from schools on an annual basis to ensure communication can easily be maintained.

Recommended Report Format

1. General Introduction

Should describe the focus (general or targeted areas) and purpose of the inspection and cite the authority under which the inspection is being conducted.

2. Report Findings

Describe the problem found by item number in the K-12 Health and Safety Guide/WAC 236-366, where it is located on the premises, and reference the problem to a regulation or recommendation that pertains to it. The findings may be discussed in narrative fashion if desired, with sufficient detail, and avoiding opinion statements.

3. Make Recommendations

Recommendations may be centered around facility repairs and improvements or focus on process and operational suggestions.

4. Prioritize Issues

The LHJ should establish priority items for the school to address and indicate those items in the report. Some items may be requirements and others could be recommendations. Some items may pose risks of serious injury, loss of life, or disability, and should be corrected as soon as possible. Other items may pose a lower risk of health and safety problems but are still important to the health official for prioritizing.

Some items identified during the inspection may have been corrected by the time the report is issued, while other items may be expensive and require long-range planning and funding efforts to resolve.

5. Identify Any Follow-Up Inspection Date

Dates for any follow-up inspection(s) should be set for documenting progress on the items identified on the inspection report.

Appendix C: Who's Who in School Environmental Health

The following agencies, organizations, and professionals are concerned with school health and safety.

Oversight Agencies

Washington State Board of Health (SBOH)

The SBOH develops and promotes policies that prevent disease and protect public health. They are responsible for making and updating rules on school environmental health and safety in the state.

Washington State Building Code Council (SBCC)

The SBCC assures that the State Building Code Act is implemented. It is responsible for the review, revision, and development of the State Building Code. The State Building Code (RCW 19.27 and WAC 51) includes the fire, energy conservation, building, plumbing, mechanical, and wildland-urban interface codes.

Sovereign Tribal Nations

Some Tribes have health departments or districts that address health issues in Tribal schools. While Washington state regulations do not apply to schools facilitated by Tribes or schools that are the subjects of state-tribal education compacts (STECs), Tribes may choose to follow the rules set forth for public and private schools in Washington State.

State Agencies

Washington State Board of Education (SBOE)

The SBOE is composed of officials elected by school district board members. The Board's responsibilities include establishing minimum standards for education and certification. Private schools in Washington must be approved by the SBOE, which involves inspection for compliance with the SBOH school environmental health and safety rules.

Washington State Department of Health (DOH)

Within DOH, the Office of Environmental Health and Safety is responsible for carrying out the powers and duties of the Secretary of the Department of Health in relation to environmental health in schools. These functions include guidelines and regulation development, technical consultation, training, evaluation, and investigation.

Washington State Office of Superintendent of Public Instruction (OSPI)

OSPI is the primary agency charged with overseeing public K–12 education in Washington state. Working with the state's 295 public school districts and 6 state-tribal education compact schools, OSPI allocates funding and provides tools, resources, and technical assistance. This includes policy and funding related to construction and maintenance of Washington state's school buildings and facilities, guidance for health, nutrition, and physical education services.

OSPI School Facilities Technical Advisory Committee (TAC)

The TAC provides guidance to OSPI on school construction, modification, and maintenance issues. Members are appointed by OSPI and include representatives from various organizations and industries involved with the construction and preservation of schools.

Washington State Department of Labor and Industries (L&I)

L&I promulgates regulations and standards to provide a safe working environment for all employees within Washington state. L&I may visit school facilities to investigate staff complaints regarding unsafe or unhealthy work situations. Their role is specific to protection of school staff, but creation of a safe work environment for staff is likely to also promote health and safety for school children in attendance. They are also available to provide consultation upon request.

Washington State Department of Ecology (ECY)

ECY promulgates regulations that govern the safe use, storage, and disposal of hazardous waste, including chemicals used for teaching. These regulations directly impact how chemicals can be safely used in school spaces such as classrooms and custodial closets.

Washington State Fire Marshal

The fire marshal is responsible for inspecting school facilities for compliance with the state and local fire codes. New plans may be reviewed by the local or state fire marshal and/or the building official, depending on the jurisdiction.

Regional, County, and Local Agencies and Organizations

Local Health Jurisdictions (LHJs)

The local health jurisdiction, under the leadership of their Health Officer, employs environmental health specialist(s) with the responsibility for reviewing school facility plans and conducting periodic school inspections to ensure compliance with health and safety regulations.

Educational Service Districts (ESDs)

The ESDs provide cooperative and informal services to local school districts as they work to attain a safe and healthy school environment. ESDs typically provide the following staff:

School Nurse Corps (SNC) Administrators

SNC Nurse Administrators provide training, mentoring, consultation, technical assistance, and professional development for nurses and administrators in all school districts. Additionally, the School Nurse Corps provides direct school nurse staffing support to small, rural school districts.

Risk Managers and Safety Officers

The Risk Manager or Safety Officer is primarily responsible for the prevention and management of insurance claims and for assuring compliance with safety requirements.

School Districts

School Districts typically have the following:

School District Board of Directors

The board of directors consists of elected members of the community who determine and adopt written policies for the development and implementation of programs, activities, services, or practices within their district.

School Nurses

School nurses provide clinical services, numerous health screenings, and health education services to students. School nurses are often the first to confront health-related issues such as outbreaks and potential exposures within a school.

Professional Associations and Organizations

These associations and organizations advance the perspectives and concerns of their members to inform and influence policy and decision makers on issues associated with health and safety:

Washington State Association of School Business Officials (WASBO)

WASBO is the professional association for risk managers and other school business officials.

Washington Association of School Administrators (WASA)

WASA is the professional association for school administrators such as superintendents.

Washington State School Directors' Association (WSSDA)

WSSDA is the association serving school board members.

Association of Washington School Principals (AWSP)

AWSP is the association serving school principals and vice principals.

Washington Association of Maintenance and Operation Administrators (WAMOA)

WAMOA is the professional association for school facility directors and maintenance supervisors.

Washington Education Association (WEA)

WEA represents public school teachers in Washington.

Washington State Parent Teacher Association (PTA)

The WSPTA represents students and their parents.

Appendix D: Questions and Answers about School Environmental Health and Safety

What Is the Historical Basis of the State Board of Health School Regulations and Local Health Jurisdictions?

The SBOH regulations that govern environmental hazards in schools date back to at least 1955, with earlier rules on school sanitation. The health officer's role in regulating the child's environment is similar to the role in food service establishments and water recreation facilities, except that schools are not required to have permits and cannot be closed unless by the health officer in the event of an imminent danger or other emergency.

What Are the Responsibilities of the Local Health Officer?

WAC 246-366 requires the local health officer to review new construction sites, review plans for new construction and modernization, conduct pre-occupancy inspections, perform routine inspections of all K-12 public and private schools, and address complaints related to student health and safety. For routine inspections, the regulations direct the local health officer to review classrooms and high-risk environments (e.g., shops, science labs, playgrounds, physical education, art, etc.). After the routine inspection, the local health officer is to forward a copy of their findings with any required changes and recommendations to the administrator of the inspected school and the local board of education.

What Is the Difference between Requirements and Recommendations?

Regulations that are explicitly stated in the language of WAC 246-366 are required. Guidelines are recommendations. Regulations can be enforced; recommendations cannot.

Do Requirements Impact Child Health More than Recommendations?

No. The recommendations are intended to address the higher risk health issues in many cases.

Are the Regulations Enforceable?

Yes. Under RCW, both the local health officer and the State Secretary of Health have the authority to enforce any rules and regulations of the SBOH that are codified as chapters of the WAC. However, there are no mechanisms provided in WAC 246-366 for administrative enforcement (e.g., fines, closures, etc.); therefore, a civil action must be filed in court to enforce the school regulations. Consequently, enforcement action is rare. Many best practices are based on the results of past litigation cases (e.g., some playground safety standards). The local health officer may call upon the secretary to assist with such an action if needed. The health official should remember that these school review and inspection processes are intended to be collegial and collaborative, and enforcement action should be a last resort.

Are the Recommendations Enforceable?

No. But best practices should not be ignored; not following them can increase liability. Requirements that are codified are enforceable, although the appropriate enforcement authority may not be the health agency.

Are Children Protected by Occupational Standards that Cover the Teachers?

No. Occupational standards (WAC 296-62,64) apply to the employer - adult employee relationship and address the range of work activities to which adults are typically exposed. School children are not in an employer - employee relationship, legally rendering the occupational standards inapplicable and often irrelevant. Environmental health objectives to assure a healthy learning environment are different than those designed to assure a healthy working environment. Many of their important exposures occur in the context of play and recreation. Where many of the concepts in occupational standards are transferable (i.e., science and vocational instruction), the actual standards are sometimes inadequate or inappropriate. Occupational standards were developed exclusively to protect the physically, mentally, and socially mature adult. Pediatric environmental health must serve as the basis for health officer involvement.

What Is Meant by Pediatric Environmental Health?

Pediatric environmental health evaluates physical, chemical, and biological exposures in light of the developmental characteristics of children. These characteristics include competencies (physical dimensions, capabilities, body system development), motivation (why children interact with their environment), and temperament (intensity of interaction with the environment).

What Is the Role of the Health Officer in Relationship to the Department of Labor and Industries (L&I)?

The local health officer is responsible for the public health surveillance of environmental hazards that affect children in school, a learning and recreational environment. L&I is responsible for enforcing occupational hygiene and safety standards to protect adult employees in the working environment including schools. With the exception of the electrical code and classroom portables, L&I has no plan review function. L&I performs a valuable consulting service in industrial hygiene and safety. Schools often use this service. Local health officials should work closely with local L&I consultants in a cooperative relationship. Many of the activities of L&I help to protect children's health.

What Is the Role of the Health Officer Relative to the Fire Marshal?

The state fire code, as enforced by the local fire marshal, addresses fire safety items in greater detail than the health department guidelines and with more statutory authority.

Fire safety items in the health department guidelines may be deferred to the fire marshal to reduce duplication of services. (Issues not relating to fire and explosion such as protecting children from acute poisoning and chronic toxicity are usually health department matters.)

What Is the Role of the Health Officer Relative to the Building Department?

The building official reviews plans for new construction and remodeling for compliance with applicable building, mechanical, and life safety codes and laws during the building permitting process. To determine what is appropriate in each jurisdiction, it is necessary for the health agency and local building department personnel to know what each other's capabilities and constraints are. LHJs should work collaboratively with building departments to provide comments on school projects at the pre-development phase for remodels and new construction. The items marked as relevant to plan review in the Guide should be used to inform LHJ comments. The health officer should initiate communication with the building department in this regard.

How Is the Plan Review Function of the Health Officer Unique?

The health officer's plan review function heavily emphasizes recommendations rather than requirements. To be effective, very early involvement in the planning process is required. Also, some of the new construction activities that should involve a health officer's plan review do not require a permit from the local building department. Finally, many items in the health regulations apply to existing facilities and practices as well as new construction.

When Is Site Approval Required?

Site approval often required when plan review is required. Automatic approval can be granted if all the following conditions are met: no new property is being developed; no buildings are being converted to use for school instruction; no new area of existing property will be covered by a new building, portable, or building expansion; and no significant increases in occupancy are being proposed.

When Is Plan Review Required by the Health Officer?

Plan review is required for new school construction, modernization, major remodels, portables, and playground installations.

How Is the Health Officer's Inspection Function Unique?

The primary focus of a health and safety inspection is education and recommendation. There are no sanctions for a routine enforcement program. Effectiveness depends on the direct communication with the school district board of directors.

How Often Should School Inspections Be Done by the Health Officer?

Previous board of health rules required annual inspections; however, subsequent amendments were made to require them on a “periodic” basis. The health officer is responsible for scheduling and conducting the inspections. The intent of the current rule is that inspections be scheduled often enough to assure that hazards are identified and children’s health is protected.

As working relationships become more coordinated and cooperative with school districts, the frequency may be reduced to every second then every third year, with follow-up inspections and/or well-documented self-inspections filling in between. It is very important that there be documentation of the school districts’ correction of problems from year to year also. If very few or no problems are found after several routine inspections, the health officer may elect to reduce the frequency even further; however, the state school steering committee generally agreed that schools should have a complete inspection by the health department at least every five years. The health officer may elect to maintain or increase inspection frequency when reported problems continue.

Appendix E: Animals in Schools

The purpose of these guidelines is to provide recommendations that will promote health and safety for staff and students when animals are brought into the classroom. Inadequate understanding of animal health and behavior can lead to unnecessary risks for students, staff, and the animals themselves. These guidelines are designed to promote understanding of:

Animals that are not safe to bring into schools.

1. Safety precautions to decrease the risk of animals spreading disease to people, particularly young children as they are at higher risk of infection and serious health outcomes.
    a. Special precautions need to be taken to protect immunocompromised students and staff.
2. Safety precautions for introducing animals into classrooms and other school settings.
    a. Handling of animals by children under 5 years of age should not be allowed.
    b. Animals visiting schools should not be handled by anyone besides their handler.
3. How to properly handle animal wastes and other materials to limit the spread of pathogens, such as bacteria, viruses, and parasites.

I. Animals Which Are UNACCEPTABLE for Schools

A. Wild Animals

Wild animals pose a risk for transmitting zoonotic diseases (diseases which can be transferred from animals to people) and, therefore, are not allowed on school grounds. The behavior of wild animals also tends to be unpredictable. Wild mammals pose a risk for transmitting rabies (WAC 220-450-030).

Exceptions to this recommendation include those instances when wildlife is presented at schools by professionals who have wildlife permits and experience handling them. Because of the high incidence of rabies in bats, raccoons, skunks, and wild carnivores, these animals should not be brought or contained on school grounds under any circumstances (including recently killed animals).

B. Poisonous Animals

Venomous and toxin-producing spiders, insects, reptiles (e.g., snakes and lizards), and amphibians (e.g., frogs) should be prohibited from being brought onto school grounds.

Exceptions to this recommendation include those instances when such animals are presented at schools by professionals who have experience handling such animals. Children should not be allowed to have physical contact with venomous or toxin-producing animals.

C. Wild Canine and Feline-Hybrids

These animals are crosses between a wild canine (e.g., wolf) or wild feline (e.g., ocelot) and a domestic dog or cat, respectively, and may retain traits of wild animals such as aggression and hunting behaviors, especially toward young children. Therefore, they should not be allowed on school grounds.

D. Stray Animals

Stray animals should not be brought onto school grounds because the health and vaccination status of these animals is seldom known.

E. Live Poultry

Live poultry, particularly young birds such as chicks and ducklings, are inappropriate in classrooms due to the high risk of Salmonella contamination and spread and other bacteria such as Campylobacter. Poultry can have these bacteria on their bodies, even when they are healthy and look clean. Live poultry are inappropriate for settings with children less than five years of age. Agricultural education programs with poultry for older students need to follow appropriate health and safety guidelines (See Section O: Animals in Classrooms).

F. Reptiles and Amphibians

Reptiles such as turtles, lizards, snakes, and amphibians (such as frogs) can have Salmonella bacteria on their bodies, even when they are healthy and look clean. The germs also get on the animal's tank and other things the animal touches. Salmonella bacteria on a person's hands can spread to other people and surfaces or infect the handler. Reptiles and amphibians are inappropriate for settings with children less than five years of age.

G. Aggressive Animals

Animals which are bred or trained to demonstrate aggression toward humans and/or animals, or animals which have demonstrated similar aggression in the past, should not be permitted on school grounds. Aggressive, unprovoked, or threatening behavior mandates an animal's immediate removal.

Exceptions may be sentry or canine corps dogs for demonstrations that are under the control of trained military or law enforcement officials.

H. Ferrets

Ferrets are inappropriate for settings with children less than five years of age because of documented aggressive, unprovoked attacks on young children.

II. General Guidelines for Animals in Schools

It is important that animals which are brought onto school grounds or into school buildings be clean and healthy to decrease the risk of transmitting diseases to people, although even animals that are clean and healthy can transmit diseases. Children are more susceptible to many zoonotic diseases and parasites than adults, partly due to a lack of hand washing and the tendency of children to put things into their mouths.

Therefore, animals that are present in school settings should be healthy-appearing, and vaccinated, and treated for parasites as recommended by a veterinarian to decrease the likelihood of the animal transmitting pathogens to staff or students. Visiting animals should be restricted to an area designated by the principal or administrator. Younger animals should be approved by the principal or administrator before visiting.

A. Verified Rabies Vaccination

Evidence of current rabies vaccination is required for all dogs, cats, and ferrets which are brought onto school property for instructional purposes. Dogs and cats under three months of age cannot yet be vaccinated against rabies and should not be handled by children.

B. Health Certificates for Pets

A signed statement by a licensed veterinarian is required stating that the pet is in good health, is current on recommended vaccinations, and receives regular parasite prevention medication. Additionally, dogs, cats, ferrets, and other animals as applicable, must have had a negative fecal exam for internal parasites within the past six months. An animal should be free of external parasites such as fleas, ticks, and mites. Dogs should be housebroken.

III. Proper Restraint of Animals

It is important to have an effective way to control all animals as they may react unpredictably to a school setting due to unfamiliarity, noise, commotion, quantity of people, etc. Fear may cause an animal to attempt to escape or act aggressively in situations which are unusual to them. Appropriate restraint devices and methods will allow the handler to react quickly and prevent harm to students or staff and escape of the animal.

A. Collars and Leashes

Dogs, cats, and ferrets should have a proper collar, harness, and/or leash as appropriate when on school grounds or in the classroom so that they can be easily controlled. Household rope or string is not considered an appropriate restraint. The owner or person responsible for the animal should stay with the animal during its visit to the school. No animal should be allowed to roam unrestrained on school grounds or in the classroom.

B. Pet Birds

Pet birds are not recommended in school. If for some reason they are present, they should never be allowed to fly free in a classroom or be handled by children.

C. Designated Areas

All animals should be restricted to the area designated by the principal or administrator. Animals are not recommended in school cafeterias or other eating areas (unless service animals) but may be allowed at times other than during meals if:

1. Effective partitioning or self closing doors separate the area from food storage or food preparation areas.

2. Condiments, equipment, and utensils are stored in enclosed cabinets or removed from the area when animals are present.

3. Dining areas, including tables, countertops, and similar surfaces, are effectively cleaned before the next meal service.

D. Estrus

Dogs and cats should be determined not to be in estrus ("heat") at the time of the visit.

E. Owl Pellets

Always obtain owl pellets for dissection from reliable supply sources that sterilize them. After dissection, children need to thoroughly wash their hands with warm water and soap, and surfaces used for dissection must be thoroughly cleaned and disinfected.

F. Animal Dissection

Always obtain animals and animal parts for dissection from reliable supply sources. Specimens should not be preserved in formaldehyde. Animals found dead are not appropriate for classroom display or dissection. If a dead animal is brought to school, report it to your local health jurisdiction immediately and do not allow anyone else to touch it.

G. Taxidermy

Preserved/stuffed animals are not to be handled by students. They are preserved with toxic substances including arsenic and mercury. They are also potential allergens Conserve O Gram Volume 2 Issue 3: Arsenic Health and Safety Update (nps.gov).

IV. Special Conditions for Specific Animals

Specific recommendations should be observed for the following animals because of zoonotic diseases that they can carry or because of certain tendencies:

A. Parrots, Parakeets, Budgies, and Cockatiels

Because these birds can transmit psittacosis to people, and have the potential for biting, feather dander, and aerosolization of feather parts and waste, they are not recommended in schools. They should not be handled by children. Birds showing any signs of illness should not be brought to the school. Birds brought to school as temporary visitors need to have clean cages and their wastes contained. Birds permanently housed on school property in cages need to be evaluated by a qualified avian veterinarian prior to being housed on school grounds; this evaluation should include PCR testing for psittacosis and prophylactic treatment if recommended.

B. Ferrets

Ferrets with rabies vaccination and a health evaluation by a veterinarian can be allowed to visit school settings in which there are no children less than 5 years of age, but they must be handled by the person responsible for them. Children should not be allowed to hold ferrets due to the animal's propensity to bite when startled.

C. Reptiles and Amphibians

Because all reptiles and amphibians can carry Salmonella, special precautions should be instituted when school children handle them. Reptiles and amphibians should not be present in school settings in which there are children less than 5 years of age. (No turtles with a carapace length less than four inches are allowed in schools. They are banned for sale or trade.) Immediately after handling a reptile, amphibian, their equipment, or anything in their environment, students should be supervised in washing their hands thoroughly with soap and warm water.

D. Fish

Disposable gloves should be worn when cleaning aquariums. Used tank water should be disposed of in sinks that are not used for food preparation or for obtaining water for human consumption. A custodial sink is preferred.

E. Guide, Hearing, and other Service Dogs and Law Enforcement Animals

These animals should not be prohibited from being on school grounds or in classroom situations. This assumes they are appropriately trained, vaccinated, have past health exams, are well-behaved, and not aggressive.

V. Student Interaction with Animals

Any animal may react aggressively in unfamiliar situations; therefore, student interaction with animals should always be supervised and regulated by a few basic rules.

A. Because increased activity and sudden movements can make animals feel threatened, all student interaction with animals should be highly organized and supervised. Students should be kept in small groups, and rough play or teasing of animals should be avoided to decrease the risk of animal bites.

B. It is recommended that children are not allowed to feed pets directly from their hands.

C. Small animals, such as guinea pigs, hamsters, gerbils, mice, and baby poultry such as chicks or ducklings, should be handled with leather gloves whenever possible. Rabbits do not like to be held and will struggle to free themselves which can cause injury to the rabbit.

D. Children should be prohibited from "kissing" or cuddling animals or having them in close contact with their faces.

E. Education with animals should be used to reemphasize proper hygiene and hand washing recommendations. All children who handle animals, their food, or their habitat should be supervised in washing their hands immediately after with soap and warm water.

F. Animals or their supplies should not be allowed in the vicinity of sinks where children wash their hands; in any area where food is prepared, stored, or served; or in areas used for the cleaning or storage of food utensils or dishes. Animals should also be restricted from nursing stations or sterile and clean supply rooms. Do not allow any animals in sand boxes where children play.

G. Immunocompromised students may be especially susceptible to zoonotic diseases; therefore, special precautions may be needed to minimize the risk of disease transmission to these students. Consultation with the child's parents about precautionary measures is strongly advised.

VI. Cage Cleaning and Handling/Disposal of Animal Wastes While on School Campuses

A. Clean Up of Cages, Aquariums, and Animal Wastes

Children should not be allowed to handle or clean up any form of animal waste (feces, urine, blood, soiled bedding, etc.). Disposable gloves should be worn when cleaning cages and aquariums. Animal wastes should be disposed of in a way to prevent children contacting them, such as in a sealed, plastic bag placed in a trash container with a lid or via the sewage system for feces and aquarium water. Cages and aquariums should be cleaned in sinks that are not used for food preparation or for obtaining water for human consumption. A custodial sink is preferred. Food handlers should not be involved in the cleanup of animal waste.

B. Prohibited Areas

Animal waste should not be disposed of, and visiting animals should not be allowed to defecate in or near areas where children routinely play or congregate (e.g., sandboxes, school playgrounds, etc.).

C. Litter Boxes

Litter boxes for visiting animals should not be allowed in classrooms.

Sources

- Alabama State Department of Public Health
- Washington State Department of Health
- Washington State Department of Agriculture
- NASPHV Animals in Public Settings Compendium