

**WAC 296-45-205 Enclosed spaces.** This section covers enclosed spaces that may be entered by employees. It does not apply to vented vaults if the employer makes a determination that the ventilation system is operating to protect employees before they enter the space. This section applies to routine entry into enclosed spaces in lieu of the permit-space entry requirements contained in chapter 296-809 WAC. If, after the employer takes the precautions given in WAC 296-45-205, 296-45-215, and 296-45-225, the hazards remaining in the enclosed space endanger the life of an entrant or could interfere with an entrant's escape from the space, then entry into the enclosed space must meet the permit-space entry requirements of chapter 296-809 WAC.

Note: Entries into enclosed spaces conducted in accordance with the permit-space entry requirements of chapter 296-809 WAC are considered as complying with this section.

(1) Safe work practices. The employer must ensure the use of safe work practices for entry into, and work in, enclosed spaces and for rescue of employees from such spaces.

(2) Training. Each employee who enters an enclosed space or who serves as an attendant must be trained in the hazards of enclosed space entry, in enclosed space entry procedures, and in enclosed space rescue procedures.

(3) Rescue equipment. Employers must provide equipment to ensure the prompt and safe rescue of employees from the enclosed space.

(4) Evaluating of potential hazards. Before any entrance cover to an enclosed space is removed, the employer must determine whether it is safe to do so by checking for the presence of any atmospheric pressure or temperature differences and by evaluating whether there might be a hazardous atmosphere in the space. Any conditions making it unsafe to remove the cover must be eliminated before the cover is removed.

Note: The determination called for in this subsection may consist of a check of the conditions that might foreseeably be in the enclosed space. For example, the cover could be checked to see if it is hot and, if it is fastened in place, could be loosened gradually to release any residual pressure. An evaluation also needs to be made of whether conditions at the site could cause a hazardous atmosphere, such as an oxygen deficient or flammable atmosphere, to develop within the space.

(5) Removing covers. When covers are removed from enclosed spaces, the opening must be promptly guarded by a railing, temporary cover, or other barrier designed to prevent an accidental fall through the opening and to protect employees working in the space from objects entering the space.

(6) Hazardous atmosphere. Employees cannot enter any enclosed space while it contains a hazardous atmosphere, unless the entry conforms to the permit-required confined spaces standard in chapter 296-809 WAC.

Note: The term "entry" is defined in chapter 296-809 WAC.

(7) Attendants. While work is being performed in the enclosed space, an attendant with first-aid training must be immediately available outside the enclosed space to provide assistance if a hazard exists because of traffic patterns in the area of the opening used for entry. The attendant is not precluded from performing other duties outside the enclosed space if these duties do not distract the attendant from monitoring employees within the space or ensuring that it is safe for employees to enter and exit the space.

Note: See WAC 296-45-215(12) for additional requirements on attendants for work in manholes.

(8) Calibration of test instruments. Test instruments used to monitor atmospheres in enclosed spaces must be kept in calibration and must have a minimum accuracy of + or - 10 percent.

(9) Testing for oxygen deficiency. Before an employee enters an enclosed space, the atmosphere in the enclosed space must be tested

for oxygen deficiency with a direct-reading meter or similar instrument, capable of collection and immediate analysis of data samples without the need for off-site evaluation. If continuous forced air ventilation is provided, testing is not required provided that the procedures used ensure that employees are not exposed to the hazards posed by oxygen deficiency.

(10) Testing for flammable gases and vapors. Before an employee enters an enclosed space, the internal atmosphere must be tested for flammable gases and vapors with a direct-reading meter or similar instrument capable of collection and immediate analysis of data samples without the need for off-site evaluation. This test must be performed after the oxygen testing and ventilation required by subsection (9) of this section demonstrate that there is sufficient oxygen to ensure the accuracy of the test for flammability.

(11) Ventilation and monitoring for flammable gases or vapors. If flammable gases or vapors are detected or if an oxygen deficiency is found, forced air ventilation must be used to maintain oxygen at a safe level and to prevent a hazardous concentration of flammable gases and vapors from accumulating. A continuous monitoring program to ensure that no increase in flammable gas or vapor concentration above safe levels occurs may be followed in lieu of ventilation if flammable gases or vapors are initially detected at safe levels.

Note: See the definition of hazardous atmosphere for guidance in determining whether a specific concentration of a substance is hazardous.

(12) Specific ventilation requirements. If continuous forced air ventilation is used, it must begin before entry is made and must be maintained long enough for the employer to be able to demonstrate that a safe atmosphere exists before employees are allowed to enter the work area. The forced air ventilation must be so directed as to ventilate the immediate area where employees are present within the enclosed space and must continue until all employees leave the enclosed space.

(13) Air supply. The air supply for the continuous forced air ventilation must be from a clean source and must not increase the hazards in the enclosed space.

(14) Open flames. If open flames are used in enclosed spaces, a test for flammable gases and vapors must be made immediately before the open flame device is used and at least once per hour while the device is used in the space. Testing must be conducted more frequently if conditions present in the enclosed space indicate that once per hour is insufficient to detect hazardous accumulations of flammable gases or vapors.

Note: See the definition of hazardous atmosphere for guidance in determining whether a specific concentration of a substance is hazardous.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 19-13-083, § 296-45-205, filed 6/18/19, effective 8/1/19; WSR 16-10-082, § 296-45-205, filed 5/3/16, effective 7/1/16. Statutory Authority: RCW 49.17.010, [49.17].040, [49.17].050 and [49.17].060. WSR 98-07-009, § 296-45-205, filed 3/6/98, effective 5/6/98.]