

ASSE/IAPMO/ANSI Series 12000

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ASSE International

Professional Qualifications Standard for the

Health and Safety of Construction and Maintenance Personnel

An American National Standard

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FOREWORD

Professional Qualifications Standard for the Health and Safety of Construction and Maintenance Personnel

This foreword shall not be considered a part of the standard. However, it is offered to provide background information.

ASSE International is a membership organization dedicated to the preservation of public health and safety through the use of proper plumbing, piping and mechanical practices. This is accomplished in the spirit of its century-old motto, "Prevention Rather than Cure."

Although pathological diseases are as old as mankind, the evolving nature of bloodborne pathogens and how they affect pipe trade workers and other construction craftspeople has basically been ignored. While there is an abundance of professional organizations representing various factions of the piping and mechanical fields, ASSE International is one of very few addressing the critical nature of bloodborne pathogens (and other infectious diseases) and the dangerous roles they play throughout our industry.

To address this potentially hazardous situation, ASSE International has developed the voluntary consensus ASSE Series 12000, Professional Qualifications Standard for the Health and Safety of Construction and Maintenance Personnel. This unique standard series sets minimum criteria for the training and certification of pipe trades craftspeople, and other construction and maintenance personnel, on how to safely work in an environment with the potentially deadly diseases that may be present within their worksites.

This standard series addresses the need for all construction and maintenance personnel and employers, especially within the pipe trades, to become proficient in identifying and managing potential situations where they may be exposed to bloodborne pathogens.

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ASSE SERIES 12000 • STANDARD #12001

References

01-1.1 References, Industry Standards and Codes

The following list of references, industry standards and codes is part of the requirements of ASSE Standards 12010, 12020, 12030 and 12040.

AAALAC, *National Research Council Guide for the Care and Use of Laboratory Animals, 8th Edition*

ASHRAE 188, *Prevention of Legionellosis Associated with Building Water Systems*

ASHRAE, *Guideline 12-2000*

ASSE Series 6000, *Professional Qualification Standard for Medical Gas Systems Personnel*

Centers for Disease Control and Prevention, *Biosafety in Microbiological and Biomedical Laboratories, 5th Edition*

Centers for Disease Control and Prevention, *Guidelines for Immunizations*

Centers for Disease Control and Prevention, *Immunization Schedules, <http://www.cdc.gov/vaccines/schedules/>*

IAPMO, *Uniform Plumbing Code, 2009*

IAPMO, *Uniform Mechanical Code, 2009*

IAPMO, *Uniform Swimming Pool, Spa and Hot Tub Code, 2009*

ICC, *International Building Code, 2012*

ICC, *International Fire Code, 2011*

ICC, *International Mechanical Code, 2011*

ICC, *International Plumbing Code, 2011*

ICC, *International Private Sewage Disposal Code, 2011*

ICC, *International Residential Code for One and Two Family Dwellings, 2011*

ICC, *International Swimming Pool and Spa Code, 2012*

NFPA 99, *Health Care Facilities Code, 2012*

NIOSH N-95, *Particulate Filtering Facepiece Respirators*

OSHA 1910, *Occupational Health and Safety Standards*

OSHA 1910,120, *Hazardous Waste Operations and Emergency Response*

OSHA 1910,141, *Sanitation*

OSHA 1910, 1030, *Bloodborne Pathogens*

OSHA *Technical Manual, Section 3, Chapter 7*

United States Department of Labor, *29 CFR 1910.1030*

United States Department of Labor, *29 CFR 1926.21(b)(2)*

United States Department of Labor, *29 CFR 1926.25*

United States Department of Labor, *29 CFR 1926.28*

NOTE: All questions related to applicability shall be directed to the Authority Having Jurisdiction (AHJ).

01-1.2 Abbreviations and Standards Development Organizations

AAALAC Association for Assessment and Accreditation of Laboratory Animal Care International, 5283 Corporate Drive, Suite 203, Frederick, MD 21703

ANSI American National Standards Institute, Inc., 25 W. 42nd Street, 4th Floor, New York, NY 10036

ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers, 1791 Tullie Circle, N.E. Atlanta, GA 30329

ASSE ASSE International, 18927 Hickory Creek Dr, Suite 220, Mokena, IL 60448

CDC Centers for Disease Control and Prevention, 1600 Clifton Rd, Atlanta, GA 30333

CSA Canadian Standards Association, 8501 East Pleasant Valley Road, Cleveland, OH 44131

EPA Environmental Protection Agency, 1200 Pennsylvania Ave, Washington, DC 20460

IAPMO	International Association of Plumbing and Mechanical Officials, 5001 E. Philadelphia Street, Ontario, CA 91761
ICC	International Code Council, 500 New Jersey Ave, 6th floor, Washington, DC 20001
NFPA	National Fire Protection Association, P.O. Box 9101, 1 Batterymarch Park, Quincy, MA 02269
NIOSH	National Institute for Occupational Safety and Health, see CDC
NSF	NSF International, 789 N. Dixboro Rd, Ann Arbor, MI 48105
OSHA	National Institute for Occupational Safety and Health, 1600 Clifton Rd, Atlanta, GA 30333
US DOL	United States Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, NW, Washington, D.C. 20210
WHO	World Health Organization, Avenue Appia 20, 1211 Geneva 27, Switzerland

ASSE SERIES 12000 • STANDARD #12005

Professional Qualifications Standard for the Health and Safety of the Construction and Maintenance Generalist

5-1.1 Scope

This standard provides general knowledge of pathogens, biohazards and infectious diseases for plumbing, piping, and mechanical systems workers, or any individual who has the potential for exposure to pathogens, biohazards or other potentially infectious material (OPIM), with the objective of providing continuing education. Eligible individuals include any person with an interest in pathogens, biohazards and infectious diseases.

5-1.2 Purpose

The purpose of this standard is to provide minimum criteria, identified by an industry consensus, for construction and maintenance personnel to ensure compliance with the referenced standards in Section 5-1.4.

5-1.3 Limitations

Compliance with this standard in itself shall not constitute compliance with the requirements for the construction and maintenance personnel as defined by ASSE 12010, ASSE 12020, ASSE 12030 or ASSE 12040.

5-1.4 References, Industry Standards and Codes

The references, industry standards and codes listed in ASSE Standard 12001 are a part of this standard.

5-2.1 General Knowledge

5-2.1.1 The individual shall be able to identify and show knowledge of the applicable laws, codes, rules, listing agencies and regulations from the federal, state and local levels pertaining to pathogens, biohazards and infectious disease.

5-2.1.2 The individual shall be able to identify and describe the basic concepts pertaining to:

- a) Appropriate method for recognizing tasks and activities which may involve exposure
- b) Criteria for the selection, use, cleaning, maintenance, storage, disposal and limitations of personal protective equipment (PPE)
- c) Cryptosporidium
- d) Emergency procedures involving pathogens or OPIM
- e) Employer responsibilities
- f) Epidemiology of pathogens, biohazards and infectious disease
- g) Explanation of an exposure control plan
- h) Exposure protocols
- i) Fecal coliform and Escherichia coli (E. coli)
- j) Fecal indicators (Enterococci or coliphage)
- k) Giardia lamblia
- l) Hepatitis B
- m) Hepatitis B vaccine (HBV) protocols
- n) Hepatitis C
- o) Legionnaires Disease
- p) Modes of transmission of pathogens, biohazards and infectious diseases
- q) Mold
- r) Naegleria Fowleri (brain eating amoeba)
- s) Post exposure protocols
- t) Sign and labeling regulations
- u) Total coliforms
- v) Use and limitation of proper work practice protocols
- w) Viruses