# **Occupational Health and Safety Specialists and Technicians**

## Summary



Occupational health and safety specialists and technicians collect data on and analyze many types of work environments and work procedures.

Quick Facts: Occupational Health and Safety Specialists and Technicians					
2019 Median Pay	\$70,480 per year \$33.88 per hour				
Typical Entry-Level Education	See How to Become One				
Work Experience in a Related Occupation	None				
On-the-job Training	See How to Become One				
Number of Jobs, 2018	117,900				
Job Outlook, 2018-28	6% (As fast as average)				
Employment Change, 2018-28	7,500				

## What Occupational Health and Safety Specialists and Technicians Do

Occupational health and safety specialists and technicians collect data on and analyze many types of work environments and work procedures.

#### **Work Environment**

Occupational health and safety specialists and technicians work in a variety of settings, such as offices or factories. Their jobs often involve considerable fieldwork and travel. Most work full time.

## How to Become an Occupational Health and Safety Specialist or Technician

Occupational health and safety specialists typically need a bachelor's degree in occupational health and safety or in a related scientific or technical field. Occupational health and safety technicians typically enter the occupation through one of two paths: on-the-job training or postsecondary education, such as an associate's degree or certificate.

## <u>Pay</u>

The median annual wage for occupational health and safety specialists was \$74,100 in May 2019.

The median annual wage for occupational health and safety technicians was \$51,550 in May 2019.

## Job Outlook

Overall employment of occupational health and safety specialists and technicians is projected to grow 6 percent from 2018 to 2028, about as fast as the average for all occupations. Specialists and technicians will be needed in a wide variety of industries to ensure that employers adhere to both existing and new regulations.

Explore resources for employment and wages by state and area for occupational health and safety specialists and technicians.

# **Similar Occupations**

Compare the job duties, education, job growth, and pay of occupational health and safety specialists and technicians with similar occupations.

## More Information, Including Links to O\*NET

Learn more about occupational health and safety specialists and technicians by visiting additional resources, including O\*NET, a source on key characteristics of workers and occupations.

# What Occupational Health and Safety Specialists and Technicians Do



Occupational health and safety specialists inspect workplaces for adherence to regulations on safety,

health, and the environment.

Occupational health and safety specialists and technicians collect data on and analyze many types of work environments and work procedures. Specialists inspect workplaces for adherence to regulations on safety, health, and the environment. Technicians work with specialists in conducting tests and measuring hazards to help prevent harm to workers, property, the environment, and the general public.

#### **Duties**

Occupational health and safety specialists and technicians typically do the following:

- Inspect, test, and evaluate workplace environments, equipment, and practices to ensure that they follow safety standards and government regulations
- Prepare written reports on their findings
- Design and implement workplace processes and procedures that help protect workers from hazardous work conditions
- Evaluate programs on workplace health and safety
- Educate employers and workers about workplace safety by preparing and providing training programs
- Demonstrate the correct use of safety equipment
- · Investigate incidents and accidents to identify what caused them and how they might be prevented

Occupational health and safety specialists examine the workplace for environmental or physical factors that could affect employee health, safety, comfort, and performance. They may examine factors such as lighting, equipment, materials, and ventilation. Technicians may check to make sure that workers are using required protective gear, such as masks and hardhats.

Some develop and conduct employee safety and training programs. These programs cover a range of topics, such as how to use safety equipment correctly and how to respond in an emergency.

## Work Environment



Occupational health and safety technicians often work with complex equipment to test and evaluate workplace environments and equipment.

Occupational health and safety specialists held about 98,000 jobs in 2018. The largest employers of occupational health and safety specialists were as follows:

Government	22%
Manufacturing	16
Construction	10
Management, scientific, and technical consulting services	6
Hospitals; state, local, and private	4

Occupational health and safety technicians held about 19,900 jobs in 2018. The largest employers of occupational health and safety technicians were as follows:

Manufacturing	18%
Government	14
Construction	11
Management, scientific, and technical consulting services	7
Hospitals; state, local, and private	5

Occupational health and safety specialists and technicians work in a variety of settings, such as offices or factories. Their jobs often involve considerable fieldwork and travel. They may be exposed to strenuous, dangerous, or stressful conditions. They use gloves, helmets, respirators, and other personal protective and safety equipment to minimize the risk of illness and injury.

#### **Work Schedules**

Most occupational health and safety specialists and technicians work full time. Some may work weekends or irregular hours in emergencies.

## How to Become an Occupational Health and Safety Specialist or Technician



Specialists and technicians carry out and evaluate programs on workplace safety and health.

Occupational health and safety specialists typically need a bachelor's degree in occupational health and safety or in a related scientific or technical field. Occupational health and safety technicians typically enter the occupation through one of two paths: on-the-job training or postsecondary education, such as an associate's degree or certificate.

#### **Education**

Occupational health and safety specialists typically need a bachelor's degree in occupational health and safety or a related scientific or technical field, such as engineering, biology, or chemistry. For some positions, a master's degree in industrial hygiene, health physics, or a related subject is required. In addition to science courses, typical courses include ergonomics, writing and communications, occupational safety management, and accident prevention.

Employers typically require technicians to have at least a high school diploma. High school students interested in this occupation should complete courses in English, mathematics, chemistry, biology, and physics.

Some employers prefer to hire technicians who have earned an associate's degree or certificate from a community college or vocational school. These programs typically take 2 years or less. They include courses in respiratory protection, hazard communication, and material-handling and storage procedures.

#### **Important Qualities**

Ability to use technology. Occupational health and safety specialists and technicians must be able to use advanced technology. They often work with complex testing equipment.

Communication skills. Occupational health and safety specialists and technicians must be able to communicate safety instructions and concerns to employees and managers. They frequently prepare written reports and prepare and deliver safety training to other workers.

Detail oriented. Occupational health and safety specialists and technicians need to understand and follow safety standards and complex government regulations.

**Physical stamina.** Occupational health and safety specialists and technicians must be able to stand for long periods and be able to travel regularly. Some work in environments that can be uncomfortable, such as tunnels or mines.

**Problem-solving skills.** Occupational health and safety specialists and technicians must be able to solve problems in order to design and implement workplace processes and procedures that help protect workers from hazardous conditions.

## Licenses, Certifications, and Registrations

Although certification is voluntary, many employers encourage it. Certification is available through several organizations, depending on the field in which the specialists work. Specialists must have graduated from an accredited educational program and have work experience to be eligible to take most certification exams. To keep their certification, specialists usually are required to complete periodic continuing education.

Occupational safety and health specialists and technicians can earn professional certifications including the following:

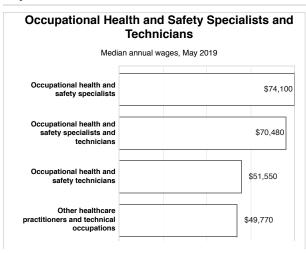
- The <u>Board of Certified Safety Professionals</u> offers the following certifications:
  - Certified Safety Professional (CSP) certification
  - Associate Safety Professional (ASP)
  - o Occupational Health and Safety Technologist (OHST)
  - o Construction Health and Safety Technician (CHST)
- The <u>American Board of Industrial Hygiene</u> awards a certification known as a Certified Industrial Hygienist (CIH)

#### **Training**

Occupational health and safety technicians usually receive on-the-job training. They learn about specific laws and inspection procedures, and learn to conduct tests and recognize hazards. The length of training varies with the employee's level of experience, education, and industry in which he or she works.

Some technicians enter the occupation through a combination of related work experience and training. They may take on health and safety tasks at the company where they are employed. For example, an employee may volunteer to complete annual workstation inspections for an office in which he or she already works.

## Pay





The median annual wage for occupational health and safety specialists was \$74,100 in May 2019. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$43,630, and the highest 10 percent earned more than \$111,130.

The median annual wage for occupational health and safety technicians was \$51,550 in May 2019. The lowest 10 percent earned less than \$32,830, and the highest 10 percent earned more than \$89,720.

In May 2019, the median annual wages for occupational health and safety specialists in the top industries in which they worked were as follows:

Manufacturing	\$74,820
Hospitals; state, local, and private	74,600
Management, scientific, and technical consulting services	73,210
Government	72,870
Construction	72,840

In May 2019, the median annual wages for occupational health and safety technicians in the top industries in which they worked were as follows:

Construction	\$58,340
Government	51,030
Manufacturing	50,080
Management, scientific, and technical consulting services	46,390
Hospitals; state, local, and private	43,350

Most occupational health and safety specialists and technicians work full time. Some may work weekends or irregular hours in emergencies.

#### Job Outlook



Employment of occupational health and safety specialists is projected to grow 6 percent from 2018 to 2028, about as fast as the average for all occupations. Employment of occupational health and safety technicians is projected to grow 7 percent from 2018 to 2028, faster than the average for all occupations.

Specialists and technicians will be needed to work in a variety of industries and government agencies to ensure that employers are adhering to both existing and new regulations. In addition, specialists will be necessary because insurance costs and workers' compensation costs have become a concern for many employers and insurance companies. An aging population is remaining in the workforce longer than past generations did, and older workers usually have a greater proportion of workers' compensation claims.

#### Job Prospects

Applicants for jobs as occupational health and safety specialists or technicians with a background in the sciences, experience in more than one area of health and safety, or certification will have the best prospects

## Employment projections data for occupational health and safety specialists and technicians, 2018-28

	soc	Employment,	Projected Employment,	iected Employment. Change, 2018-28		Employment by	
Occupational Title	Code	2018		Percent	Numeric	Industry	
Occupational health and safety specialists and technicians	29-9010	117,900	125,400	6	7,500	Get data	

	soc	Employment,	Projected Employment,	Change, 2018-28		Employment by	
Occupational Title	Code	2018		Percent	Numeric		
Occupational health and safety specialists	29-9011	98,000	104,000	6	6,000	Get data	
Occupational health and safety technicians	29-9012	19,900	21,400	7	1,500	<u>Get data</u>	

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

## State & Area Data

## **Occupational Employment Statistics (OES)**

The Occupational Employment Statistics (OES) program produces employment and wage estimates annually for over 800 occupations. These estimates are available for the nation as a whole, for individual states, and for metropolitan and nonmetropolitan areas. The link(s) below go to OES data maps for employment and wages by state and area.

- Occupational health and safety specialists
- Occupational health and safety technicians

#### **Projections Central**

Occupational employment projections are developed for all states by Labor Market Information (LMI) or individual state Employment Projections offices. All state projections data are available at <a href="https://www.projectionscentral.com">www.projectionscentral.com</a>. Information on this site allows projected employment growth for an occupation to be compared among states or to be compared within one state. In addition, states may produce projections for areas; there are links to each state's websites where these data may be retrieved.

## CareerOneStop

CareerOneStop includes hundreds of <u>occupational profiles</u> with data available by state and metro area. There are links in the left-hand side menu to compare occupational employment by state and occupational wages by local area or metro area. There is also a <u>salary info tool</u> to search for wages by zip code.

# **Similar Occupations**

This table shows a list of occupations with job duties that are similar to those of occupational health and safety specialists and technicians.

	OCCUPATION	JOB DUTIES	ENTRY-LEVEL EDUCATION	2019 MEDIAN PAY
	Construction and Building Inspectors	Construction and building inspectors ensure that construction meets building codes and ordinances, zoning regulations, and contract specifications.	High school diploma or equivalent	\$60,710
	Environmental Scientists and Specialists	Environmental scientists and specialists use their knowledge of the natural sciences to protect the environment and human health.	Bachelor's degree	\$71,360
A P	Fire Inspectors	Fire inspectors examine buildings in order to detect fire hazards and ensure that federal, state, and local fire codes are met.	See How to Become One	\$60,230
	Health and Safety Engineers	Health and safety engineers combine knowledge of engineering and of health and safety to develop procedures and design systems to protect people from illness and injury and property from damage.	Bachelor's degree	\$91,410
i dent	Environmental Science and Protection Technicians	Environmental science and protection technicians monitor the environment and investigate sources of pollution and contamination.	Associate's degree	\$46,540

## **Contacts for More Information**

For more information about credentialing in industrial hygiene, visit

American Board of Industrial Hygiene

For more information about occupations in safety, a list of safety and related academic programs, and credentialing, visit

**Board of Certified Safety Professionals** 

For more information about occupational health and safety, visit  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)

Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (NIOSH)

To find job openings for occupational health and safety positions in the federal government, visit

**USAJOBS** 

## CareerOneStop

For a career video on occupational health and safety specialists, visit

Occupational Health and Safety Specialists

## O\*NET

Occupational Health and Safety Specialists

Occupational Health and Safety Technicians

## Suggested citation:

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