



ECO CANADA

Environmental Careers Organization



# Careers in Environmental Health and Safety

Current Job Trends and Future Growth

2 0 1 4

Canada

Funded by the Government of Canada's Sector Council Program

## ECO CANADA

ECO Canada develops programs that help individuals build meaningful environmental careers, provides employers with resources to find and keep the best environmental practitioners, and informs educators and governments of employment trends to ensure the ongoing prosperity of Canada's growing environmental sector.



## LABOUR MARKET RESEARCH

ECO Canada Labour Market Research investigates current environmental skill and labour trends within the environmental profession and provides up-to-date, timely and relevant insights that can be applied in policy, business, and educational contexts. The complete collection of reports is available at [eco.ca](http://eco.ca).

## ACKNOWLEDGMENTS

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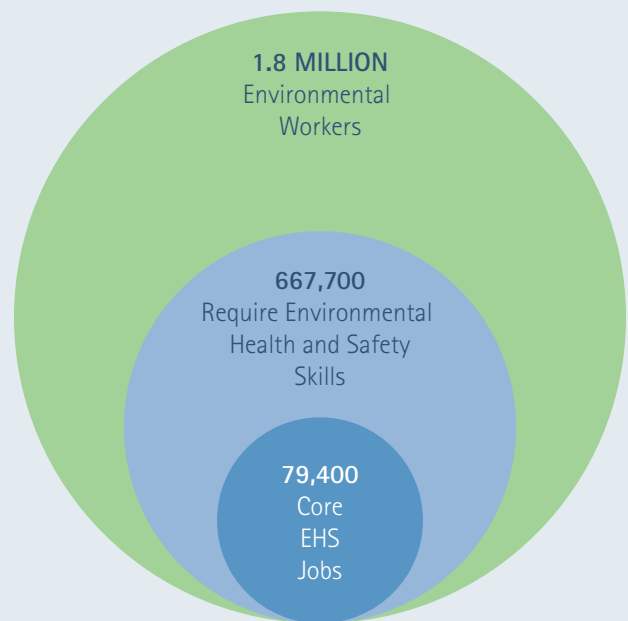
Finally, this research would not have been possible without the participation of the thousands of individuals who contributed their time to speak with researchers and complete the survey.



## FOREWORD

There are many well-established links between the environment and the fields of safety (controlling hazards and risks that can cause injuries) and health (protecting people from risk factors that can lead to health problems or illness). The quality of the natural and built environment determines health problems and, conversely, the implementation of health and safety procedures and protections often has environmental protection goals. For example, training on the safe movement of hazardous materials prevents worker injuries and environmental contamination that can occur as a result of spills of toxic chemicals. These linkages have supported the growth of environmental health and safety (EHS) as a well-recognized field of work with many different applications and specializations.

**Figure 1**  
Environmental Health and Safety Core Occupations, Jobs Requiring Environmental Health and Safety Skills and Knowledge, and Total Environmental Workers



Source: The number of environmental workers was taken from ECO Canada's 2013 *Survey of Environmental Employers*. Core jobs were extrapolated from an analysis of job vacancies and Statistics Canada's 2011 *National Household Survey*. Analysis by the author.

Many different types of workers at all levels of an organization require environmental health and safety (EHS) skills and knowledge. EHS specialists such as process safety engineers, occupational hygienists, food safety inspectors, and health physicists apply technical knowledge of safety hazards, health risks, and dangers to the environment to prevent workplace injuries and illnesses, as well as ensure public safety. Senior executives in Canada are personally liable for the health and safety of the workers that are under their direction, so many executives require EHS skills and knowledge related to the risks in their workplace. Workers in lower-skilled jobs such as labourers in forestry, oil and gas, manufacturing, or construction, often require health, safety, and the environmental knowledge to perform their work safely while protecting the environment. As organizations take a systematic approach to environmental health and safety, the requirement for EHS knowledge and skills is becoming more widespread, leading to a growing number of human resource

professionals who manage environmental health and safety training and compliance matters.

Canada's environmental health and safety labour force includes (1) core environmental health and safety occupations for practitioners who work mainly in the field of environmental health and safety, as well as (2) workers who require some environmental health and safety skills and knowledge. In 2013, Canada had an estimated 1.8 million workers who used environmental skills as part of their work activities.<sup>1</sup> Environmental health and safety knowledge and skills were required by about 37.1% of these workers (667,671 workers) who applied this information to perform a diverse range of activities related to occupational health and safety, public health and safety, transportation health and safety, and other areas. This report focuses on core occupations in environmental health and safety, a subset of approximately 79,400 workers in Canada.



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<sup>1</sup> Source: ECO Canada, *Survey of Environmental Employers*, 2013.

# RESEARCH FINDINGS

**Figure 2**  
Top Core Occupations in Environmental Health and Safety

Occupational Health and Safety Specialist, Coordinator, Manager, or Senior Manager	Environmental Health and Safety Consultant / Advisor	Environmental Health and Safety Trainer	Occupational Hygienist / Industrial Hygienist / OHS Technician
<p>Most OHS specialists are employed in industry. They manage workplace safety programs and worker safety regulatory compliance. Work duties vary based on the types of hazards present in the workplace.</p>	<p>EHS consultants perform work similar to an occupational health and safety specialist, but do so on a consulting basis, either for a project or ongoing. Many EHS consultants are specialists in particular types of hazards.</p>	<p>EHS trainers deliver a variety of types of EHS training including standardized training (e.g. HAZWOPR), worker onboarding training, remedial &amp; refresher training for workers, mandated safety training programs (incl. manager training), customized safety training (for site specific hazards) and other training.</p>	<p>Occupational hygienists and technicians manage health risks in the workplace and also perform safety management duties. They apply advanced scientific and technical skills to assess workplace hazard exposure risk and implement controls to protect workers.</p>
Public Health Inspector / Environmental Officer	Community Nurse, Public Health Nurse, and Occupational Health Nurse	Environmental Health and Safety Attorney	Safety Engineer
<p>Public health inspectors and environmental officers administer and enforce provincial EHS legislation through inspections and investigations and also provide other types of technical support to help employers provide safe and healthy public services.</p>	<p>Community and public health nurses implement public health service delivery approaches as either a generalist, with practice based on geographic location (e.g. neighbourhood nursing), or as a specialist, with practice focused on a particular health issue (e.g. sexual health, post partum care, etc.).</p>	<p>EHS attorneys assist in crafting policies and regulations governing public health standards, work as advocates for patients or injured workers, pursue lawsuits against organizations that violate public health standards, manage workplace injury claims (in some cases within a unionized environment), or work in related practice areas.</p>	<p>Safety engineers apply technical analysis skills to prevent unexpected releases of toxic, reactive, or flammable chemicals through Process Safety Management practices. They design features of structures or systems that incorporate safety and environmental protection standards. They also perform safety inspections, and other duties.</p>
Other Selected Specialists in Environmental Health and Safety			
<ul style="list-style-type: none"> <li>• Actuary / risk analyst (insurance)</li> <li>• Analytical chemist</li> <li>• Biohazard scientist / engineer</li> <li>• Biostatistician</li> <li>• Construction infection control manager</li> <li>• Construction inspector (safety)</li> <li>• Disability and worker compensation specialist</li> <li>• Emergency response manager</li> <li>• Engineering controls/ventilation analyst</li> <li>• Environmental health risk manager</li> <li>• Epidemiologist</li> </ul>	<ul style="list-style-type: none"> <li>• Ergonomics specialist</li> <li>• Fire prevention and security manager</li> <li>• Flood mitigation manager</li> <li>• Health physicist (radiation)</li> <li>• Health risk analyst</li> <li>• Indoor air quality technician/scientist</li> <li>• Industrial process supervisor</li> <li>• Noise and hearing loss prevention specialist</li> <li>• Occupational therapist</li> <li>• Personal protective equipment manager</li> <li>• Radiation technician (ionizing and nonionizing radiation)</li> </ul>	<ul style="list-style-type: none"> <li>• Remediation professional (mould, asbestos, radon, etc.)</li> <li>• Safety auditor</li> <li>• Safety process manager</li> <li>• Safety systems manager</li> <li>• Solid/hazardous waste manager</li> <li>• Thermal stress health assessment analyst</li> <li>• Toxicologist</li> <li>• Water quality inspector</li> <li>• Workplace accident investigator</li> </ul>	

Note: Core occupations determined through expert interviews and analysis of EHS job vacancy advertisements..

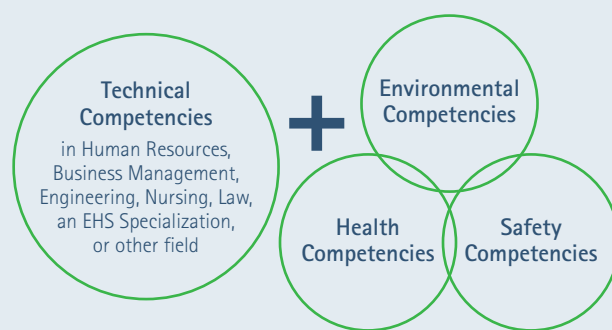
There are approximately 79,400 workers in Canada who are employed in core environmental health and safety (EHS) jobs and the scope of these jobs is diverse.<sup>2</sup> They include jobs for workers who specialize specifically in environmental health and safety management in the workplace or for public health (e.g. an occupational health and safety specialist). They also include jobs that combine occupational technical competencies such as nursing, engineering, or policy development with EHS competencies for jobs (e.g. a community health nurse or process safety engineer). A third group of workers include sub-specialists who have work duties that are linked specifically to certain EHS risks, hazards, or issues. Examples include emergency response managers, toxicologists, health physicists who protect workers from radiation, ergonomists, water quality inspectors, and air quality monitoring technicians. For any particular job, the mix of technical occupational competencies, safety competencies, health competencies, and environmental competencies differs based on the types of hazards and risks present in a specific work or public environment.

There are eight common core EHS occupational categories that comprise a large portion of the EHS job market including (1) occupational health and safety practitioners (specialists, coordinators, managers, and senior managers) who implement workplace safety programs, (2) environmental health and safety consultants (both internal and external) who advise or manage specific EHS issues, (3) EHS trainers, (4) occupational hygiene practitioners, (5) public health inspectors and environmental officers, (6) EHS nursing occupations, (7) legal occupations in EHS, and (8) safety engineers.

Most EHS jobs require environmental knowledge and competencies for the purpose of protecting people's safety and health. Therefore, environmental health and safety practice areas fall into two broad practice areas:

- (1) **Environmental Safety:** Ensuring occupational and public safety
- (2) **Environmental Health:** Preventing environment-related illnesses or health problems

**Figure 3**  
Competencies for EHS Careers



Most practitioners in EHS require competencies in both practice areas, but they specialize in one or the other. The main difference between these fields relates to the type of risks and hazards that are addressed. Workers in environmental safety implement programs to control and protect workers or the public from known environmental safety hazards such as high voltage electricity, falls, or operating mobile heavy equipment. Workers in environmental health assess and recommend controls to mitigate risks that are *less obvious* such as risks of inhalation of dangerous chemicals or dust, loss of hearing from noise exposure, or risks to long-term musculoskeletal tissue due to poor ergonomic designs.

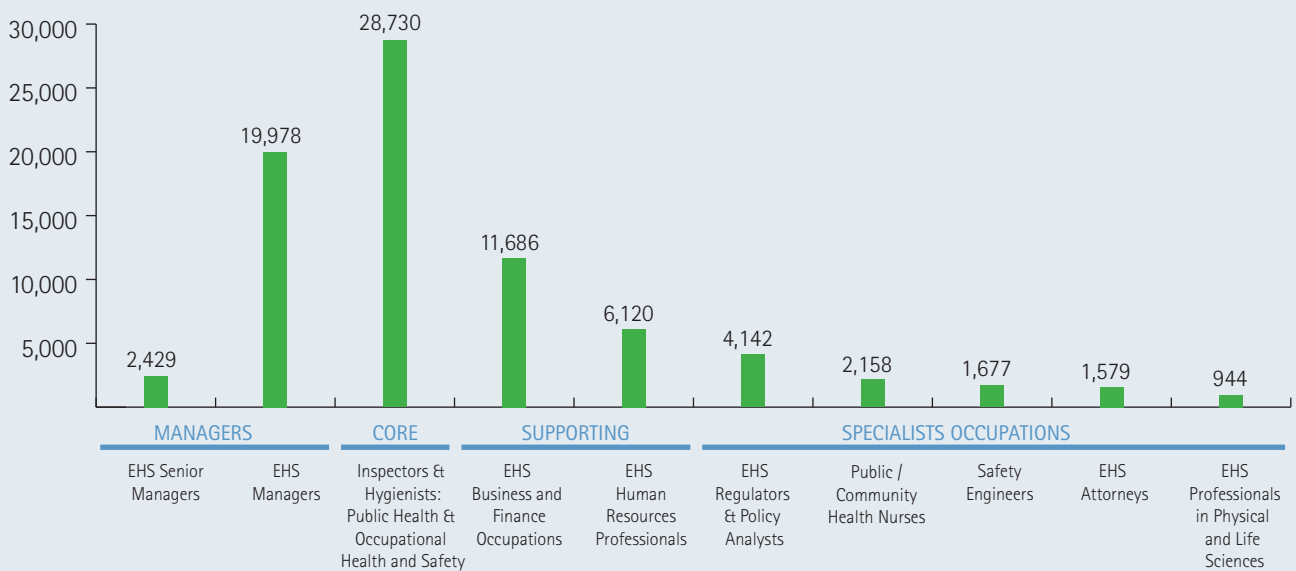
<sup>2</sup> Estimate based on analysis of job vacancy advertisements.

**Table 1**  
Type of Risks and Hazards in Environmental Health and Safety

Environmental Safety	Environmental Health
<p><b>Physical Hazards:</b></p> <ul style="list-style-type: none"> <li>Working at heights</li> <li>Exposure to unguarded or unprotected electrical equipment</li> <li>Wet surface conditions</li> <li>Blocked walkways</li> <li>Working with powered equipment</li> <li>Unguarded machines</li> <li>Overhead hazards</li> <li>Temperature extremes</li> </ul> <p><b>Chemical Hazards:</b></p> <ul style="list-style-type: none"> <li>Flammable and combustible substances</li> <li>Chemical storage and handling</li> <li>Chemical incompatibility</li> </ul> <p><b>Biological Hazards:</b></p> <ul style="list-style-type: none"> <li>Blood or other body fluids or tissue</li> <li>Human or animal waste</li> </ul> <p><b>Psychological Hazards:</b></p> <ul style="list-style-type: none"> <li>Violence in the workplace</li> <li>Work pace, fatigue, overwork and/or underwork effects</li> </ul>	<p><b>Physical Hazards:</b></p> <ul style="list-style-type: none"> <li>Noise and vibration</li> <li>Sustained static postures (ergonomics)</li> <li>Radiation/radon</li> <li>Working in restricted or confined spaces</li> <li>Hazardous energy (lockout/tagout procedures)</li> </ul> <p><b>Chemical Hazards:</b></p> <ul style="list-style-type: none"> <li>Asbestos, lead paint, mercury, and other airborne chemical agents</li> <li>Carcinogenic substances, mutagenic substances, teratogenic substances, and oxidizing substances</li> <li>Hazards in the production of chemicals</li> </ul> <p><b>Biological Hazards:</b></p> <ul style="list-style-type: none"> <li>Fungi / mould</li> <li>Bacterial and viruses</li> <li>Drugs / cytotoxic substances</li> </ul> <p><b>Psychological Hazards:</b></p> <ul style="list-style-type: none"> <li>Psychological distress (stress)</li> <li>Harassment</li> <li>Worker phobias</li> </ul>

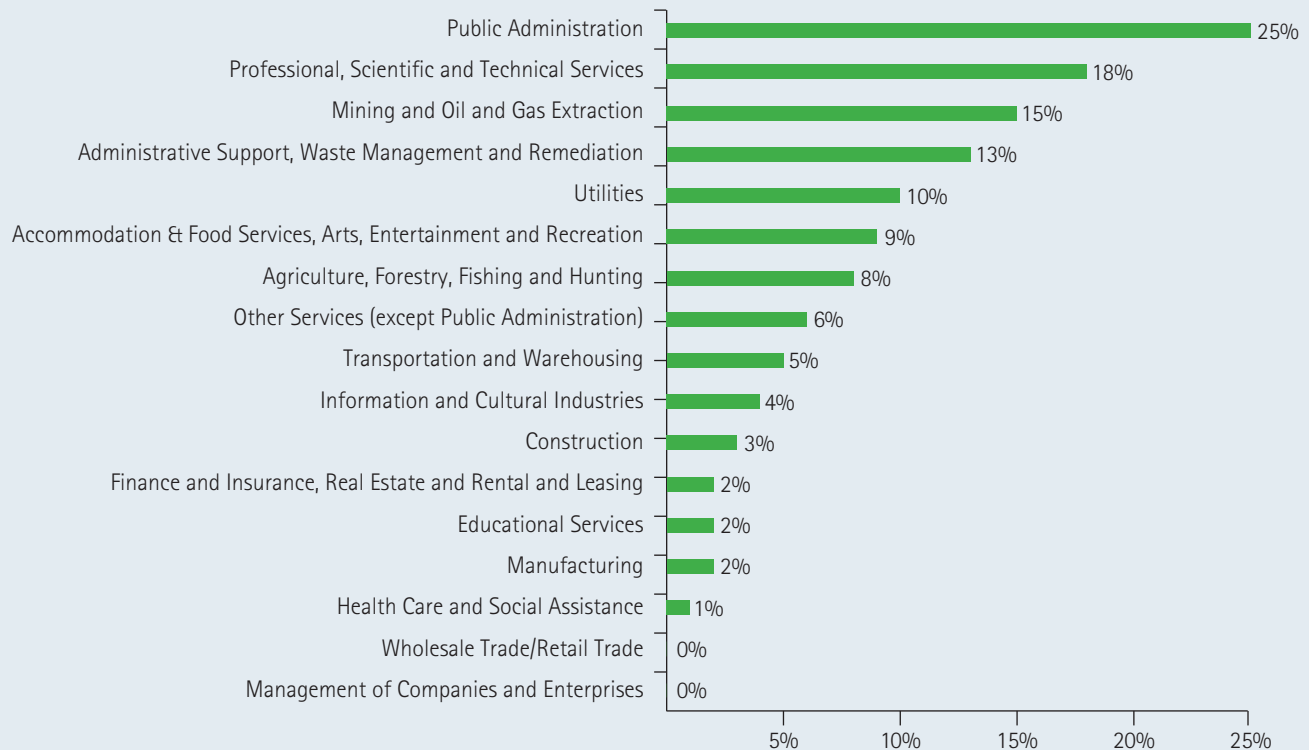
## The EHS Labour Force: Occupations and Employers

**Figure 4**  
Environmental Health and Safety Labour Force by Occupation Category



Sources: Statistics Canada, *National Household Survey*, 2011. ECO Canada, *Job Vacancies Database*, n=7,027, 2013. ECO Canada, *Survey of Environmental Employers*, 2013. Analysis by the author.

**Figure 5**  
 Percentage of Employers that Employ Environmental Health and Safety Workers



Sources: Statistics Canada, *National Household Survey*, 2011. ECO Canada, *Job Vacancies Database*, n=7,027, 2013. ECO Canada, *Survey of Environmental Employers*, 2013. Analysis by the author. This includes workers in occupations outside of the core EHS occupations (e.g. occupations in grounds keeping, food services, construction workers, forestry workers, administrative assistants, etc.). Estimate of non-core EHS occupations is based on ECO Canada's *Survey of Environmental Employers*.

Inspectors in public and environmental health and occupational health and safety comprise a large portion of the core EHS labour force. This segment of workers includes occupational and industrial hygienists and inspectors in public health, workplace safety, food safety and other areas. There were approximately 28,700 workers in these occupations in Canada in 2011. According to the 2006 Census of Canada, a quarter of these workers (28.4%) were employed at federal, provincial, or municipal governments, 14.1% were employed by manufacturers, 11.0% were employed at professional, scientific, or technical services companies in consulting, and 7.7% were employed in oil and gas, mining, or related support activities.

Senior managers, area or business unit managers, human resources professionals, and business professionals are some of the occupations most likely to manage an organization's occupational health and safety (OHS) activities. There are approximately 20,000 managers in Canada with EHS job duties and an estimated 2,400 senior managers in Canada with EHS responsibilities. For many organizations, the human resources department manages occupational safety programs, so there are an estimated 6,100 human resource managers and professionals in Canada with EHS responsibilities.



Compliance with environmental health and safety policy is a key driver of demand for environmental health and safety professionals, and regulatory workers who are policy analysts or policy program managers use environmental health and safety skills to shape policies and programs. Approximately 4,100 applied-science policy researchers, consultants, and program officers require environmental health and safety skills in their work.

## The Job Market for EHS Practitioners

The Environmental Health and Safety sector is Canada's largest environmental sector by total employment and the demand for EHS professionals exceeds the supply of qualified individuals.

- According to the 2006 Census of Canada, there were 20,080 professionals working as inspectors in public and environmental health and occupational health and safety (NOC 2263), a figure that has increased by 43% to 28,730 in 2011, according to the 2011 National Household Survey.
  - In March 2013, there were an estimated 1,004 advertisements for job vacancies in Canada that required environmental health and safety skills, a 16% increase from March 2012.
  - According to our Survey of EHS Employers, 38% of EHS employers had current job openings in July-August 2013 and 59% had job vacancies in the past two years (2011-2013).
  - More than half of EHS employers (58%) reported that they expect their staffing levels to increase in the next two years (2013-2015) and the remainder expected to maintain current staff levels. No employers expected to reduce their EHS staff in the future.
  - Among employers who tried to hire workers in the past two years (2011-2013), 58% experienced hiring difficulties. The most common difficulty was a lack of qualified external applicants (a problem for 87% of hiring employers). Other problems included difficulties recruiting workers to a remote or undesirable location and difficulties recruiting because of the level of compensation offered.
- Several trends will likely spur an increased demand for EHS professionals, including:
- Public concern over safety and health issues.
  - Increasingly stringent legislation, regulation, and code for occupational health and safety, environmental protection, and public health.
  - A move towards a systems approach to address OHS issues, creating a greater need for specialist training on how to manage specific hazards and risks, as well as basic training and knowledge of EHS issues.
  - An increased awareness and concern for EHS issues amongst executives. Bill C-45 Amendments to Canada's Criminal Code places liability for worker health and safety on senior managers.
  - The occurrence of disasters, which drives demand for professionals to ensure environmental health and safety. For instance, staffing levels for CFIA environmental health and safety inspectors have increased by 18% in Canada following the 2008 Listeria outbreak.
  - Introduction of new workplace risks associated with new industrial processes and technology.
  - Increased levels of regulation that require manufacturers to manage health and safety issues related to their products, such as managing their product's lifecycle and related environmental, health, and safety risks.
  - Ongoing research and discovery of new EHS issues. For example, testing and remediation of radon gas in homes is expected to increase in the future as Health Canada launches campaigns to raise awareness of radon-related health risks in homes.
  - General economic growth and resource development projects. More construction-related activity creates demand for EHS professionals).
  - Retirements of EHS practitioners. Nearly 21% of the EHS labour force was over age 55 in 2011.<sup>3</sup>

<sup>3</sup> Source: Statistics Canada, *National Household Survey*, 2011.

## Career Pathways in EHS

There are several pathways to progress into an EHS career, both for young people considering their career options and for mid-career individuals who want to specialize in managing environmental health and safety. EHS jobs are available to workers at all levels of experience.

**Table 2**  
Experience Required for EHS Occupations, Share of All Positions

EHS OCCUPATION/LEVEL	Entry Level Positions	Junior Level Positions (1 to 3 Years of Experience)	Intermediate Level Positions (4 to 7 Years of Experience)	Senior Level Positions (8 or More Years of Experience)
EHS Manager/Director	0%	6%	34%	60%
EHS Coordinator/Advisor/Specialist	1%	15%	24%	59%
EHS Technician	14%	19%	40%	27%
EHS HR Professional	23%	54%	15%	8%
Occupational Hygienist	18%	24%	26%	32%
EHS Engineer	9%	2%	15%	75%
Other EHS Specializations	7%	34%	40%	18%

Source: ECO Canada, *Survey of EHS Employers*, n=114, 2013.

**Table 3**  
Share of Job Vacancy Advertisements by Minimum Degree Requirements, Selected EHS Occupations

OCCUPATION/LEVELS	No Specific Post-Secondary Education	Specific Certification Only	Certificate or Diploma	Trades Certificate	Bachelor's Degree	Experience Only	Master's Degree	Doctoral Degree
EHS Manager/Director	7%	14%	22%	4%	54%	0%	0%	0%
EHS Coordinator/Advisor/Specialist	7%	29%	25%	11%	18%	4%	7%	0%
EHS Technician	20%	0%	40%	0%	40%	0%	0%	0%
EHS HR Professional	20%	0%	40%	0%	40%	0%	0%	0%
Occupational Hygienist	0%	0%	8%	0%	69%	0%	23%	0%
Safety Engineer	0%	0%	17%	0%	58%	0%	25%	0%
Other EHS Specializations	0%	5%	5%	0%	75%	0%	5%	10%

Source: ECO Canada, *Survey of EHS Employers*, n=114, 2013.

The educational requirements for EHS careers can differ by employer for each position.

- Jobs in EHS are open to workers that have educational backgrounds in many fields of study. For workers in regulated occupations such as community health nurses, safety engineers, and environmental health inspectors, provincial regulatory bodies determine the course of study. These typically require a minimum of a bachelor's degree in a specified field of study. Other jobs in environmental health and safety may require post-secondary education in safety, public health, occupational hygiene, occupational health, environmental sciences, chemistry, engineering, business administration, kinesiology, or other science fields.
- In all EHS job categories, the majority of job positions require a minimum of a certificate in health and safety, although a significant number of positions require only a specific safety-training program and some have no specific post-secondary educational requirement beyond a high school diploma.
- A specific certification such as the Canadian Registered Safety Professional (CRSP) or other health and safety certifications, is the only educational requirement for a large portion of jobs for EHS coordinators, advisors, or specialist positions (29% of positions). The same trend is evident for EHS managers and directors (14% of jobs only require a specific safety certification).<sup>4</sup>
- EHS specialists tend to require higher levels of post-secondary education. According to the Survey of Environmental Health and Safety Employers (2013), most jobs in occupational hygiene require a bachelor's degree and nearly one quarter (23%) require a master's degree. Most jobs for engineers and other specialized EHS workers (e.g. emergency response workers, analytical chemists, toxicologists, etc.) require at least a bachelor's degree.

Certifications and professional designations are an important credential for EHS careers and they help support career mobility. Demand for credentials varies by sector and region, however, the most common credentials include the Canadian Registered Safety Professional (CRSP), Certified Safety Professional (CSP), Registered Occupational Hygienist (ROH), Certified Industrial Hygienist (CIH), Certificate in Public Health Inspection (Canada), Certified Community Health Nurse (Canada) (CCHN(C)), Certified Health and Safety Consultant (CHSC), and National Construction Safety Officer (NCSO) Certification.

In addition to the common professional designations and certifications, a large number of certifications apply for EHS professionals who work with particular hazards. Typically, these certifications can be obtained in a short certification course lasting less than a year, or in some cases, a few days. Examples include the Radiation Safety Officer (RSO-1, RSO-2) training, Hazardous Waste Operations and Emergency Response (HAZWOPER) training, Water Damage Restoration Technician (WRT), and Applied Microbial Remediation Technician (AMRT).



<sup>4</sup> Note: Certification requirements do not necessarily imply the requirement for a post-secondary university degree or college diploma. Some professional designations allow applicants to substitute experience for post-secondary educational requirements.

## Environmental Competencies and Training Requirements for EHS Careers

According to the our 2013 Survey of EHS Employers, approximately four out of five environmental health and safety employers have workers who apply the following four common environmental competencies:

1. Presenting expert information on environmental matters (84% of employers have workers requiring these competencies)
2. Analyzing or interpreting environmental samples and data (80%)
3. Collecting samples and data for environmental purposes (79%)
4. Liaising and partnering with stakeholders (82%)

Many employers require environmental competencies, although the specific environmental competencies vary depending on many factors. Overall, employers' training needs reflect the environmental competencies that are most commonly used in today's workforce. The specific environmental competencies differ by occupation and level of management responsibility.

- EHS managers and directors typically require more environmental competencies than EHS specialists, EHS coordinators, and EHS HR managers. In job vacancies for EHS professionals that were posted online between March 2012 and June 2013, EHS managers and directors were more likely to require competencies such as:
  - Corporate environmental program planning and implementation (a stated requirement for 52% of manager/director jobs)
  - Regulatory and enforcement competencies (required for 41% of jobs)
  - Natural resources planning and management (required for 37% of jobs)
  - Environmental business, technology, and product development (required in 33% of jobs)
- At the EHS specialist and advisor level, a smaller portion of jobs require the same environmental skills, but there is greater demand for the following competencies:
  - Environmental education and training competencies (required for 39% of jobs)
  - Regulatory and enforcement competencies (required for 44% of jobs)

- Site assessment competencies (required in 17% of jobs)
- Environmental sampling and analytical competencies (required for 17% of jobs)
- The Canadian Registered Safety Professional (CRSP) designation requires competencies related to eleven broad areas, including three practice areas that have explicit environmental skills and knowledge:
  - Environmental practice competencies (e.g. applying knowledge of the fundamental objectives, principles, and components of an Environmental Management System)
  - Occupational hygiene competencies (e.g. applying knowledge of occupational toxicology and routes of entry of toxic materials into the body)
  - Health and wellness competencies (e.g. understanding the factors that lead to health and wellness (e.g. environmental, genetic, social, economic, physiological, and lifestyle)
- According to the Canadian Registration Board of Occupational Hygienists and Canadian Industrial Hygiene Associations' 2010 Salary Survey, occupational hygienists report that they spend 21% of their time on average on environmental roles, 45% of their time on occupational hygiene roles, and 34% of their time on safety.<sup>5</sup>
- Environmental health (EH) is a branch of public health protection that involves all aspects of the natural and built environments that affect human health. Public health inspectors who work as environmental health officers apply environmental competencies in their work related to food hygiene, insect and rodent control, communicable disease investigation, inspection of public accommodation and community care facilities, quality control at water supply and waste disposal systems, occupational health and safety, and environmental pollution.
- Public health and community health nurses address how political, cultural, and environmental contexts can impact health. Environmental determinants of health include chemical and biological factors, as well as physical and natural settings that can produce hazards, reduce the quality of air, water and soil, pose occupational risks, produce different hygiene and sanitation behaviors, impact housing and road conditions, affect noise, and result in large-scale climate and ecosystem changes.<sup>6</sup>

<sup>5</sup> Source: Canadian Registration Board of Occupational Hygienists and Canadian Industrial Hygiene Associations, *Cross Canada Occupational Hygiene Salary Survey*, 2010.

<sup>6</sup> Source: Canadian Community Health Nursing, *Professional Practice Model and Standards of Practice*, 2011.

## Earnings for Environmental Health and Safety Professionals

According to the Survey of Environmental Health and Safety Employers (2013), the average starting wages for EHS practitioners is \$36,700 for an EHS HR professional, \$39,700 for an EHS technician, \$56,200 for an for EHS coordinator, advisor, or specialist, and \$66,900 for an EHS manager or director.

Many professionals report that entry-level positions often do not offer high wages for workers without prior experience, but wages increase significantly after an individual has at least one year of experience. Compared to entry-level positions, average base salaries are 50% higher or more for workers with five years of experience.

While these averages are a reasonable indicator of wages offered for EHS positions, similar studies of earnings of EHS practitioners indicate that the earnings of EHS professionals span a broad spectrum, in some cases ranging from less than \$50,000 to over \$150,000 for workers at the same experience level.

**Figure 6**

Average Starting Salaries and Salaries for Workers with Five Years Experience by Occupation, 2013

OCCUPATION	Entry Level / New Hire	With Five Years Experience
EHS Manager/Director	\$66,900	\$103,000
EHS Coordinator/Advisor/Specialist	\$56,200	\$86,900
EHS Technician	\$39,700	\$67,300
EHS HR Professional	\$36,700	\$55,000
Occupational Hygienist	\$44,700	\$78,300
EHS Engineer	\$57,900	\$98,600

Source: ECO Canada, *Survey of EHS Employers*, n=65, 2013.

- According to the Board of Canadian Registered Safety Professionals' 2011 Salary Survey, individuals with the CRSP designation earn wages ranging from approximately \$50,000 to over \$150,000.
  - Approximately half (49.2%) of individuals with the CRSP designation have earnings between \$70,000 and \$100,000 per year.
  - Over a third of these workers (37.2%) have annual earnings of over \$100,000 per year and the remaining 13.5% have earnings of less than \$70,000 per year.
  - The petrochemical industry is among the highest-paying industries. Over 70.2% of CRSPs in the petrochemical sector earn more than \$100,000 per year and nearly one out of five CRSPs working in the petrochemical industry earns over \$150,000 per year.
  - The construction sector is also a comparatively high-paying sector with nearly half of workers (49%) earning over \$100,000 per year.
  - Most CRSPs working in government have annual salaries in the \$70,000 to \$100,000 range (67% fall into this range), and average wages in manufacturing are similar although over 28% of CRSPs in manufacturing have earnings of over \$100,000 per year.
- According to the Canadian Registration Board of Occupational Hygienists and Canadian Industrial Hygiene Associations' 2010 Salary Survey, the mean salary for practitioners in this field was \$90,600 per year.<sup>7</sup>
  - The range of salaries is broad. Approximately 15% of occupational hygienists earn less than \$70,000 per year, over 48% of workers earn more than \$100,000, and over 15% earn more than \$120,000.
  - Wages for occupational hygienists increase significantly with additional management responsibility. Average salaries for occupational hygiene practitioners who supervise one to three staff members is slightly higher than the average of \$92,885, but supervisors who oversee four to nine staff members have average salaries of \$100,576 and those supervising a staff of 10 or more have average salaries of \$108,702.

<sup>7</sup> Source: Canadian Registration Board of Occupational Hygienists and Canadian Industrial Hygiene Associations, *Cross Canada Occupational Hygiene Salary Survey*, 2010.

**Table 4**  
Salary Ranges of Canadian Registered Safety Professionals by Sector

SALARY RANGE	Petrochemical	Government	Manufacturing	Construction
<49,999	1.1%	0.0%	2.6%	1.9%
\$50k - \$59,999	1.7%	4.1%	6.8%	4.8%
\$60k - \$69,999	1.1%	12.3%	19.7%	4.8%
\$70k - \$79,999	6.2%	27.5%	17.1%	14.4%
\$80k - \$89,999	6.7%	20.5%	14.5%	14.4%
\$90k - \$99,999	12.9%	19.9%	11.1%	10.6%
\$100k - \$109,999	10.1%	8.2%	14.5%	11.5%
\$110k - \$119,999	12.4%	2.3%	2.6%	12.5%
\$120k - \$129,999	15.7%	2.3%	4.3%	8.7%
\$130k - \$139,999	10.1%	0.6%	1.7%	2.9%
\$140k - \$149,999	2.8%	1.2%	1.7%	1.0%
> \$150k	19.1%	3.4%	3.4%	12.5%

Source: Board of Canadian Registered Safety Professionals, *Salary Survey*, 2011.





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ECO Canada (2014).

*Careers in Environmental Health and Safety: Current Job Trends and Future Growth*

Labour Market Research.

Environmental Careers Organization of Canada.



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