Master of Public Health

Environmental and Occupational Health Concentration
The Department of Environmental & Occupational Health in the Colorado School of Public Health focuses on decreasing and preventing environmental and occupational health hazards through education, research and service. Our programs prepare students to combat the effects of environmental contaminants on human health, the impacts of human activity on the environment and workplace exposures that impact employee wellbeing.

From air pollution and hazardous waste to risk assessment and injury prevention, the Department offers courses and curriculum to meet students’ diverse environmental and occupational interests. The Department offers a Master of Public Health in Environmental and Occupational Health at both the University of Colorado Anschutz Medical Campus and Colorado State University (CSU). The Department also supports the Occupational & Environmental Medicine Residency Program.

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**Master in Public Health Environmental and Occupational Health Concentration**

**Program Overview**

As an environmental and occupational health student you’ll learn to:

- Characterize the human health effects of major environmental and occupational hazards.
- Analyze sources, pathways and routes of exposure to environmental and occupational hazards and determine the populations with a high risk of exposure.
- Prevent and control environmental and occupational hazards and recommend appropriate interventions.
- Identify ethical issues in environmental and occupational health policy and practice.
- Promote sustainable use of resources with concern for environmental justice.
Environmental and occupational health professionals have varied interests including industrial hygiene, workplace safety, exposure science, risk assessment, epidemiology and more broadly, the built environment, urban planning, and health. To be successful in an MPH in environmental and occupational health, applicants should have a background in health or natural sciences with a science GPA of 3.0 or better. Previous coursework in chemistry, biology, statistics, and/or geographic information systems is recommended. Strong analytic and writing skills are desired; one year of professional experience (internships, paid work experience, Peace Corps volunteer) is preferred; and a strong personal statement of career goals related to environmental or occupational health.

Required MPH Core Courses:

- BIOS 6601  Applied Biostatistics I
- EPID 6630  Epidemiology
- EHOH 6614  Introduction to Environmental & Occupational Health
- CBHS 6610  Social and Behavioral Factors & Health
- HSMP 6603  Health Systems Management & Policy
- PUBH 6600  Foundations in Public Health
- PUBH 6606  Practicum
- PUBH 6955  MPH Capstone Project

Required Environmental & Occupational Health Courses:

- EHOH 6618  Environmental Health Policy & Practice
- EHOH 6619  Environmental Exposures & Health Effects

Choose 2 required courses of the following 3 options:
(if taking all 3, the 3rd will be counted as an elective)

- EHOH 6616  Environmental & Occupational Toxicology
- EHOH 6617  Environmental & Occupational Epidemiology
- EHOH 6620  Risk Assessment and Decision Making

Total Program Credits: 42 Hours

To apply for admission: [http://www.sophas.org/](http://www.sophas.org/)

Colorado School of Public Health | Environmental and Occupational Health

http://www.ucdenver.edu/academics/colleges/PublicHealth/departments/EnvironmentalOccupationalHealth/Pages/welcome.aspx
As we continue to face increasing human development environmental and occupational health specialists work to find ways to keep our environments and workplaces healthy and safe. Graduates with a master’s degree in EOH play an essential role in protecting the public from exposures to biological, chemical and physical agents.

Environmental and occupational health encompasses a broad array of factors that can influence our health and the environment in which we live and work. From managing the quality of air, water, and soil to advocating for environmental policy changes and identifying health risks, EOH graduates find solutions to problems that can contribute to asthma, cancer or other diseases in workplaces and communities.

With a master’s degree in environmental and occupational health, graduates are find employment with corporations, hospitals, government agencies, research centers, universities, poison control centers and environmental consulting firms.

**Environmental & Occupational Health Careers**

Recent Environmental & Occupational Health Graduates:

Rachel Hansgen
Rachel has been working with Groundwork Denver following graduation working on a variety of projects looking at environmental relationships to neighborhood level health. Projects include understanding health effects of industrial odors plaguing the Globeville neighborhood and dealing with E.coli contamination in the Bear Creek. Both involve bringing together stakeholders, steering committees, and coordinate volunteer and public education events.

Emily O’Winter
Emily has been working as the Healthy Schools Coordinator for Jefferson County Public Schools in Colorado since graduation. She is working on a variety of program implementation projects, prevention, and health education programs. She had found it is a wonderful way to work in public health, because school environments can have a strong impact on child and adolescent health.

Here are some common job titles in environmental & occupational health:

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<tr>
<th>Agricultural Inspector</th>
<th>Health Physicists</th>
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<tr>
<td>Built Environment Specialist</td>
<td>Industrial Hygienist</td>
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<tr>
<td>Consumer Safety Officer</td>
<td>Loss Prevention Specialist</td>
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<tr>
<td>Environmental Health Policy Analyst</td>
<td>Occupational Health &amp; Safety Specialist</td>
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<tr>
<td>Environmental Protection Officer</td>
<td>Safety &amp; Health Manager</td>
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<tr>
<td>Ergonomist</td>
<td>Sanitary Engineer</td>
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<tr>
<td>Food Safety Specialist</td>
<td>Toxicologist</td>
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CSPH Career Services Information:
http://www.ucdenver.edu/academics/colleges/PublicHealth/careers/prep/Pages/default.aspx
Beyond teaching, our faculty are experts in the field of Environmental and Occupational Health. Faculty are engaged in several research projects and activities including:

- **Beryllium Disease Biorepository (Data Coordinating Center) (DOE)**
- **CBD Worldwide Unrecognized Epidemic: Surveillance, Monitoring and Diagnosis Program (US Israel Binational Science Foundation)**
- **Community Design and Health Healthy Eating by Design Live Well Colorado Evaluation**
- **Health impacts of natural gas development**
- **National Supplemental Screening Program for Former Energy Workers (DOE)**
- **Workplace health, safety and productivity**

Areas of department research and academic interest include agricultural health and safety; air pollution; chronic beryllium disease; environmental health law and policy; ergonomics; industrial hygiene; and oil and gas activities.
The environmental and occupational health faculty are dedicated to helping students find career opportunities post graduation. Students are encouraged to meet with their faculty advisor to discuss potential career paths through their studies at the Colorado School of Public Health.

**Faculty Profiles**

**John Adgate, PhD, MSPH**
**Professor, Chair**
Research Interests:
Exposure science, Risk assessment, Children’s environmental health, Outdoor and indoor characterization of toxic air pollutants, Health impacts of natural resource extraction

**Jill Litt, PhD**
**Associate Professor**
Research Interests:
Environmental and community health, Urban planning, Community development, Environmental policy, Community greening, Food systems, Healthy homes

**Alison K. Bauer PhD**
**Assistant Professor**
Research Interests:
Environmental toxicology, Mechanisms of environmental carcinogenesis including PAHs, particles and metals, Innate immunity in ozone-induced pulmonary responses and in pulmonary neoplasia, Cancer chemoprevention

**Lee Newman, MD**
**Professor**
Research Interests:
Occupational medicine, Health effects of beryllium and other metals, Environmental and occupational etiology, Immunology

**Roxana Witter, MD, MSPH**
**Assistant Research Professor**
Research Interests:
Environmental Toxicology, Health effects of oil and gas activities, Health effects of methamphetamine exposure

**Elizabeth Carlton, PhD, MPH**
**Assistant Professor**
Research Interests
Emerging infectious diseases, Health impacts of climate change, neglected tropical diseases

**Admissions Support**

**Jennifer Pacheco**
**Admissions Specialist**
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