

ENVIRONMENTAL & OCCUPATIONAL HEALTH

What is Environmental & Occupational Health?

Environmental and occupational health is the relationship between the physical world and human health. It is one of the five core disciplines of public health. Students pursuing a degree in this field may end up in a career that:

- Examines the connection between environmental toxins and health outcomes
- Creates protocols on how to safely work with people with certain contagious diseases
- Monitors compliance with environmental and health regulations
- Builds or helps build structures in ways that minimize environmental harm

What are examples of careers in Environmental & Occupational Health?

A variety of careers exist for those interested in environmental and occupational health. Below are just a sample of the professions related to this field:

Local

- Community Builder, NeighborWorks Lincoln
- Healthcare Facilities Surveyor, Nebraska Department of Health and Human Services
- Lead Risk Assessor, Douglas County Health Department

National/International

- Climate Change Youth Leadership Fellow, National Parks Service
- Infection Prevention and Control Coordinator, Centers for Disease Control and Prevention
- Toxicologist, Environmental Protection Agency

Who might be interested in an Environmental & Occupational Health career?

Students interested in environmental and occupational health typically have strong backgrounds in science and enjoy looking at things from the “big picture” perspective. If you want to know answers to the following types of questions, you might want to explore this field some more:

- What effects do pesticides have on human health?
- How does exposure to lead paint impact cognitive development in children?
- What are the toxicological effects of cigarette smoke on lung function?
- At what level does nitrogen become dangerous in public bodies of water?
- What occupations have the greatest risk of developing certain types of cancer?

Where can I get a degree in Environmental & Occupational Health?

All schools of public health should have graduate degrees in environmental and occupational health. Students should consult each school they plan to apply to in order to know what coursework will be required for admission. These requirements may vary by school. UNMC has the following programs available:

Master of Public Health (Environmental and Occupational Health Concentration)

The following courses are required for admission:

- Two semesters of Biology (Any BIOS or LIFE classes)
- Two semesters of Chemistry (CHEM 105 & 106 OR 109 & 110 OR 113 & 114/221)
- One semester of Physics (PHYS 115, 141, 151, 211)
- One semester of college level Math (MATH 101 or higher)

Doctorate of Philosophy (PhD) in Environmental Health, Occupational Health and Toxicology

A master's or other advanced degree is required for admission, but exceptional undergraduate students will be considered. UNMC's doctoral program has tracks in Environmental and Occupational Hygiene, Occupational Biomechanics, and Toxicology.

What courses can I take to prepare for an Environmental & Occupational Health program?

See our Pre-Public Health sheet for courses that will broadly prepare you for a public health graduate program. Beyond those, specific courses that are relevant to this field include those below. Please consult an academic advisor and the Undergraduate Bulletin to discuss these classes before enrolling.

Environmental Ethics: PHIL 225

Environmental Planning: CRPL 470, 471, 489, NRES 323

Environmental Sociology: SOCI 346

Environmental Studies: ENVR 201, 249, GEOG 181, METR 180

Natural Resources: NRES 109, 220, 222, 281, 300, 475

Occupational Safety: MSYM 400A, MSYM 400B

Sustainability: ALEC 125, ARCH 107, CYAF 460, PSYC 334

What can I do to explore Environmental & Occupational Health?

- **Research:** Gain experience through a UCARE project or by identifying an internship at a governmental or advocacy agency that is involved with this field. Even if you aren't directly involved in a research project, interning at a setting that engages in environmental and occupational health is a great background for an undergraduate student interested in a career related to that field.
- **Career Information:** Find a professional who you can do an informational interview with in order to learn more about career paths in the field.
- **Organizations:** Join the Pre-Public Health Club to gain exposure to the various career and academic opportunities for students interested in public health. UNL also has a number of environmental student organizations for you to join.

How do I apply?

For admission to UNMC's MPH or PhD programs, students must apply through the centralized application process – SOPHAS. Information on SOPHAS can be found at www.sophas.org and on the UNMC admissions page at <http://unmc.edu/publichealth/admissions/index.html>.

Students can apply to start the MPH program in either the fall or spring semesters each year. The PhD program only admits students to the fall semester. Please see UNMC's admissions page for specific application dates.

The admissions committee reviews grade point average, letters of recommendation, knowledge of profession, service, and leadership experience. In addition to a GRE (or other acceptable entrance exam), students will need to provide a one page personal statement and a resume reflecting one or more years of work/volunteer history related to health and/or human services.

Where can I go for more information?

UNMC College of Public Health

Department of Environmental, Agricultural & Occupational Health

<http://unmc.edu/publichealth/departments/environmental/>

Associations of Schools and Programs of Public Health

<http://www.aspph.org/study/environmental-health/>

National Environmental Health Association

<http://www.neha.org/>

Explore Health Careers

<http://explorehealthcareers.org>