

EPIDEMIOLOGY - M.P.H.

College of Public Health and Health Sciences
www.kent.edu/publichealth

About This Program

Explore Kent State University's STEM-designated Master of Public Health program in Epidemiology, designed to provide students with comprehensive training in the principles and methods of epidemiological research. Gain expertise in analyzing health data, identifying disease trends and designing interventions to improve public health outcomes. Read more...

Contact Information

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- Connect with an Admissions Counselor

Program Delivery

- **Delivery:**
 - Fully online
 - In person
- **Location:**
 - Kent Campus

Accreditation

The M.P.H. degree in Epidemiology is accredited by the Council on Education for Public Health (CEPH).

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university
- Minimum 3.000 undergraduate GPA on a 4.000-point scale
- Official transcript(s)
- Goal statement
- Résumé
- Two letters of recommendation
- English Language Proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions to waive) by earning one of the following:¹
 - Minimum 79 TOEFL iBT score
 - Minimum 6.5 IELTS score
 - Minimum 58 PTE score
 - Minimum 110 DET score

¹ International applicants who do not meet the above test scores will not be considered for admission.

Application Deadlines

- **Fall Semester**
 - Priority deadline: March 15 (international student)
All application materials (including applicable fee, transcripts, recommendation letters, etc.) submitted by this deadline will receive the strongest consideration for admission.
 - Rolling admissions (domestic student)
- **Spring Semester**
 - Priority deadline: August 15 (international student)
All application materials (including applicable fee, transcripts, recommendation letters, etc.) submitted by this deadline will receive the strongest consideration for admission.
 - Rolling admissions (domestic student)
- **Summer Term**
 - Rolling admissions (domestic student)

Program Requirements

Major Requirements

| Code | Title | Credit Hours |
|---|---|--------------|
| Major Requirements | | |
| BST 62019 | BIOSTATISTICS IN PUBLIC HEALTH | 3 |
| BST 63014 | APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA | 3 |
| EHS 62018 | ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH | 3 |
| EPI 62017 | FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY | 3 |
| EPI 63014 or EPI 63015 | EPIDEMIOLOGY OF CHRONIC DISEASES EPIDEMIOLOGY OF INFECTIOUS DISEASES | 3 |
| EPI 63016 | PRINCIPLES OF EPIDEMIOLOGIC RESEARCH | 3 |
| HPM 62016 | PUBLIC HEALTH ADMINISTRATION | 3 |
| HPM 63020 | COMMUNITY HEALTH NEEDS ASSESSMENT | 3 |
| SBS 64634 | SOCIAL DETERMINANTS OF HEALTH BEHAVIORS | 3 |
| Major Electives, choose from the following: | | 12 |
| BST 60010 | USING R IN PUBLIC HEALTH | |
| BST 60011 | USING SAS IN PUBLIC HEALTH | |
| BST 60012 | USING EXCEL IN PUBLIC HEALTH | |
| BST 62020 | DATA MANAGEMENT AND LOGIC USING SAS® SOFTWARE | |
| BST 63012 | SURVIVAL ANALYSIS IN PUBLIC HEALTH | |
| BST 63013 | EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH | |
| EHS 52100 | CLIMATE CHANGE AND POPULATION HEALTH | |
| EHS 53014 | BUILT ENVIRONMENT AND PUBLIC HEALTH | |
| EPI 50017 | PHARMACOEPIDEMIOLOGY | |
| EPI 50018 | REGULATORY AFFAIRS IN CLINICAL RESEARCH | |
| EPI 52010 | UNDERSTANDING THE COVID-19 PANDEMIC | |
| EPI 63019 | EXPERIMENTAL DESIGNS FOR CLINICAL RESEARCH | |
| EPI 63020 | ADVANCED EPIDEMIOLOGY AND CLINICAL RESEARCH METHODS | |
| EPI 63021 | ETHICAL ISSUES IN PUBLIC HEALTH AND CLINICAL RESEARCH | |
| EPI 63034 | LONGITUDINAL DATA ANALYSIS | |
| GEOG 59070 | GEOGRAPHIC INFORMATION SCIENCE | |

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| GEOG 59071 | FUNDAMENTALS OF GEOGRAPHIC INFORMATION SCIENCE I | |
| GEOG 59072 | GEOGRAPHIC INFORMATION SCIENCE AND HEALTH | |
| Any graduate course (50000 level or higher) with advisor approval ¹ | | |
| <i>Culminating Requirement</i> | | |
| EPI 60192 | APPLIED PRACTICE EXPERIENCE IN EPIDEMIOLOGY ² | 2 |
| PH 61199 | INTEGRATIVE LEARNING EXPERIENCE | 1 |
| Minimum Total Credit Hours: | | 42 |

¹ A maximum 6 credit hours of BST 60195 may be applied toward the degree.

² It is expected that students enrolled in EPI 60192 who do not complete the course in one term will continuously register for EPI 60292 each semester, until all requirements have been met. Credit hours for EPI 60292 do not apply to the minimum 42 credit hours for the degree.

Graduation Requirements

| Minimum Major GPA | Minimum Overall GPA |
|-------------------|---------------------|
| - | 3.000 |

- Practicum placement at an approved public health agency under the guidance of a qualified preceptor (150 or 300 contact hours).
- Final portfolio/report and a presentation integrating theory and practice.
- Participation in at least one approved interprofessional education event (IPE); IPE requires students to participate at a specific time/date to be determined in consultation with the student's advisor.
- No more than one-half of a graduate student's coursework may be taken in 50000-level courses.
- Grades below C are not counted toward completion of requirements for the degree.

Program Learning Outcomes

Graduates of this program will be able to:

Evidence-based Approaches to Public Health

1. Apply epidemiological methods to the breadth of settings and situations in public health practice.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context.
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.
4. Interpret results of data analysis for public health research, policy or practice.

Public Health and Health Care Systems

1. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.
2. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.

Planning and Management to Promote Health

1. Assess population needs, assets and capacities that affect communities' health.
2. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.
3. Design a population-based policy, program, project or intervention.
4. Explain basic principles and tools of budget and resource management. Select methods to evaluate public health programs.

Policy in Public Health

1. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.
2. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
3. Advocate for political, social or economic policies and programs that will improve health in diverse populations.
4. Evaluate policies for their impact on public health and health equity.

Leadership

1. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.
2. Apply negotiation and mediation skills to address organizational or community challenges.

Communication

1. Select communication strategies for different audiences and sectors.
2. Communicate audience-appropriate public health content, both in writing and through oral presentation.
3. Describe the importance of cultural competence in communicating public health content.

Interprofessional Practice

1. Perform effectively on interprofessional teams.

Systems Thinking

1. Apply systems thinking tools to a public health issue.

Dual Degree with M.S. in Health Informatics

Students have the opportunity to complete a dual degree program with the M.P.H. degree in Epidemiology and the M.S. degree in Health Informatics. A separate application must be submitted for each program. Students can view admission requirements for each program on their respective catalog page.

The fully online dual degree prepares students for careers at the intersection of public health, data science, healthcare technology and disease prevention and response. Students learn how to build and manage health data systems and analyze and interpret public health data.

Dual Degree Requirements

| Code | Title | Credit Hours |
|---|---|--------------|
| Major Requirements | | |
| BST 62019 | BIostatistics in Public Health | 3 |
| BST 63014 | Applied Regression Analysis of Public Health Data | 3 |
| EHS 62018 | Environmental Health Concepts in Public Health | 3 |
| EPI 62017 | Fundamentals of Public Health Epidemiology | 3 |
| EPI 63014 | Epidemiology of Chronic Diseases | 3 |
| or EPI 63015 | Epidemiology of Infectious Diseases | |
| EPI 63016 | Principles of Epidemiologic Research | 3 |
| HI 60401 | Health Informatics Management | 3 |
| HI 60402 | Legal Issues in Health Informatics | 3 |
| HI 60403 | Health Information Systems | 3 |
| HI 60410 | Health Records Management | 3 |
| HI 60411 | Clinical Analytics | 3 |
| HI 60414 | Human Factors and Usability in Health Informatics | 3 |
| HI 60636 | Standardized Terminologies in Healthcare | 3 |
| HPM 62016 | Public Health Administration | 3 |
| HPM 63020 | Community Health Needs Assessment | 3 |
| SBS 64634 | Social Determinants of Health Behaviors | 3 |
| Health Informatics (HI) Graduate Electives (50000 level or higher) ¹ | | 6 |
| Major Electives, choose from the following: ¹ | | 6 |
| BST 60010 | Using R in Public Health | |
| BST 60011 | Using SAS in Public Health | |
| BST 60012 | Using Excel in Public Health | |
| BST 62020 | Data Management and Logic Using SAS® Software | |
| BST 63012 | Survival Analysis in Public Health | |
| BST 63013 | Experimental Designs in Public Health Research | |
| EHS 52100 | Climate Change and Population Health | |
| EHS 53014 | Built Environment and Public Health | |
| EMAT 51510 | Project Management and Team Dynamics | |
| EPI 50017 | Pharmacoepidemiology | |
| EPI 50018 | Regulatory Affairs in Clinical Research | |
| EPI 52010 | Understanding the COVID-19 Pandemic | |
| EPI 63019 | Experimental Designs for Clinical Research | |
| EPI 63020 | Advanced Epidemiology and Clinical Research Methods | |
| EPI 63021 | Ethical Issues in Public Health and Clinical Research | |
| EPI 63034 | Longitudinal Data Analysis | |
| GEOG 59070 | Geographic Information Science | |
| GEOG 59071 | Fundamentals of Geographic Information Science I | |
| GEOG 59072 | Geographic Information Science and Health | |
| KM 60301 | Foundational Principles of Knowledge Management | |

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| KM 60370 | Semantic Analysis Methods and Technologies | |
| LIS 50645 | Database Fundamentals for Information Professionals | |
| LIS 60620 | Health Information Resources | |
| LIS 61095 | Special Topics in Information Studies | |
| UX 60511 | Information Architecture Fundamentals | |
| UX 60541 | User Experience Evaluation Fundamentals | |
| Any Health Informatics (HI) Graduate course (50000 level or higher) ¹ | | |
| <i>Culminating Requirement</i> | | |
| EPI 60192 | Applied Practice Experience in Epidemiology ² | 2 |
| PH 61199 | Integrative Learning Experience | 1 |
| Health Informatics Elective, choose from the following: | | 3-6 |
| HI 66092 | Master's Internship in Health Informatics | |
| HI 66099 | Master's Project in Health Informatics | |
| HI 66198 | Master's Research Paper in Health Informatics | |
| HI 66199 | Thesis I | |
| Minimum Total Credit Hours: | | 66 |

- ¹ A maximum 4 credit hours of HI 60693 and maximum 6 credit hours of HI 61096 may be applied toward the degree.
- ² It is expected that students enrolled in EPI 60192 who do not complete the course in one term will continuously register for EPI 60292 each semester, until all requirements have been met. Credit hours for EPI 60292 do not apply toward the minimum total credit hours for the dual degree.

Full Description

The Master of Public Health degree in Epidemiology prepares students to analyze the distribution and determinants of disease, disabilities and death in populations. Graduates are able to apply quantitative and qualitative methods to investigate disease outbreaks, determine causal relationships between environmental and biological factors and conduct studies to project health trends in populations. Students benefit from public health faculty research agendas in immigrant and refugee health, chronic disease, cancer and infectious disease epidemiology.

Career opportunities for graduates include research positions in universities, medical schools and pharmaceutical companies; disease prevention specialists in hospitals; and surveillance managers in state and local health departments.